

SWAMI VIVEKANANDA UNIVERSITY

ANNUAL REPORT **Session : (2023-2024)**

DISCLAIMER

While every effort has been made to ensure the accuracy and currency of the information provided in this report, Swami Vivekananda University reserves the right to modify any part of this report as necessary to address errors, omissions, inconsistencies, or regulatory requirements. Such changes, determined by University Authorities, may affect both prospective and enrolled students. Please note that the information presented in this brochure is subject to change without prior notice. It is intended solely as a general reference guide about the University's academic updates.

About Us:

Swami Vivekananda University (SVU) has emerged as a premier institution in West Bengal since its establishment in 2019 under the Regent Education and Research Foundation (RERF). As part of the esteemed Swami Vivekananda Group of Institutes, SVU offers a wide array of programs spanning science, engineering, technology, management, and more, aligning with Swami Vivekananda's vision of holistic education. SVU's mission is to fuse Eastern values with Western knowledge, emphasizing character building alongside academic excellence. The university is committed to innovation and entrepreneurship, echoing the aspirations of its Hon'ble Chairman for excellence in education.

Formally recognized by the State Legislature of West Bengal and accredited by the University Grants Commission (UGC), SVU upholds rigorous quality standards through its Internal Quality Assurance Cell (IQAC). Located in Barrackpore, SVU's sprawling 12-acre green campus boasts state-of-the-art facilities, including smart classrooms, well equipped laboratories, a central library with an extensive collection, and recreational amenities like a gymnasium and swimming pool. With over 2000 students enrolled across various programs and a focus on industry-relevant curriculum, SVU is poised to excel as a center of academic excellence and innovation.

In defining our mission, vision, and goals, we lay the foundation for our organization's purpose, direction, and aspirations. These guiding principles serve as the compass that steers our actions, shapes our decisions, and fuels our collective efforts toward meaningful impact and sustainable growth. Through clarity of purpose and steadfast commitment, we endeavor to inspire, innovate, and make a positive difference in the world we serve.

VISION

To transform the University into a globally recognized institute of excellence with tripartite wellspring relational objectives centered on learning, innovation, and entrepreneurship.

MISSION

- As a skill-oriented university, to instill skills in every student for their growth and sustainability.
- To prepare students as the next generation of leaders with human values and social responsibilities.
- To create an innovative, learning-centric environment with optimal knowledge transfer.
- To escalate innovation, startups, and entrepreneurship towards self-reliance.

GOAL

Driven by a commitment to **excellence, innovation, and entrepreneurship**, our overarching goals embody our dedication to fostering a dynamic learning environment, empowering students to thrive as creative thinkers, problem- solvers, and leaders in their respective fields.

“Act on the educated young men, bring them together, and organise them.” -Swami Vivekananda

MESSAGE FROM THE CHANCELLOR'S DESK

The world as we know now and as we knew back in 20th century has changed tremendously. The upcoming of life changing technologies and different fields that are now open to academic research and employment as made one thing sure that knowledge will be the key to everything that has to come and will be highly sought after as it has the power to change anything and everything . We believe that Education is not preparation for life. Education is life itself. We believe that in professional as well as personal life that we all have, we have to learn how to educate ourselves always, develop and evolve ourselves in a better way. We have to learn how to be responsible towards the society in which we live and to promote it towards growth. At SVU , we not only promote the evolution of individual but also the growth of society as a whole.

At Swami Vivekananda University, We Believe Education Is Life Itself. We Foster Individual And Societal Growth Through Continuous Learning, High Moral Values, And Creativity. By Providing The Right Environment And State-Of-The-Art Facilities, We Ensure Our Students Excel, And In Turn, We Excel With Them.

We have to realize that education alone is not sufficient and so we train our students in regions of respect for the society, Having High Morales, Personality Development ,Creativity etc. These are some things which are very important in long run. We realize that right environment is equally important in making a student learn and grow and so at SVU we aim at creating that right environment for students by giving them the proper facilities they need to grow. We also regularly tie up with industries and companies to provide our students with excellent opportunities to work and learn with industry experts. We leave no stone unturned when it comes to providing the state-of-the-art Education to our students. As we believe that when our students excel, we excel.

Dr. Nandan Gupta
Hon'ble Co-Chancellor
Swami Vivekananda University

MESSAGE FROM THE CO-CHANCELLOR'S DESK

It gives me immense pride and joy to address you through this brochure as a CO-Chancellor of Swami Vivekananda University, Barrackpore. Education, to us, is not merely a preparation for life – it is life itself. At SVU, we deeply believe that every student carries within them infinite potential, and it is our duty to nurture, guide, and inspire them to discover it. In today's world, change is the only constant. With the rapid rise of technology, global connectivity, and innovative industries, the challenges before our youth are both complex and demanding. In such an environment, knowledge alone is not sufficient. What matters equally is character, responsibility, adaptability, and creativity. At SVU, we integrate these qualities into our teaching, so that our students evolve into balanced individuals who can confidently face real-life situations.

We are proud that our University goes beyond conventional teaching. Through industry collaborations, skill development programs, and creative opportunities, our students are trained not just to secure jobs but to create opportunities for others. We encourage them to take pride in Indian values, respect society, and contribute positively wherever they go.

As a trustee, I firmly believe that the strength of a university lies in the growth of its students. Our constant effort is to create an environment where every learner feels empowered, supported, and motivated to achieve excellence. With the blessings of Swami Vivekananda's vision and the dedication of our faculty, we are confident that SVU will continue to shine as a hub of knowledge and human development.

Dr. Rakesh Binaykia
Hon'ble Co-Chancellor
Swami Vivekananda University

MESSAGE FROM THE TRUSTEE MEMBER'S DESK

Swami Vivekananda University, Barrackpore, is not just an institution of higher learning; it is a mission dedicated to building responsible citizens and future leaders. As a trustee, I feel honored to contribute to this noble journey of education and empowerment.

We strongly believe that the purpose of education is not only to acquire degrees but also to develop the mind and enrich the soul. Our aim is to produce individuals who are intellectually strong, morally upright, and socially responsible. Education must prepare our students to lead with compassion, integrity, and innovation – qualities that are essential in today's fast-changing world.

At SVU, equal importance is given to academics, creativity, research, and values. We understand that a student's growth is complete only when knowledge is combined with character. Therefore, we emphasize personality development, high morals, leadership training, and industry readiness. By connecting our students with companies, research centers, and social initiatives, we ensure that they are exposed to the best opportunities for growth and contribution.

As trustees, we are committed to leaving no stone unturned in providing world-class infrastructure, skilled faculty, and enriching experiences. Our vision is clear – to make SVU a place where dreams are shaped into realities, where students excel not just in examinations but in every aspect of life.

We invite every aspiring learner to be part of this journey, where education becomes a celebration of life.

**Dr. Ashok Binaykia
Hon'ble Trustee Member
Swami Vivekananda University**

MESSAGE FROM THE TRUSTEE MEMBER'S DESK

The world of the 21st century is a place of rapid change and endless possibilities. In such times, education must go beyond traditional learning to prepare students for leadership in every sphere of life. At Swami Vivekananda University, Barrackpore, we are committed to shaping individuals who are not only well-informed but also well-formed. As a trustee, I am proud that our university draws inspiration from the timeless teachings of Swami Vivekananda, who believed that “education is the manifestation of perfection already in man.” Guided by this philosophy, we strive to create an atmosphere where every student discovers their true potential and uses it for the betterment of society.

We believe that the strength of a nation lies in the strength of its youth. Hence, our mission at SVU is to empower students with knowledge, skills, values, and vision. We encourage innovation, research, and critical thinking while also instilling discipline, respect, and social responsibility. Our focus is holistic development – blending academics with sports, arts, and community service.

Industry collaboration is another cornerstone of our approach. By partnering with companies, startups, and research organizations, we ensure that our students are well-prepared to meet global challenges. They are trained to adapt, to innovate, and to contribute meaningfully to the nation and the world.

As trustees, we pledge our continued dedication to excellence. With modern facilities, committed faculty, and a student-centered environment, SVU is destined to become a beacon of learning and growth. Together, let us work to uphold the values of knowledge, service, and innovation, ensuring that every graduate of this university stands as a proud representative of our shared vision.

**Mr. Chandan Gupta
Hon'ble Trustee Member
Swami Vivekananda University**

MESSAGE FROM THE CHIEF OPERATING OFFICER'S DESK

It is a great privilege and honour to be a part of the mission to make “Swami Vivekananda University” a name to reckon within the academic fraternity by giving a strong impetus to creating an environment of knowledge, application and holistically inspiring youth to become leaders of tomorrow. I believe that the rigours of the contemporary world will require knowledgeable professionals who could withstand the dynamics of the fast-changing world. It is a great privilege and honour to be a part of the mission to make “Swami Vivekananda University” a name to reckon within the academic fraternity by giving a strong impetus to creating an environment of knowledge, application and holistically inspiring youth to become leaders of tomorrow. I believe that the rigours of the contemporary world will require knowledgeable professionals who could withstand the dynamics of the fast-changing world. Hence “Making a Difference in the Life of Every Student” is the Priority of my administration. We look forward to a deep engagement with Students, Industry, Faculty, and Community to position Andhra university as the national leader in delivering value to its students and offering a transformative educational and life experience. The COO's office works collaboratively across the University to ensure that every student has the best possible education and experience. We aim to position our university as a national leader in delivering transformative education, preparing students to excel in a fast-changing world.

In the journey, there will be tough times and there will be easier ones, but we shall work hard with no regrets, and be victorious. The University faculty are here to be the mentors and facilitators to help the students in all round progress. The parents are here to understand the strength and weaknesses of their wards and encourage them, in choosing a study of their passion. The students are here to understand that the rules and regulations in the university are put in a place to help them in achieving dreams. There must be an aspiration to excel and serve the society, and hence there must be measuring standards. We the faculty and students as a University must excel and set standards to impact society and future generations. Let's move ahead with a clear line of action to excel in academics, fortify our research initiatives through quality publications, strengthened industry – institute interactions, product development, Start-Up ventures and honestly contributing for the upliftment and growth of people and humanity at large. Our challenge is to help to generate ideas that will benefit society, and to educate and train people to work in fields where they will be valued both for their knowledge, and for their ability to research, communicate and solve problems. I offer my best wishes to all students, faculty and staff to grow and excel in this challenging and competitive era and reach the pinnacle of success.

Mr. Saurabh Adhikari
Hon'ble Chief Operating Officer
Swami Vivekananda University

MESSAGE FROM VICE CHANCELLOR'S DESK

It's indeed a privilege to be at the forefront of an emerging university, our SVU. It is a matter of pride and satisfaction that ever since the inception in 2020, SVU has been striving for excellence in Higher Education, Research and Extension activities. Gratitude to the guidance of Hon'ble Chancellor and thanks to the efforts of our Colleagues for flourishing the University's Undergraduate, Postgraduate, and Doctoral Programmes in the areas of Engineering, Management, Agriculture, Computer Science, Life Sciences, Allied Health Science, Humanities and Social Sciences.

Our research programs range across all disciplines and total commitment is essential to achieve the goals. As we look to the future, one thing is certain - technology and knowledge will be key resources, most sought after within the country and around the world. Therefore, it is our paramount duty to help generate ideas that will benefit society, and to educate and train people to work in fields where they will be valued for their specialized knowledge.

“ALONE WE CAN DO SO LITTLE, TOGETHER WE CAN DO SO MUCH.” -Helen Keller

Our acumen to research, communicate and solve issues is to be improved upon from time to time. To meet these challenges, alliances with research institutions, partnership with Government and other agencies are to be undertaken expeditiously. We should leave no stone unturned to ensure the quality of our academic programs and excellence of our teaching, learning and research.

This is the byproduct of dedication and concerted efforts from all corners. In the rapidly evolving society of today, it has become more important than ever for the University to adapt, evolve and be the cornerstone of creating knowledge. The excellence of the University has always come from the individual strengths of our extremely diverse members. With many more miles to go, let us shoulder the responsibility and work together to take this institution to greater heights.

In the words of Helen Keller, “Alone we can do so little, together we can do so much.”

Dr. Subrata Kumar Dey
Hon'ble Vice Chancellor
Swami Vivekananda University

MESSAGE FROM REGISTRAR'S DESK

We have pleasure in welcoming you to Swami Vivekananda University, Barrackpore. The University is striving hard to have qualitative improvement in the level of education, environment and economy of this region. The university has a visionary mission to contribute in multidimensional growth and development of the region in general and holistic development of the students in particular. We hope that the inspiring students, under the guidance of dedicated teachers and a far-sighted leadership of the top administration would lead this University to a coveted and recognized position in the galaxy of higher education in the country.

Swami Vivekananda University's aspiration is to be a world class centre of excellence in training, research and innovation in cutting edge technologies. We are in the sincere process of creating a positive image whereby our name becomes synonymous with excellence, innovation, honour, integrity and outstanding quality and service. Always we will keep our vision goal focused ensuring to reach greater heights in the days ahead. As we embark on developing the University, all the dedicated personnel at SVU need to be unswerving in defending our vision. We are dedicated to creating a positive impact and preparing graduates to excel as professionals and responsible citizens.

We shall focus on the individuals' strengths and use their strengths in a very goal-directed niche within our institution.

The University offers an array of subjects that cater to the capabilities of different individuals at various levels of education.

Our primary objective is to enrich and support the individual in his/her endeavour towards the attainment of knowledge and wisdom, as well as to apply that knowledge in coherence with the aims and ambitions of the individual in particular and for the greater good of human kind in general. Industries and renowned institutions are always welcome to collaborate for R & D activities with faculty members and research scholars. As regards to the students who are our main stakeholders, we look forward to a healthy working relationship where dialogue becomes the pillar of our understanding. We remain open to your deserved needs and not demands and our focus will be to make you all-round graduates ready for the market and responsible citizens of this great country.

I assure you the best possible academic, administrative and research atmosphere in the campus.

Prof. (Dr.) Pinak Pani Nath
Hon'ble Registrar
Swami Vivekananda University

DEPARTMENT OF MECHANICAL ENGINEERING

ABOUT DEPARTMENT:

The department of Mechanical Engineering has a vision to emerge as an excellent centre of skill-based learning in Mechanical Engineering to develop professionals who are technically competent, ethical and capable of addressing the changing societal needs with credibility. The department offers up to date curriculum with a focus to cater the overall anticipation of industry and academia. In addition to curriculum courses, the department contributes to skill-based training, value added courses, guest lecture by industry experts, industrial visits and various add on activities for the students to make them future ready technocrats of academia & industry. The department has perfect blend of Industry-academia environment which develops students with practical hands-on sessions offering a dynamic teaching program for creating a vibrant and successful community of professionals who can develop both concepts and skills essential for the design, analysis, manufacturing, and maintenance of various kinds of mechanical systems and machinery. The Department is dedicated to conducting high-quality research in the field of cutting- edge technologies, innovative products, and solutions that hold the potential to make a significant impact on society, the economy, and various industries. Since the University's establishment in 2020, the department has consistently demonstrated its dedication to conducting exceptional research, yielding noteworthy outcomes in the form of numerous publications in reputable journals and granted patents. At present, the Department of Mechanical Engineering has a Center of Excellence in partnership with Bosch Rexroth and has set up a state-of-the-art research laboratory known as the Material Development and Characterization Lab, equipped with NABL-certified instrumentation. Our department boasts a team of dedicated Master's and Ph.D. scholars, along with esteemed faculty members, actively engaged in research pursuits spanning a range of fields, including Hydrogen Engine technology, Biomaterial development, vibration analysis, additive manufacturing, and gas turbine research. Several of these research endeavors involve collaborations with renowned institutions such as Rowan University in the USA, Jadavpur University, BITS Pilani, Aliah University, CMERI, and NIT Durgapur. We are constantly enhancing our research infrastructure and facilities, aiming to position ourselves as a distinguished center for research in the near future. We are committed to work in emerging areas and developing sustainable technologies & innovations to shape the future of Mechanical Engineering and allied sectors.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|---------------------------|--|
| Dr. Bikash Panja | Manufacturing, Composites, , Additive Manufacturing Technology |
| Dr. Ranjan Kumar | Design, Li-ion Batteries, Design Thinking, Aerospace structure, Finite element simulation and analysis, Material cracks, Vibration |
| Dr. Md Ershad | Thermal Engg., Fluid mechanics |
| Dr. Samrat Biswas | Aerodynamics, Fluid Mechanics, Turbulence, CFD, Sediment Interactions, Hydro Turbines |
| Dr. Arnab Das | Manufacturing, Additive Manufacturing Technology |
| Mr. Soumya Ghosh | Thermal Engg., Fluid mechanics |
| Mr. Arijit Mukherjee | Wire Arc Additive Manufacturing, Advanced Machining |
| Mr. Soumak Bose | Surface treatments, Weld cladding, Corrosion Resistance properties |
| Mr Suman Kumar Ghosh | Manufacturing Technology, Fluid Mechanics, Tribology |
| Mr Sayan Paul | Thermal Engineering, CFD |
| Mr. Abhishek Poddar | Material Science and Technology, Advanced Materials and Composites |
| Mr. Sayantan Sinha Biswas | TIG & Laser welding on advanced materials like glass And other joining processes |
| Dr. Mohammad Zahid | Manufacturing, Additive Manufacturing Technology |
| Mr. Prosenjit Singha | CFD, Sediment Interactions, Hydro Turbines |
| Mr. Anupam Mallick | Manufacturing, Additive Manufacturing Technology |
| Mr. Mohammad Shahid Raza | Advanced Machining |
| Dr. Ravi Nigam | Wire Arc Additive Manufacturing |
| Dr. Sujit Majumdar | Manufacturing |
| Dr. Suresh Gain | TIG & Laser welding on advanced materials like glass And other joining processes |

PUBLICATIONS

a. Journal

Ranjan Kumar, Saikat Chatterjee, Vinayak Ranjan, Sanjoy K. Ghoshal [2023], “Simulation Studies on Combined Effect of Variable Geometry, Rotation and Temperature Gradient on Critical Speed of Gas Turbine Disc”, Multidiscipline Modeling in Materials and Structures, Vol. 19 No. 2, pp. 277-291. (SCI Indexed, Impact factor 3.6).
Doi: <https://doi.org/10.1108/MMMS-07-2022-0139>

2. Basma Souayah, Suvanjan Bhattacharyya, Soumya Ghosh, Huda Alfannakh, Mir Waqas Alama, Biswajit Halder [2024] Effects of a novel hybrid turbulator tape on the thermohydraulic performance and irreversibility of a solar air heater, Case Studies in Thermal Engineering. (SCI Indexed) Doi: <https://doi.org/10.1016/j.csite.2024.104132>

[PAGE-24]

3. Ravi Nigam, Ramnivas Kumar, Sachin Kumar Singh [2024], Numerical and experimental investigation on crack detection in a beam using maximal overlapping discrete wavelet transform, Structural Health Monitoring. Doi : <https://doi.org/10.1177/1475921723121493> (SCI Indexed)

4. Chandan K. G., Patil Mallikarjun B., Soumya Ghosh & Suvanjan Bhattacharyya [2024] Entropy analysis for two-dimensional double-diffusive mixed convective flow of a Williamson nanofluid through a porous medium. Numerical Heat Transfer, Part B: Fundamentals. (SCI Indexed) Doi: <https://doi.org/10.1080/10407790.2024.2329256>

5. Joydip Naskar, Ranjan Kumar, Somnath Das, Nilanjan Roy, Sayan Paul [2023], Experimental investigation of cutting parameters during laser beam machining of aluminum alloy 7075, Materials Today: Proceedings- In Press (Scopus Indexed). Doi: <https://doi.org/10.1016/j.matpr.2023.03.194>

6. Joydip Kumar Mondal, Somnath Das, Ranjan Kumar and Mriganka Maity [2023], Multicriteria decision-making process for position analysis in FDM 3D printed objects, Materials Today: Proceedings- In Press (Scopus Indexed).
Doi: <https://doi.org/10.1016/j.matpr.2023.02.292>

7. Sudip Chakraborty, Madhujit De, Ranjan Kumar and Sudipta Nath [2023], Identification of different features of the reported alternative fuels using Exploratory data analysis (EDA)” Journal of mines, metals & fuels, Vol. 71 (10), pp. 1657-1662 (Scopus Indexed)
Doi: <https://doi.org/10.18311/jmmf/2023/35864>

8. Priyam Mondal, Ranjan Kumar, Md Ershad [2023], Mechanical properties of CeLa substituted Bio- Glass Ceramics. Journal of mines, metals & fuels, Vol. 71 (10), pp. 1639-1644 (Scopus Indexed) DOI: <https://doi.org/10.18311/jmmf/2023/35871>

9. Mriganka Maity, Somnath Das, Ranjan Kumar, Joydip K. Mondal [2023], Experimental investigation for enhancing surface quality in 3D printing technology using non-planar layer method, Lecture notes in mechanical Engineering, pp. 191-200, Springer (Scopus Indexed).
Doi: https://doi.org/10.1007/978-981-19-8517-1_14

10. Atul, G Divya Deepak, Ranjan Kumar [2024] A Review on the Approach towards Cyber Physical Manufacturing System Architecture for Mining and production industries- Journal of Mines, Metals and Fuels, Vol. 71 (12A), pp. 21-29. (Scopus Indexed).

Doi: <https://doi.org/10.18311/jmmf/2023/43064>

11. Ranjan Kumar, Bidyut Ghosh, Ravi Nigam, Arijit Mukherjee, Somnath Das [2024], Optimization of Process Parameters of Gas Metal Arc Welding using Taguchi Method. Journal of mines, metals & fuels, Vol. 71 (12A), pp. 6-14. (Scopus Indexed)

Doi: <https://doi.org/10.18311/jmmf/2023/43787>

12. Md Ershad, Ranjan Kumar, Neeraj Gupta, Arijit Mukherjee, Soumya Ghosh, Apurba Mandal [2024] CoO Substituted Borate 1393B3 Glass Scaffold with Enhanced Metallurgical Performance. Journal of mines, metals & fuels, Vol. 71 (12A), pp. 15-20(Scopus Indexed). Doi:

<https://doi.org/10.18311/jmmf/2023/43176>

13. Prashant Kumar Choudhary, Ranjan Kumar, Subodh Kumar [2023], Free Vibration Response of Functionally Graded Porous Metallic Plates Embedded with Piezoelectric Layers, Journal of Mines, Metals and Fuels, 71(10): 1645-1656. (Scopus Indexed).

DOI: <https://doi.org/10.18311/jmmf/2023/35867>

14. Sudipta Nath, Ranjan Kumar, Shahanwaz Khan, Somnath Das and Vinayak Ranjan [2023], A review on performance and emissions of a compression ignition engine powered by hydrogen-diesel mixtures: effect of operational parameters Journal of Mines, Metals and Fuels, 71(11): 2056-2068(Scopus Indexed). DOI: <https://doi.org/10.18311/jmmf/2023/36095>

15. Ravi Nigam, Ramnivas Kumar, Nisit Kumar Parida, Ranjan Kumar, Soumya Ghosh, Sayan Paul [2024], Damage Localization in a Beam by Lifting Wavelet Scheme and Photographic based Experimentation. Journal of mines, metals & fuels, Vol. 71 (12A), pp. 153-159 (Scopus Indexed). Doi: <https://doi.org/10.18311/jmmf/2023/43926>

16. Arijit Mukherjee, Santosh Kumar, Ranjan Kumar, Sayan Paul [2023], Comparative Study of Wear Behaviour of Heat Treated 304 Austenitic and 410 Martensitic Stainless Steel, Journal of Mines, Metals and Fuels, 71(11): 2110-2115(Scopus Indexed).

DOI: <https://doi.org/10.18311/jmmf/2023/36038>

17. Neeraj Gupta., MdErshad., & Apurba Mandal. (2023). Metallurgical Behavior and Biocompatibility of Boron Trioxide on the Bioactive Glasses. Journal of Mines, Metals & Fuels, 71(11).(Scopus Indexed). Doi: <https://doi.org/10.18311/jmmf/2023/36041>

18. Ravi Nigam, Niraj K Saha, Sachin K Singh, [2024] “Delamination Damage Detection in a Composite Beam Using Discrete Wavelet Transform”, Mechanisms and Machine Science (2024), DOI: https://doi.org/10.1007/978-981-99-8986-7_1

19. Animesh Roy, Samrat Biswas, Prabir Kumar De, Bireswar Majumdar, Analysis of Vortex Dominated Flow over Double Delta Wing, JMMF, pp-1620-1630(Scopus Indexed) Doi: <https://doi.org/10.18311/jmmf/2023/35861>

b. Books

1. Mechanical Engineering in Biomedical Applications: Bio-Materials, Implant Design, Bio-3D Printing, Computational, Tissue & Bioluid Mechanics, [2024] Editors: Ranjan Kumar et al. Publisher: Wiley, USA, ISBN: 978-1-394-17452- (Indexed by Scopus, Web of Science) - Year: 2024, <https://scrivenerpublishing.com/cart/title.php?id=882>
2. Mechanical Engineering Advancements: Current trends and Future Prospects, Swami Vivekananda University (Institutional Publisher) ISBN: 978-81-964878-1-2, Year: 2023
3. Recent research advancements in mechanical engineering: Material, Design, and Production, Swami Vivekananda University (Institutional Publisher) ISBN: 978- 81-964878-0-5, Year: 2023

c. Book Chapters

1. Md Ershad., Ranjan Kumar [2024]. Mechanical Behavior of Bioglass Materials for Bone Implantation. Mechanical Engineering in Biomedical Applications: Bio-3D Printing, Biofluid Mechanics, Implant Design, Biomaterials, Computational Biomechanics, Tissue Mechanics, 261-275. ISBN: 978-1-394-17452-2 (SCOPUS)
2. Ranjan Kumar, Mohammad Shahid Raza [2023] Process monitoring in metal additive manufacturing, Mechanical Engineering Advancements: Current trends and Future Prospects, Swami Vivekananda University (Institutional Publisher) ISBN: 978-81-964878-1-2
3. Samrat Biswas, Ranjan Kumar [2023], Sea water desalination and hydrogen generation, Mechanical Engineering Advancements: Current trends and Future Prospects, Swami Vivekananda University (Institutional Publisher) ISBN: 978-81-964878-1-2
4. Ranjan Kumar, “Process Monitoring In Metal Additive Manufacturing”, Mechanical Engineering Advancements: Current Trends and Future Prospects, Chapter 1, page 15 – 35, 2023.
5. Ravi Nigam, “Damage Detection Analysis In The Beam System: A Technical Review”, Mechanical Engineering Advancements: Current Trends and Future Prospects, Chapter 2, page 36 – 58, 2023.
6. Md. Ershad, “Composite Materials: Overview, Processing, And Engineering Applications”, Mechanical Engineering Advancements: Current Trends and Future Prospects, Chapter 3, page 59 – 76, 2023.
7. Sayan Paul and Soumya Ghosh, “Exploring The World Of 3d Printing Technology”, Mechanical Engineering Advancements: Current Trends and Future Prospects, Chapter 4, page 77 – 103, 2023.
8. Samrat Biswas and Ranjan Kumar, “Sea Water Desalination and Hydrogen Generation”, Mechanical Engineering Advancements: Current Trends and Future Prospects, Chapter 5, page 104 – 120, 2023.
9. Arijit Mukherjee and Suman Kumar Ghosh, “A Brief Introduction To Wire-Arc Additive

Manufacturing Process”, Mechanical Engineering Advancements: Current Trends and Future Prospects, Chapter 6, page 121 – 131, 2023.

10. Soumak Bose, “Generation of Electricity Through Speed Breaker”, Mechanical Engineering Advancements: Current Trends and Future Prospects, Chapter 7, page 131 – 143, 2023.

11. Ranjan Kumar, “Pioneering Breakthroughs In The Realm Of Internal Combustion Propulsion”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 1, page 1 - 14, 2023.

12. Md. Ershad, “Mechanical Properties Of Materials With Biomedical Applications”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 2, page 15 - 25, 2023.

13. Ravi Nigam, “Vibration Based Analysis On Damaged Composite Beams”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 3, page 26 - 35, 2023.

14. Soumya Ghosh, “Advancements in Renewable Energy-Based Cooling Systems: A Comprehensive Review And Future Prospects”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 4, page 36 - 47, 2023.

15. Suman Kumar Ghosh, "Diminutive Abrasive Surface Profiling Apparatus", Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 5, page 48 - 59, 2023.

16. Abhishek Poddar, “Advanced Materials Analysis Through X-Ray Diffraction Technique”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 6, page 60 - 76, 2023.

17. Samrat Biswas, “Understanding Wind Turbines: Harnessing The Power Of The Wind (Part 1)”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 7, page 77 - 92, 2023.

18. Sayan Paul, “Understanding Wind Turbines: Harnessing The Power Of The Wind (Part 2)”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 8, page 93 - 110, 2023.

19. Soumak Bose, “Effect Of Process Parameters And Heat Input On Weld Bead Geometry Of Austenitic Stainless Steel Wire Electrode Using Gas Metal Arc Welding”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 9, page 111 – 122, 2023.

20. Arijit Mukherjee, “Exploring Advanced Materials: In-Depth Analysis Using X-Ray Diffraction Methodology”, Recent Research Advancements In Mechanical Engineering Material Design &Production, Chapter 10, page 123 – 137, 2023.

d. Patents

1. "Pin electrode based plasma jet", Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application Number 202341004118A].
2. "Fabrication and design of the 360-degree rotating vehicle" Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202331022706A]
3. "Solar powered Automatic Tobacco / non tobacco products Vending Machine" Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202431024111 A]
4. "Hydraulic ram pump system for water lifting in hilly region" Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202231035645A]
5. "Plastic-Based Composite for Concrete Production", Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202331055315A]
6. "Transformation of Dairy Byproduct into Sustainable Biodegradable Material". Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202431028476A]
7. "Intelligent Autonomous Wheel Driven Sprayer System for Precision Agriculture". Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202431028477]
8. "Fabrication and design of the Solar Air Cooler", Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202331057258A]
9. "Automatic Electromagnetic Brake Using Ferromagnetic Material Scrap", Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202331057359A]
10. "Power generation using Speed Breaker", Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202331054862A]

11. "Mini Blet grinder", Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202331054863A]

12. "Solar Air Heater", Intellectual Property India, Office of the Controller General of Patents, Design and Trade Marks, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. [Patent Application No: 202431028487]

e. Conference Publications

[1] Ranjan Kumar et al., Optimization of Process Parameters of Gas Metal Arc Welding Using Taguchi Method. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[2] Ranjan Kumar et al., Experimental and numerical analysis of tool wear in single point cutting tools. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[3] Ranjan Kumar et al., Analysis of MRR and Surface Roughness Modeling in Stainless Steel Using Response Surface Methodology. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[4] Ranjan Kumar et al., An overview of an experimental study based performance and emissions evaluation of hydrogen-diesel dual fuel operation in compression ignition engine. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[5] Md Ershad et al., Failure Analysis for Swelling in Stator Elastomer of Progressive Cavity Pump and its effect on Volumetric Efficiency. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[6] Ranjan Kumar et al., Experimental Investigation of Welding Parameters on Mild Steel Using Metal Active Gas Welding. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[7] Md Ershad et al., Assessing mechanical properties of composites with silicon carbide fibers in a calcium aluminosilicate glass matrix. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[8] Md Ershad et al., A holistic conceptual approach to use Perovskite cells along with Photovoltaic solar cells to maximize the output efficiency and eliminate limitations of Perovskite cells. Proceedings of the International Conference on Integrative Science and

Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[9] Mr. Soumya Ghosh, "Study of Velocity in Sth frame in Rotational Frame of Reference Distribution in the Flow Field around Drag Type Wind Turbine", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[10] Mr. Soumya Ghosh, "Analytical Investigation of Vorticity in the Flow around Savonius Wind Turbines", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[11] Mr. Soumya Ghosh, "2D Flows Driven by Boundary Wall Motion for Rheological Fluids using Computational Fluid Dynamics: A Review", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[12] Mr. Soumya Ghosh, "Recent Advances in the Technological Evolution of Electric Vehicles Batteries, Electric Motor Drives and Charging", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[13] Mr. Soumya Ghosh, "An experimental study for examining the impact of a new hybrid tech on the thermo hydraulic properties of a solar air heater.", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[14] Mr. Suman Kumar Ghosh, "An Investigative Examination of Eddy Viscosity Evolution in the Flow Field Surrounding a Savonius Turbine", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[15] Mr. Suman Kumar Ghosh, "Study of Pressure Coefficient Distribution in the Flow around Vertical Axis Wind Turbine", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[16] Md Ershad et al., CuO substituted borate 1393B3 glass scaffold with enhanced mechanical. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[17] Md Ershad et al., An Investigation into the Performance Characteristics of a Rear-Supported V-Cone Flowmeter. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[18] Ravi Nigam et al., Damage Localization in a beam by lifting wavelet scheme. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[19] Ravi Nigam et al., Prediction of Production of Natural Energy Sources using Singular Spectrum Analysis. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[20] Ravi Nigam et al., Solar Energy Utilization in Electric Vehicles: A Process. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[21] Ravi Nigam et al., Solar Energy Utilization in Electric Vehicles: A Process. Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[22] Ranjan Kumar et al., Analysis of vibration response of heavy vehicle driver's seat towards prediction of musculoskeletal effect. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[23] Ranjan Kumar et al., A review on burst strength of gas turbine disc. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[24] Ranjan Kumar et al., Contact stress analysis of firtree joint of bladed-disc assembly using finite element method. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[25] Ranjan Kumar et al., Contemporary approaches to weld overlay. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[26] Ranjan Kumar et al., Investigation of mechanical behavior and biocompatibility glass nano powder for addressing oral bone deficiencies. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[27] Ranjan Kumar et al., Impact of operating parameters on emissions and performance of compression ignition engines using hydrogen-diesel blends. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[28] Md Ershad et al., Characterization of TiO₂- Substituted Bioactive Glasses: Physicochemical, Mechanical, Biological, and In-Vitro Properties. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[29] Md Ershad et al., Assessing mechanical properties of composites with silicon carbide fibers in a calcium aluminosilicate glass matrix. 2nd International Conference on Engineering Design

and Computing (ICEDC)-2024.

[30] Md Ershad et al., Examining the Performance Traits of a Rear-Supported VCone Flowmeter. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[31] Md Ershad et al., Exploring the PhysicoMechanical Characteristics of cela-Substituted Bio-Glass Ceramics: TEM Analysis and Insights. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[32] Md Ershad et al., Improved Mechanical Characteristics and Biocompatibility of Lanthanum and Aluminum Oxide Substituted Bioactive Glasses: Insights from TEM Analysis. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[33] Md Ershad et al., Mechanical properties and structure of soda lime silicate glass incorporating rare earth doping. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[34] Md Ershad et al., Mechanical properties of aluminosilicate glasses: young's modulus, vickers hardness, and indentation fracture toughness. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[35] Ravi Nigam et al., Impact of Energy Sustainability on Climate Change. 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

[36] Ravi Nigam et al., Advances in sustainable energy consumption forecasting: an overview and future directions. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[37] Ravi Nigam et al., Numerical Study on Detection and Localization of Delamination Fault in a Composite Beam. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[38] Ravi Nigam et al., Fault detection and localization in the beam using averaging of discrete wavelet coefficients: An experimental analysis. 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

[39] Ravi Nigam et al., Numerical Simulation analysis on detection of crack in the beam using averaging of discrete wavelet coefficients. Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[40] Mr. Abhishek Poddar, “Explorative Study of Evolution of Vorticity Distribution in the Flow Field around Savonious Turbine”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28- 30, 2023.

[41] Mr. Abhishek Poddar, "Numerical analysis on Casson nanofluid over a surface with nonlinear thermal radiation and binary chemical reaction”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[42] Mr. Abhishek Poddar, "Effects Of Ion-Slip And Hall Currents On Mhd Nanofluid Flow With Thermal Diffusion Using Spectral Quasi-Linearization Method”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[43] Mr. Abhishek Poddar, “A comprehensive review of functionally graded material – manufacturing methods, applications and challenges.”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[44] Mr. Abhishek Poddar, "Qualitative study of fluid handling equipment utilizing eco-friendly human-powered rotary device: A novel design approach”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[45] Mr. Arijit Mukherjee, “Analytical Study of Velocity Swirling Strength for Flow over Savonious Wind Turbine”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[46] Mr. Arijit Mukherjee, “An Exploration of Eddy Viscosity Changes in longitudinal direction for Flow around Vertical Axis Wind Turbine”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[47] Mr. Arijit Mukherjee, “Finite Elemental Analysis on Free vibration of Functionally Graded Material plates with integrated piezoelectric layers”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[48] Mr. Arijit Mukherjee, “Flex Fuel Technology is the Future Horizon of Indian Automobile Industry: A Review”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[49] Mr. Arijit Mukherjee, “Essence of Total Quality Management (TQM) in small scale manufacturing industries (SMEs).”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28- 30, 2023.

[50] Dr. Samrat Biswas, "Explorative Study of Evolution of Pressure Distribution in the Flow Field around Vertical Axis Wind Turbine", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[51] Dr. Samrat Biswas, "Investigative Exploration into the Evolution of Velocity Distribution around Savonious Turbine", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28- 30, 2023.

[52] Dr. Samrat Biswas, "Qualitative Observation of Helicity Distribution for Flow around Drag Type Vertical Axis Wind Turbine", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[53] Dr. Samrat Biswas, "Qualitative Analysis of Velocity Swirling Strength Distribution in the Flow Field Surrounding a VAWT", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[54] Dr. Samrat Biswas, "Analytical study of wear behavior of SS304 under pre and post heat treatment.", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[55] Mr. Sayan Paul, "Investigative Exploration into the Evolution of Pressure Coefficient Distribution within the Flow Field Surrounding a Vertical Axis Wind Turbine.", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[56] Mr. Sayan Paul, "Qualitative Investigation into the Evolution of Velocity in sth frame in Rotating Reference Frame Distribution in the Surrounding Frame of a Vertical Axis Wind Turbine.", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28- 30, 2023.

[57] Mr. Sayan Paul, "Literature Survey of Evolution of Vertical Axis Wind Turbine", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[58] Mr. Sayan Paul, "In depth analysis of tribological characteristics of SS410 under pre and post heat treatment.", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28- 30, 2023.

[59] Mr. Sayan Paul, "Comprehensive review of three-dimensional solid object printing technology under additive manufacturing.", Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[60] Mr. Soumak Bose, “Analysis of Pressure Distribution in the Flow Field around Vertical Axis Wind Turbine”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[61] Mr. Soumak Bose, “Analysis of Velocity Distribution in the Flow Field around Savonius Wind Turbine”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[62] Mr. Soumak Bose, “Investigational Report on Bead-on-Plate Welding of 316 Austenite Stainless Steel Using Pulsed GTAW Process”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[63] Mr. Soumak Bose, “Investigational Report On Cladding Performance Of 316 Austenitic Stainless Steel Using Pulsed Gas Tungsten Arc Welding Process”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[64] Mr. Soumak Bose, “Effect of process parameters and heat input on weld bead geometry of 316ASS electrode using GMAW.”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[65] Mr. Suman Kumar Ghosh, “Explorative Analysis of Helicity Distribution along Longitudinal Direction in the Flow around Savonius Wind Turbines”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[66] Mr. Suman Kumar Ghosh, “The Prospects of Corn-Based Bio-Fuels in the Future of Indian Transportation”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28- 30, 2023.

[67] Mr. Suman Kumar Ghosh, “A parametric optimization study of electrically generated wire arc direct energy deposition method utilizing taguchi research methodology. ”, Proceedings of the International Conference on Integrative Science and Engineering (ICISE-2023), Swami Vivekananda University, Barrackpore, West Bengal, India. September 28-30, 2023.

[68] Abhishek Poddar, Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Soumak Bose, “Decoding Strain Rate Distribution on a Wind Turbine Blade for Performance Optimization”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[69] Abhishek Poddar, Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Soumak Bose, “The Whirlwind’s Whisper: Unveiling the Distribution of Velocity Circumferential in Flow and its Dance with Flow around HAWT Blade”, Proceedings of the

International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[70] Abhishek Poddar, Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Soumak Bose, “Explorative Study of Velocity Curl Distribution at Different Section along Span-Wise Location of HAWT Blade”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[71] Abhishek Poddar, Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Soumak Bose, “Exploration of Distribution of Velocity Divergence at Different Span-wise location along Horizontal Axis Wind Turbine Blade”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[72] Abhishek Poddar, Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Soumak Bose, “Exploration of Velocity Field Distribution in the Flow Field around Horizontal Axis Wind Turbine”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[73] Arijit Mukherjee, Abhishek Poddar, Sayan Paul, Soumya Ghosh, Suman Kumar Ghosh, Samrat Biswas, "Numerical analysis on Casson nanofluid over a surface with nonlinear thermal radiation and binary chemical reaction", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[74] Arijit Mukherjee, Suman Kumar Ghosh, Sayan Paul, Soumya Ghosh, Soumak Bose, Samrat Biswas, “Unveiling the Inner Pulse of Turbulence: A Journey into Eddy Frequency Distribution For Flow Field Around HAWT”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[75] Arijit Mukherjee, Suman Kumar Ghosh, Sayan Paul, Soumya Ghosh, Soumak Bose, Samrat Biswas, “The Invisible Conductor: Unveiling the Distribution of Radial Component of Velocity in Flow Field with Wind Turbine Blades”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[76] Arijit Mukherjee, Abhishek Poddar, Sayan Paul, Soumya Ghosh, Suman Kumar Ghosh, Soumak Bose, "Qualitative study of fluid handling equipment utilizing eco-friendly human-powered rotary device: A novel design approach", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[77] Arijit Mukherjee, Dipsankar Chatterjee, Abhishek Poddar, Suman Kumar Ghosh, Soumak Bose, “Flex Fuel Technology: Pioneering the Future of the Indian Automobile Industry - An Overview”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[78] Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Soumak Bose, "From Vortices to Performance: Decoding the Secrets of Wind Turbine Efficiency through Helicity", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[79] Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Soumak Bose, Arijit Mukherjee, "Tip Vortices and Beyond: A Multi-Plane Analysis of Pressure Coefficient Distribution and its Implications for Wind Turbine Design", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[80] Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Soumak Bose, "Academic Review Paper: Aerodynamics and Optimization of Horizontal Axis Wind Turbine Blades", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[81] Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Soumak Bose, Arijit Mukherjee, "Unveiling the Significance of Velocity U Distribution for Wind Turbine Performance", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[82] Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Soumak Bose, "Dissecting the Vorticity Distribution at Different Sectional Plane along the Span of Horizontal Axis Wind Turbine Blade", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[83] Sayan Paul, Samrat Biswas, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Soumak Bose, "Unveiling the Aerodynamic Symphony: A Numerical Investigation of Pressure Distribution on a Wind Turbine Blade", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[84] Sayan Paul, Samrat Biswas, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Soumak Bose, "Qualitative Analysis of Distribution of Turbulence Intensity in the Flow Field around Horizontal Axis Wind Turbine", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[85] Sayan Paul, Samrat Biswas, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Soumak Bose, "Explorative Multi-Plane Analysis of Velocity Angle in the Sth Frame ", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[86] Sayan Paul, Samrat Biswas, Suman Kumar Ghosh, Soumya Ghosh, Anupam Mallick,

Soumak Bose, “Analyzing Spanwise Velocity Distribution on a Horizontal Wind Turbine Blade for Performance Optimization”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[87] Sayan Paul, Samrat Biswas, Suman Kumar Ghosh, Soumya Ghosh, Anupam Mallick, Soumak Bose, "Unveiling the Significance of Vorticity Y Distribution along Span-Wise Direction for HAWT Blade", Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[88] Soumak Bose, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Samrat Biswas, “Deciphering the Flow’s Hidden Energy: Analyzing Relative Total Pressure Distribution on a Wind Turbine Blade”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[89] Soumak Bose, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Abhishek Poddar, Samrat Biswas, “From Turbulent Chaos to Flow Harmony: Leveraging Re_t Insights for Optimized and Resilient Wind Turbine Design”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[89] Soumak Bose, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Samrat Biswas, “Qualitative Analysis of Longitudinal Vorticity Distribution at Different Sectional Plane along Span-Wise Location of HAWT Blade”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[90] Soumak Bose, Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Arijit Mukherjee, Anupam Mallick, “Exploring Gas Metal Arc Welding (GMAW) Cladding: A Comprehensive Review of Process Parameters, Clad Materials, and Corrosion Resistance”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[91] Soumak Bose, Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Arijit Mukherjee, Anupam Mallick, “Advancements and Perspectives in Gas Tungsten Arc Welding (GTAW) Cladding: A Comprehensive Exploration of Process Parameters, Material Selection, and Performance Characteristics”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[92] Soumya Ghosh, Samrat Biswas, Sayan Paul, Soumak Bose, Arijit Mukherjee, Anupam Mallick, “Unveiling the Energetic Flow: A Multi-Plane Analysis of Dynamic Pressure Distribution on a Wind Turbine Blade”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[93] Soumya Ghosh, Samrat Biswas, Sayan Paul, Soumak Bose, Arijit Mukherjee, Suman Kumar Ghosh, “Explorative Study of Total pressure in Sth frame Distribution in Flow Field

around the Wind Turbine Blade ”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[94] Soumya Ghosh, Sayan Paul, Suman Kumar Ghosh, Abhishek Poddar, Arijit Mukherjee, Samrat Biswas, “Analysis of Velocity Angle Distribution for Flow around Horizontal Axis Wind Turbine: A Qualitative Study”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[95] Soumya Ghosh, Sayan Paul, Suman Kumar Ghosh, Abhishek Poddar, Arijit Mukherjee, Samrat Biswas, “Numerical Study of Axial Component of Velocity Distribution at Sectional Plane along Span for Flow over HAWT”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[96] Soumya Ghosh, Sayan Paul, Suman Kumar Ghosh, Abhishek Poddar, Arijit Mukherjee, Samrat Biswas, “Analysis of Vorticity Distribution in Z-direction at Different Section along Span-Wise location on the HAWT Blade”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[97] Suman Kumar Ghosh, Sayan Paul, Samrat Biswas, Soumya Ghosh, Arijit Mukherjee, Soumak Bose, “Unraveling the Turbulent Tapestry: An Investigation of Eddy Viscosity Distribution on a Wind Turbine Blade”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[98] Suman Kumar Ghosh, Sayan Paul, Samrat Biswas, Soumya Ghosh, Abhishek Poddar, Soumak Bose, “Multi-Plane Analysis of K-production Distribution on a Wind Turbine Blade using the k-omega SST Model”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[99] Suman Kumar Ghosh, Samrat Biswas, Sayan Paul, Soumya Ghosh, Anupam Mallick, Soumak Bose, “Explorative Study of Total Pressure Distribution in Flow Field around the Wind Turbine Blade ”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[100] Suman Kumar Ghosh, Sayan Paul, Samrat Biswas, Soumya Ghosh, Abhishek Poddar, Soumak Bose, “Analysis of Turbulent Eddy Dissipation for Flow Field around Horizontal Axis Wind Turbine Blade”, Proceedings of the International Conference on Engineering Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

[101] Suman Kumar Ghosh, Sayan Paul, Samrat Biswas, Soumya Ghosh, Arijit Mukherjee, Soumak Bose, "Unveiling the Significance of Velocity W Distribution for Wind Turbine Performance and Flow Physics”, Proceedings of the International Conference on Engineering

Design and Computing (ICEDC-2024), Swami Vivekananda University, Barrackpore, West Bengal, India. February 22-24, 2024.

f. Project submission for funding to Government agency

1. Dr. Ranjan Kumar, Project titled “ Sustainable Treatment, Reuse and Management of electronic Waste (e-waste) plastics into Value-Added Efficient, Affordable and Synergistic Construction Materials. – Submitted to SERB-SUPRA. (Reference Id: SPR/2023/000129 Status: Accepted for Evaluation)
2. Dr. Ranjan Kumar, Dr. Ravi Nigam, Project titled “Detection and localization of faults in industrial rotor system”. SERB-SURE (Reference ID: SUR/2023/005259)
3. Dr. Ranjan Kumar, Dr. Arnab Das, Mr. Riki Biswas, Project titled “Enhancing electronic performance of Li-ion batteries exploiting sustainable advancements of Lithium Vanadium Phosphate cathode”. Submitted to Department of Science and Technology (DST), New Delhi. (Reference ID: Registration No.: TPN / 110068 Status: Accepted for Evaluation)

5. Activities (Seminar, Conference & Workshop)

1. International Conference on Integrative Science and Engineering (ICISE) –28-30 September, 2023
2. 2nd International conference on Engineering Design and Computing (ICEDC) – 22-24 February, 2024
3. Organized, SVU Innovation 2023: A Magnificent Showcase of Creativity and Ingenuity
4. Organized Tech Fest in association with IIT Kharagpur.
5. Organized Engineers Day Celebration in association with Institution’s Innovation Council (IIC)
6. Workshop on the Expansive Scope of Modeling in Collaboration with Genex Engineering & Management Solutions.
7. Active participation on Ministry of Education and AICTE sponsored national event “Innovation, Design and Entrepreneurship (IDE) Boot Camp.
8. Organized Techno Mania & Project Exhibition cum competition.
9. Summit school visit to 3D printing lab and Advance manufacturing lab.
10. Organized a Workshop on Entrepreneurship Awareness Programme:
11. Organized Vikshit Bharat Sampark awareness programme in association with NSS team.

6. Achievements of the Department

1. Department has commenced a new Journal entitled with Journal of Mechanical Engineering Advancements
Weblink: <https://www.swamivivekanandauniversity.ac.in/jmea/>
2. Centre of Excellence (Hydraulics) in association with BOSCH Rexroth.
3. Industry Collaboration with Astram Technologies, South Africa.
4. Industry Collaboration with efficient CNC.
5. Industry Collaboration with Pointo.

6. Industry Collaboration with Bosch Rexroth (A MNC Company)
7. Industry Collaboration with KYB Motorcycle Suspension India Pvt. Ltd. (A MNC Company)
8. Industry Collaboration with Dhoot Transmission, Aurangabad.
9. Academic Collaboration with IIT Kharagpur (Virtual Lab Project)
10. Academic Collaboration with Aliah University, Kolkata.
11. Student Chapter establishment with The Institution of Engineers.
12. Collaboration with Tata Strive.
13. Establishment of Centre of material testing and characterization (NABL Certified Instrumentation)
14. Establishment of Centre of advanced manufacturing.

DEPARTMENT OF ELECTRICAL ENGINEERING

ABOUT DEPARTMENT:

Electrical engineering is a fascinating field that revolves around the study of electricity, electronics, and electromagnetism. As an electrical engineer, you'll delve into designing, analysing, and implementing various electrical systems, devices, and technologies. The curriculum covers essential areas such as circuit analysis, power engineering, digital systems, and control systems. These professionals play a crucial role in shaping our world. Whether it's developing communication systems, microelectronics, or power generation solutions, electrical engineers contribute to a wide range of projects. From the initial design phase to system installation and testing, their responsibilities span across diverse industries, including electric power generation, agriculture, research, and control instrument manufacturing. Continuous learning keeps their skills up-to-date, ensuring they meet industry standards and government regulations while addressing consumer needs.

EXTERNAL MEMBERS ON THE BOARD OF STUDIES:

| SL. | NAME | DESIGNATION |
|-----|------------------------|--|
| 1. | Dr. Sandip Chanda | Associate Professor, Department of Electrical Engineering, GKCIET |
| 2. | Dr. Abhinandan De | Associate Professor, Department of Electrical Engineering, IEST, Shibpur |
| 3. | Dr. Subhra Jana | Assistant Professor, CEM, Kolaghat |
| 4. | Dr. Pritam Kumar Gayen | Assistant Professor, Kalyani Govt. Engineering College |

FACULTY DETAILS

| Name of the Teacher | Specialization |
|-------------------------|--|
| Dr. Rituparna Mitra | Power Distribution, Power Quality |
| Dr. Rituparna Mukherjee | Power System Protection |
| Dr. Suryendu Dasgupta | HIGH VOLTAGE ENGINEERING, COMPUTATION AND OPTIMIZATION OF ELECTRIC FIELDS FOR HIGH VOLTAGE APPARATUS |
| Mr. Abhishek Dhar | Power Distribution, Power Quality |
| Mr. Avik Datta | Control and Instrumentation |
| Mr. Koushik Chatterjee | Power System Protection |
| Mr. Saikat Majumder | Hybrid Electric Vehicle |

| | |
|----------------------------|---|
| Ms. Arunima Mahapatra | Renewable Energy, Power System |
| Mr. Promit Kumar Saha | Power Electronics, Renewable Energy, Hybrid Electric Vehicle, High Voltage Engineering, IoT, Smart Grid |
| Mr. Titas Kumar Nag | Power system, renewal energy |
| Ms. Susmita Dhar Mukherjee | power system |
| Mr. Suvrajjal Dutta | Power system Protection |
| Mr. Sujoy Bhowmik | Power Electronics Converters, Active Power Factor Correction, PWM Rectification |
| Mr. Parshan Bandopadhyay | Control System, PID Control, Nonlinear System Analysis |
| Mr. Soumen Pal | Power System Optimization, Micro-grid, Renewable Energy, DERs |
| Ms. Suravi Singh | Micro-Grid Energy Management System, Renewable Energy, DERs, Smart Grid. |

PUBLICATIONS

Conference

1. Suvrajjal Dutta , Titash Kumar Nag , Promit Kumar Saha “Optimal PMU Placement Methods in Power Systems: A Review of Phasor Measurement Unit Integration” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
2. Suvrajjal Dutta , Avik Datta , Rituparna Mitra “HVDC Protection Strategies: An In-Depth Survey and Analysis” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
3. Suvrajjal Dutta, Papun Biswas, Sandip Chanda “Enhancing Power System Reliability: Three-Zone Distance Protection for Transmission Line Contingencies” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
4. Rituparna Mukherjee ,Abhishek Dhar, Saurabh Adhikari “Ensemble Security Predictor based Power System Dynamic Security State Predictor” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
5. Rituparna Mukherjee ,Abhishek Dhar ,Saurabh Adhikari “Power System Transient Stability Analysis using Kohonen Neural Network Security Classifier - a Case Study on the IEEE 57-Bus System" International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
6. Promit Kumar Saha , Suvrajjal Dutta , Rituparna Mukherjee , Susmita Dhar Mukherjee, Aritras Chakraborty , Rituparna Mitra, Avik Datta, Titas Kumar Nag “A Literature Review on High Gain dc-dc Boost Converter” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)

7. Promit Kumar Saha, Rituparna Mitra , Rituparna Mukharjee “A Review on Application of Solar Energy in Agriculture Sector” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
8. Susmita Dhar Mukherjee ,Rituparna Mukherjee ,Suvraujjal Dutta “Review of the growth prospects for renewable energy in several countries” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
9. Susmita Dhar Mukherjee , Rituparna Mukherjee , Rituparna Mitra “A Comparative Review of the Use, Difficulties, and Future of Renewable Energy” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
10. Arunima Mahapatra “Comprehensive study on-sizing of hybrid renewable-energy. system using traditional methods “ International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
11. Arunima Mahapatra “A detailed study on-methods of optimization used in hybrid renewable-energy system” “ International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
12. Arunima Mahapatra “ An extensive study on-management methods of hybrid renewable-energy system” “ International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
13. Promit Kumar Saha, Rituparna Mukharjee, Suvraujjal Dutta, Rituparna Mitra, Avik Datta, Titas Kumar Nag “Islanded Microgrid Adaptive Control of Power Electronics Load Considering User Intention” International Conference on Integrative Science and Engineering (ICISE-2023) (Accepted)
14. Rituparna Mitra, Avik Datta, Susmita Dhar Mukherjee, Titas Kumar Nag, Promit Kumar Saha, Suvraujjal Dutta ”Review on Wind Energy Based Electricity Market Price and Load Forecasting” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)
15. Rituparna Mitra, Avik Datta, Titas Kumar Nag, Promit Kumar Saha, Rituparna Mukherjee, Susmita Dhar Mukherjee “An overview on re- active power supervision in deregulated energy markets” International Conference on Engineering Design and Computing (ICEDC-2024) (Accepted)
16. Suvraujjal Dutta, Avik Datta, Titas Kumar Nag, Rituparna Mukharjee “Ship-board Power System Intelligent Protection System Design” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)
17. Suvraujjal Dutta, Avik Datta, Rituparna Mitra, Rituparna Mukharjee “Indian Power System Frequency Analyses” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)
18. Suvraujjal Dutta, Avik Datta, Rituparna Mitra, Rituparna Mukharjee “The Method of Operation Condition Assessment and How It Can Be Usefully for Protection Systems”

International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

19. Suvraujjal Dutta ,Avik Datta ,Rituparna Mitra ,Rituparna Mukharjee “An investigation on how variations in PV power generation model parameters affect power systems” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

20. Suvraujjal Dutta ,Titas Kumar Nag , Promit Kumar Saha, Susmita Dhar Mukharjee “Diagnosis of power system protection issues: a few factors of power system transformation” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

21. Rituparna Mukherjee , Susmita Dhar Mukherjee , Abhishek Dhar , Avik Datta , Rituparna Mitra , Promit Kumar Saha “Machine Learning Techniques for Power System Protection from a Utility Perspective” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

22. Rituparna Mukherjee , Susmita Dhar Mukherjee , Abhishek Dhar , Avik Datta , Rituparna Mitra , Promit Kumar Saha “Review of machine learning applications to power systems studies” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

23. Rituparna Mukherjee , Susmita Dhar Mukherjee , Promit Kumar Saha, Abhishek Dhar, Suvraujjal Dutta, Titas Kumar Nag “Power System Relay Protection Technology: Its Development and Use” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

24. Rituparna Mukherjee , Abhishek Dhar, Titas Kumar Nag, Susmita Dhar Mukherjee, Suvraujjal Dutta , Promit Kumar Saha “OPTIMIZATION TECHNIQUES IN POWER SYSTEM: REVIEW” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

25. Rituparna Mukherjee , Abhishek Dhar, Titas Kumar Nag, Susmita Dhar Mukherjee, Suvraujjal Dutta , Promit Kumar Saha “A Practical Approach to Machine Learning Techniques in Power System Protection” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

26. Titas Kumar Nag , Rituparna Mitra, Suvraujjal Dutta, Rituparna Mukherjee , Avik Dutta , Susmita Dhar Mukherjee “Energizing smart grid: An in-depth analysis of energy storage technology and applications with integration of renewable energy” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

27. Titas Kumar Nag, Rituparna Mitra, Rituparna Mukherjee, Avik Dutta, Suvraujjal Dutta, Promit Kumar Saha “A evaluation of the integration of renewable energy sources and electric vehicles in the smart grid” International Conference on Engineering Design and Computing (ICEDC-2024) (Accepted)

28. An in-depth look at the day-ahead electricity market and important aspects of major global changes in electric power

29. Titas Kumar Nag, Rituparna Mitra, Avik Dutta, Rituparna Mukherjee, Promit Kumar Saha, Susmita Dhar Mukherjee “Wind Energy Grid Integration Challenges” International Conference

on Engineering Design and Computing(ICEDC-2024) (Accepted)

30. Titas Kumar Nag , Rituparna Mitra, Avik Dutta , Rituparna Mukherjee , Suvraujjal Dutta, Susmita Dhar Mukherjee “Renewable energy sources connected to the grid: An overview of the most modern integration specifications and control techniques" International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

31. Titas Kumar Nag , Rituparna Mitra, Rituparna Mukherjee , Susmita Dhar Mukherjee , Suvraujjal Dutta, Promit Kumar Saha “Applications of grid-scale energy storage in the integration of renewable energy sources: A survey” International Conference on Engineering Design and Computing(ICEDC-2024) (Accepted)

32. Sujoy Bhowmik*, Avik Datta, Rituparna Mitra, Suryendu Dasgupta, Arunima Mahapatra “A Review – Solar Power in India Present Scenario, Challenges and Opportunities”, International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

33. Sujoy Bhowmik*, Suryendu Dasgupta, Avik Datta, Suvraujjal Dutta, Rituparna Mukherjee “A Conceptual Review on Electrical Power Generation” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

34. Sujoy Bhowmik*, Susmita Dhar Mukherjee, Arunima Mahapatra, Rituparna Mitra, Suvraujjal Dutta “Review on Microgrid Technology” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

35. Sujoy Bhowmik*, Rituparna Mukherjee, Rituparna Mitra, Avik Datta, Susmita Dhar Mukherjee “Introduction to Machine Learning” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

36. Sujoy Bhowmik*, Rituparna Mitra, Suryendu Dasgupta, Avik Datta “An Analytical Study of Power System under the Fault Conditions using different Methods of Fault Analysis” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

37. Suryendu Dasgupta, Avik Datta, Rituparna Mitra, Sujoy Bhowmik “A Review of Applications of High Voltage” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

38. Suryendu Dasgupta, Rituparna Mitra, Avik Datta, Sujoy Bhowmik “A Review of Partial Discharge Tests Pertaining to DC Applications” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

39. Suryendu Dasgupta, Avik Datta, Rituparna Mitra, Sujoy Bhowmik “An Examination of Techniques for Partial Discharge Detection and Diagnosis in High Voltage Power Cables” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

40. Suryendu Dasgupta, Avik Datta, Sujoy Bhowmik, Rituparna Mitra “An Examination of the Aging Effectiveness of Polyethylene Insulation Materials Cross-linked with Direct Current” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

41. Suryendu Dasgupta, Sujoy Bhowmik, Rituparna Mitra, Avik Datta “Examining the methods for partial discharge monitoring employed in high-voltage equipment” International

Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

42. Rituparna Mitra, Avik Datta “Study and Investigation of Force Quality for an Electric Power Appropriation Framework - Contextual analysis: Mos- cow Locale” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

43. Rituparna Mitra, Avik Datta “ A Look at the Issues with Power Quality and How to Fix Them” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

44. Rituparna Mitra, Avik Datta “Examination of Force Quality Varieties in Conveyed Age Frameworks “ International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

45. Rituparna Mitra, Avik Datta “A review of the effects of electric vehicle integration on distribution network power quality and the associated mitigation measures” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

46. Rituparna Mitra, Avik Datta “Power Quality Improvement in Power Appropriation Framework: Momentum and Future Patterns in Exploration” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

47. Avik Datta, Rituparna Mitra, Sujoy Bhowmik, Suryendu Dasgupta, Rituparna Mukherjee, Titas Kumar Nag “Thorough Survey on Power Market Cost and Burden Forecasting Using Wind Power” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

48. Avik Datta, Rituparna Mitra, Promit Kumar Saha, Susmita Dhar Mukherjee, Suvraujjal Dutta, Rituparna Mukherjee “Review of Domestic and International Electricity Market Reform” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

49. Avik Datta, Rituparna Mitra “An Examination of the Electricity Market Architecture” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

50. Avik Datta, Rituparna Mitra “A look at market power in the electricity market that is not regulated” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

51. Avik Datta, Rituparna Mitra “An in-depth look at the day-ahead electricity market and important aspects of major global changes in electric power” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

52. Suvraujjal Dutta, Avik Datta, Rituparna Mitra, Rituparna Mukharjee “Real-Time Power System State Estimation via the Alternating Direction Method of Multipliers” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

53. Suvraujjal Dutta¹, Sujoy Bhowmik, Rituparna Mitra, Suryendu Dasgupta “Adversarial Deep Learning Techniques Targeting Power System State Estimation” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

54. Suvraujjal Dutta, Promit Kumar Saha, Arunima Mahapatra, Susmita Dhar Mukharjee “Machine Learning Applications to Power Systems” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
55. Suvraujjal Dutta, Sujoy Bhowmik, Rituparna Mitra, Suryendu Dasgupta “PMU Based Real Time Power System State Estimation using ePHASORsim” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
56. Suvraujjal Dutta¹, Sujoy Bhowmik, Titas Kumar Nag³, Suryendu Dasgupta⁴ “Dynamic State Estimation in Power Systems Using Kalman Filters” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
57. Promit Kumar Saha, Rituparna Mukherjee, Abhishek Dhar, Aritras Chakraborty, Susmita Dhar Mukherjee “A Structural Overview of Complex Inverters Based on Main Submodules” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
58. Susmita Dhar Mukherjee, Rituparna Mukherjee, Abhishek Dhar, Promit Kumar Saha Rituparna Mitra Avik Dutta “An overview of the obstacles and problems facing electric cars in India as well as the vehicle to grid optimization “International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
59. Susmita Dhar Mukherjee, Rituparna Mukherjee, Abhishek Dhar, Promit Kumar Saha Titas Kumar Nag, Suvraujjal Dutta “ An analysis of India’s Electric Vehicle Adoption: The Mediating Effect of Attitude “International- al Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
60. Susmita Dhar Mukherjee, Rituparna Mukherjee, Abhishek Dhar, Pro- mit Kumar Saha Sujay Bhowmik, Arunima Mahapatra “Review on Research trends on electric vehicles” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
61. Susmita Dhar Mukherjee, Rituparna Mukherjee, Abhishek Dhar, Promit Kumar Saha “Industrial Automation System Utilizing PLC” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
62. Rituparna Mukherjee, Susmita Dhar Mukherjee, Abhishek Dhar, Promit Kumar Saha Rituparna Mitra Avik Dutta “An overview of programmable logic controllers’ (PLCs’) uses” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
63. Susmita Dhar Mukherjee, Rituparna Mukherjee, Abhishek Dhar, Promit Kumar Saha “An overview of the power systems studies’ use of machine learning” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
64. Rituparna Mukherjee, Susmita Dhar Mukherjee, Abhishek Dhar, Promit Kumar Saha Rituparna Mitra Titas Kumar Nag “DETECTION OF TRANSMIS- SION LINE FAULTS: A REVIEW” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)
65. Rituparna Mukherjee, Susmita Dhar Mukherjee, Abhishek Dhar, Promit Kumar Saha Suvraujjal Dutta Titas Kumar Nag “A Review on Fault Detection and Allocation Techniques

in Power System” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

66. Rituparna Mukherjee, Susmita Dhar Mukherjee, Abhishek Dhar, Promit Kumar Saha Sujoy Bhowmik, Arunima Mahapatra “POWER SYSTEM AND FAULTS: A REVIEW” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

67. Rituparna Mukherjee, Susmita Dhar Mukherjee, Abhishek Dhar, Promit Kumar Saha Sujoy Bhowmik, Arunima Mahapatra “ A Review on Fault Detection on DC Microgrid” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

68. Titas Kumar Nag “OVERVIEW OF TRANSMISSION CONGESTION MANAGEMENT IN DISTRIBUTION NETWORK” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

69. Titas Kumar Nag “AN OVERVIEW ON VARIOUS ATTRIBUTES OF TRANSMISSION LINE CONGESTION MANAGEMENT” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

70. Titas Kumar Nag “PERSPECTIVES ON TRANSMISSION LINE CONGESTION MANAGEMENT “International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

71. Titas Kumar Nag “OVERVIEW ON RECENT ADVANCEMENT IN TRANSMISSION LINE CONGESTION” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

72. Titas Kumar Nag “SYNOPSIS ON CONGESTION MANAGEMENT FOR DEREGULATED POWER SYSTEM” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

73. Arunima Mahapatra, Nitai Pal, Ratan Mandal “A Comprehensive Study of Hydrogen Energy: Mechanisms, Technologies, Benefits, Challenges, Applications and Future Prospects” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

74. Arunima Mahapatra, Nitai Pal, Ratan Mandal “An In-Depth Review of Fuel Cells: Operation, Technologies, Applications, and Future Outlook” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

75. Arunima Mahapatra, Rituparna Mukherjee, Suvrajjal Dutta, Sujoy Bhowmik “Advancements and Challenges in Tidal Energy: A Comprehensive Study” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

76. Arunima Mahapatra*, Sujoy Bhowmik, Suvrajjal Dutta, Rituparna Mukherjee “ Extensive Study on Magnetohydrodynamics (MHD): Fundamentals, Technologies, Applications, and Future Prospects” International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

77. Arunima Mahapatra, Nitai Pal, Ratan Mandal “Advancements and Challenges in Wave Energy Harvesting: A Comprehensive Review “International Conference on Integrative Science and Engineering (ICISE-2024) (Accepted)

78. S. Bhowmik, S. Chowdhury and A. Mitra, "Analysis of Active Power Transfer to Grid from a Specific EV - A V2G Technology," IEEE 3rd International Conference on Control, Instrumentation, Energy & Communication (CIEC), Kolkata, India, 25 – 27 January, 2024, Electronic ISBN: 979-8-3503-1370-3, Print on Demand (PoD) ISBN: 979-8-3503-1371-0, pp. 384-389, DOI: 10.1109/CIEC59440.2024.10468540.

79. S. Bhowmik and A. Mitra, "Design of PID Controller for Separately Excited DC Motor and Its Performance Analysis", published in the proceedings of International Conference on Energy, Systems, Drives, Power Electronics, Measurement & Sensors (ESDPMS 2K23), organized by Department of Electrical Engineering, Narula Institute of Technology (IEEE PES Student Chapter) on 16th and 17th February, 2023, Ideal International E-Publication, 1st edition, Vol. 1, ISBN: 978-93-89817-95-9, pp. 103-107.

80. S. Bhowmik, P. K. Gayen and A. Mitra, "Performance Comparison between PI based Control and Model Predictive Control of Voltage Source Inverter under Load Variations," IEEE International Conference of Electron Devices Society Kolkata Chapter (EDKCON), Kolkata, India, 26 - 27 November, 2022, Electronic ISBN: 978-1-6654-7205-0, Print on Demand (PoD) ISBN: 978-1-6654-7206-7, pp. 344-348, DOI: 10.1109/EDKCON56221.2022.10032916.

81. S. Bhowmik, A. Mitra, S. Sarkar, S. Mukherjee, K. Banerjee and P. Dutta, "Design and Performance Analysis of DC-DC Sepic Converter for Specific Input Range," IEEE International Conference of Electron Devices Society Kolkata Chapter (EDKCON), Kolkata, India, 26 - 27 November, 2022, Electronic ISBN: 978-1-6654-7205-0, Print on Demand (PoD) ISBN: 978-1-6654-7206-7, pp. 6-11, DOI: 10.1109/EDKCON56221.2022.10032921.

82. Mitra, S. Bhowmik and P. B. Deb, "Analysis of Series Load Resonant (SLR) DC– DC Converter under Different Modes of Operation," 2nd IEEE International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC), Mathura, India, 21 – 22 January, 2022, Electronic ISBN: 978-1-6654-3215-3, DVD ISBN: 978-1-6654-3214-6, Print on Demand (PoD) ISBN: 978-1-6654-3216-0, pp. 1-4, DOI: 10.1109/PARC52418.2022.9726544.

83. S. Bhowmik, A. Mitra and P. B. Deb, "Effect of Load Switching on Induced e.m.f. of a Transformer," IEEE International Conference on Computational Performance Evaluation (ComPE), Shillong, India, 01 – 03 December, 2021, Electronic ISBN: 978-1-6654-3656-4, Print on Demand (PoD) ISBN: 978-1-6654-3657-1, pp. 103-108, DOI: 10.1109/ComPE53109.2021.9752120.

84. S. Bhowmik, S. Karmakar, J. Das, A. Mitra, B. Halder and S. Mukherjee, "Measurement of Real Time Energy Consumption using Low-Cost High-Speed Microcontroller," 13th IEEE PES Asia Pacific Power & Energy Engineering Conference (APPEEC), Thiruvananthapuram, India, 21 - 23 November 2021, Electronic ISBN: 978-1-6654-4878-9, Print on Demand (PoD) ISBN: 978-1-6654-4879-6, pp. 1-5, DOI: 10.1109/APPEEC50844.2021.9687750.

85. Mitra, S. Bhowmik and S. Chowdhury, "V/f Control of PMSM Drive fed from PR Current Controller Based Single-Phase AFE Rectifier," IEEE 3rd International Conference on Control, Instrumentation, Energy & Communication (CIEC), Kolkata, India, 25 – 27 January, 2024, Electronic ISBN: 979-8-3503-1370-3, Print on Demand (PoD) ISBN: 979-8-3503-1371-0, pp. 337-342, DOI: 10.1109/CIEC59440.2024.10468398.

86. Mitra, S. Bhowmik, S. Mukherjee, P. Dutta, K. Banerjee and S. Sarkar, "Performance Comparison and Design of Passive Components for DC-DC Buck- Boost, Cuk and Sepic Converter," IEEE International Conference of Electron Devices Society Kolkata Chapter (EDKCON), Kolkata, India, 26 - 27 November, 2022, pp. 12-17, Electronic ISBN: 978-1-6654-7205-0, Print on Demand (PoD) ISBN: 978-1-6654-7206-7, DOI: 10.1109/EDKCON56221.2022.10032936.
87. S. Bhowmik, S. Pal, and D. Dey, "Water Treatment – Principles and Procedure For Next Generation Desalination Technology", National Conference on Environmental Sustainability, Water Resource and Management (ES- WRM 2K19), organized by Narula Institute of Technology, 8 - 9 November, 2019, ISBN: 978-93-89817-19-5, pp. 74.
88. S. Bhowmik, D. P. Goswami, and D. Dey, "Cluster formation of HRV in AF patients: a comparison with normal people", 2nd National Conference on Science, Technology and Communication Skills (NCSTCS 2K19), organized by Narula Institute of Technology, 5th April, 2019, ISBN: 978-93-86675-98-9, pp. 59.
89. "Three zone distance protection of modern power system with transmission line contingency", International Conference on Computational Advancement in Applied Science and Engineering (IC2A2SE - 2016).
90. Suvraujjal Dutta, Dr. Sandip Chanda , Dr. Papun Biswas, Dr. Abhinandan De, "Development of PMU data-based fault classification in smart electrical power networks", ICTCS 2022, Chandigarh, India.
91. Suvraujjal Dutta, Dr. Sandip Chanda , Dr. Papun Biswas, Dr. Abhinandan De, "State Estimation of Smart Power System Networks with PMU Data and Machine Learning Algorithms" , ESDA 2022,Kolkata,India.
92. Suvraujjal Dutta, Dr. Sandip Chanda, Dr. Papun Biswas, Dr. Abhinandan De, A Survey on Dynamic state estimation strategies of power system networks , ICICASEE 2023, Malda, India.
93. Suvraujjal Dutta, Dr. Sandip Chanda , Dr. Papun Biswas, Dr. Abhinandan De, A Survey on Dynamic State Estimation strategies deployed for protection and control of modern Power Grid, CCSN 2023, Mumbai, India.

Books :

1. Advancement of Power Electronics Abridgement with Power Quality Issues **ISBN: 978-81-964878-1-2**
2. Electrical Engineering Developments in Recent Years **ISBN: 978-93- 340-1849-3**
3. Future Energy Resources **ISBN: 978-93-340-6874-0**

Book Chapter:

1. Arkendu Mitra, Subhra Mukherjee, Pallav Dutta and Sujoy Bhowmik, "Recent Advancements in Power Electronics" has been published in edited book titled "Advances in Electrical Engineering (Volume - 7)", ISBN: 978-93-6135-603-2, by AkiNik Publications.
2. Subhra Mukherjee, Arkendu Mitra, Kamalika Banerjee and Sujoy Bhowmik, "Different Types of Solar Photovoltaic Cells along with Recent Developments in Perovskite Materials" has been published in edited book titled "Advances in Electrical Engineering (Volume - 7)", ISBN: 978-93-6135-603-2, by AkiNik Publications.
3. Mitra, S. Bhowmik, A. Halder, S. Karmakar and T. Paul, "Performance Analysis of Series Load Resonant (SLR) DC–DC Converter", Power Converters, Drives and Controls For Sustainable Operations, Scrivener Publishing, WILEY, Chapter 5, ISBN 978-11-19791-91-1, pp. 149-158, 23rd June, 2023, DOI: <https://doi.org/10.1002/9781119792918.ch5>.
4. Bose, A. Mitra, S. Mukherjee, S. Bhowmik, "Solar Tracking System to Harvest Photovoltaic Energy with Higher Efficiency", published in the edited book on Emerging Technology & Management Trends in Environment and Sustainability (EMTES-2022), CRC Press, Taylor & Francis Group, Chapter 9, ISBN: 978-1-032-41095-1 (pbk), ISBN: 978-1-003-35623-3 (ebk), pp. 93-101, 26th May, 2023, DOI: <https://doi.org/10.4324/9781003356233>.
5. Suvrajjal Dutta, Dr. Sandip Chanda, Dr. Papun Biswas, Dr. Abhinandan De (31 May 2023). "Development of PMU Data-Based Fault Classification in Smart Electrical Power Networks". In: Joshi, A., Mahmud, M., Ragel, R.G. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2022). ICTCS 2022. Lecture Notes in Networks and Systems, vol 623. Springer, Singapore.

Research Papers

1. Rituparna Mukherjee, Abhinandan De, Promit Kumar Saha, Susmita Dhar Mukherjee, Abhishek Dhar, Saurabh Adhikari, A Convolutional Neural Network based Pattern Classification Approach for Dynamic Security Assessment with Inadequate Energy Sources, Journal of Mines, Metals and Fuels: Volume 71, Issue 12A, 2023
2. Rituparna Mukherjee, Abhinandan De, Promit Kumar Saha, Susmita Dhar Mukherjee, Abhishek Dhar, Saurabh Adhikari, Power System Transient Stability Analysis using Decision Tree Classifier- A Case Study on the IEEE 57- Bus System, Journal of Mines, Metals and Fuels: Volume 71, Issue 12A, 2023
3. Susmita Dhar Mukherjee, Abhishek Dhar, Saurabh Adhikari, Rituparna Mukherjee, Suvrajjal Dutta, Promit Kumar Saha, A Review on Electric Vehicles and Renewable Energy Synergies in Smart Grid, Journal of Mines, Metals and Fuels: Volume 71, Issue 12A, 2023
4. Mahapatra, A., & Pal, N. (2024). Comprehensive Study on Sizing of Hybrid Renewable Energy System Using Commercial Software. Journal of Mines, Metals and Fuels, 71(12A), 47–53. <https://doi.org/10.18311/jmmf/2023/43192>
5. Das, P., Mitra, R., Dey, B., Das, S., Pal, B., Sasmal, M., Upadhaya, D., Roy, G., Pandey, A., & Roy, B. (2024). A Review on Techniques of Power Transmission Lines Congestion Management in Deregulated Electricity Market. Journal of Mines, Metals and Fuels, 71(12A), 394–397. <https://doi.org/10.18311/jmmf/2023/43065>

6. A. Mitra, S. Das, S. Bhowmik and S. Chowdhuri, "Performance Improvement of Three-Phase AFE Rectifier During Switching of Loads with Fractional Feedback Current Control," Sodhano Journal, Vol. 49, No. 203 (2024) Springer (SCIE), I.F = 1.6.

7. "Design and Development of Three-Zone Distance Relay Protection Scheme at MATLAB Platform" ISSN 2250-2106, published in Journal(SCOPUS) of The Institution of Engineers (India): Series B in 2nd Nov 2020.

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

1. International Conference on Engineering Design and Computing (ICEDC)-2023- 27th-28 January 2023
2. International Conference on Integrative Science and Engineering (ICISE-2023)
3. International Conference on Engineering Design and Computing (ICEDC)-2024)
4. International Conference on Integrative Science and Engineering (ICISE-2024)

DEPARTMENT OF BIOTECHNOLOGY

ABOUT DEPARTMENT:

The Department of Biotechnology at Swami Vivekananda University, established in 2019, has consistently aimed to position itself as a department of excellence, bridging academia and industry. With a distinguished and competent faculty, the department strives to instill the latest tenets and trends of modern biotechnology in its students, encouraging them to dream. The department's comprehensive laboratory facilities serve undergraduate, postgraduate, and PhD research students, providing an excellent foundation for advanced study and research.

Biotechnology, at the forefront of science and technology, integrates Physics, Chemistry, Mathematics, and Biology, attracting students from these disciplines at the high school level. The department is dedicated to fostering innovation and entrepreneurship through its curriculum. Presently, 25 research scholars are engaged in diverse areas of biotechnology under the mentorship of experienced faculty. Key research areas include Molecular Biology, Bioinformatics, Drug Discovery & Protein Engineering, Environmental Biotechnology, and Applied Nanotechnology. Regular campus recruitment drives offer students diverse career opportunities, inspiring them to contribute to society and the nation. The department actively organizes international conferences and seminars, providing students with opportunities to interact with eminent scientists such as Prof. Sunil Kumar Khare, Prof. Subhra Chakraborty, Prof. Suman Kumar Dhar, Prof. Parthapratiim Majumdar, and Prof. Debabrata Das. The establishment of the journal club promotes scientific research ideas among postgraduate students. Participation in initiatives like the Smart India Hackathon encourages students to pursue innovation and entrepreneurship. Under the guidance of Hon'able Chancellor Dr. Nandan Gupta, COO Mr. Saurabh Adhikari, and Vice Chancellor Subrata Kumar Dey, the department has published a book titled "Frontiers in Biotechnology: Emerging Approaches and Strategies" (ISBN 978-93-5980-245-9).

This book, featuring eight chapters on recent developments in oncology, computational biology, bioremediation, environmental pollution, bioprocess engineering, gene regulation sequencing, and nanobiotechnology, showcases contributions from esteemed faculty members. Faculty members regularly enhance their academic and professional skills through Faculty Development Programmes. Since 2019, the university has collaborated with various institutions and government organizations to foster interdisciplinary break throughs. We are pleased to announce that Dr. Priyajit Banerjee has received a grant for the project "Investigating Synergistic Antifungal Effects of Bioavailable Curcumin and Berberine to Combat Drug-Resistant *Candida albicans*" from Polyphenolix Research Laboratory (OPC) Pvt. Ltd. An advanced research laboratory equipped with high-end instruments such as UV-Visible Spectroscopy, High Performance Liquid Chromatography (HPLC), Atomic Absorption Spectroscopy (AAS), Fourier Transform Infrared Spectroscopy (FTIR), Gas Chromatography Flame Ionization Detector (GC-FID), Rotary Evaporator, and Filtration Assembly has been established for this project. Additionally, Dr. Srijan Haldar, Associate Professor, has received a grant to serve as Co-investigator for the project "Indoor Air Pollution Study in South Asian Countries," funded by the YESI Knowledge Exchange Fellows scheme.

In April-May 2024, biotechnology students from the department have been shortlisted for their outstanding participation in the E-YUVA Entrepreneurship Program, a BIRAC initiative by the Department of Biotechnology, Government of India.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|--------------------------|--|
| Dr. Pijush Mallick | Agriculture Biotechnology |
| Dr Semanti Ghosh | Protein structure function relationship, Computer- aided drug discovery, Molecular Dynamics study, Structural bioinformatics, Computational Biology. |
| Dr Bidisha Ghosh | Nano-Sensing, Nano-Ligand Interaction |
| Dr. Sibashish Bakshi | Bioenergy, Fermentation Technology |
| Dr Sabyasachi Ghosh | Environmental Nano Biotechnology |
| Dr. Mainak Mukhopadhayay | Enzymology |
| Dr. Srijan Haldar | Enzymology, Industrial Biotechnology |
| Dr. Santanu Paul | Cell Biology, Cancer Stem Cell |
| Dr Priyankar Pal | Environmental Toxicology And Physiology |
| Dr. Aroni Chatterjee | Medical Biotechnology |
| Dr Debjit De | Host Microbiome Interaction, Host Disease, NGS Data Analysis, Metagenomics, Genomics, Meta- Analysis, Biostatistics |
| Dr Priyajit Banerjee | Drug Discovery and Protein Engineering |
| Dr Samudra Pal | Human Genetics |
| Dr Palash Kumar Pal | Eco-toxicology and Environmental Endocrinology |
| Mr. Susovan Jana | Structural bioinformatics, Computational Biology. |

PUBLICATIONS

a. Conference Publications

1. Sriya Choudhury, Sibashish Baksi, Bidyut Bandyopadhyay, Debjani Roy. "Assessment of Phytochemicals, Antioxidant Activity and Enzyme Production of Endophytic Fungi Isolated from Medicinal Plant Sources." International Conference on Scientific Advances in Life Sciences, Agriculture and Food & Nutrition (ICSA 2023) (Published)
2. Ayan Ghorui, Sibashish Baksi. "CRISPR/Cas9 Technology: Challenges and Drawbacks." International Conference on Scientific Advances in Life Sciences, Agriculture and Food & Nutrition (ICSA 2023) (Published)
3. Subha Mondal, Sibashish Baksi. "Bioremediation Of Industrial Wastewater: A Synergistic Approach." International Conference on Scientific Advances in Life Sciences, Agriculture and Food & Nutrition (ICSA 2023) (Published)
4. Ankita Guin, Sibashish Baksi. "RNA Interference: A Potential Approach For Silencing Splice Isoforms Associated With Human Diseases." International Conference on Scientific Advances in Life Sciences, Agriculture and Food & Nutrition (ICSA 2023) (Published)
5. Shreya Saha, Sibashish Baksi. "Illuminating The Shadows: Unveiling The Concealed Hazards And Intriguing Links Between Light Pollution And Cancer." International Conference on Scientific Advances in Life Sciences, Agriculture and Food & Nutrition (ICSA 2023) (Published)
6. Rupesh Dutta Banik, Uparna Dutta, Sneha Sahani, Shreya Saha, Subhankar Paul, Sibashish Baksi, Pritha Pal. "Impact Of Chronic Arsenic Toxicity on Human Health- A Review", International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
7. Krittika Ganguly, Lusi Dey, Sibashish Baksi. "Mycoremediation: Role of Mushroom in the Bioremediation of Heavy Metals", International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
8. Pritha Pal, Rittick Dutta, Shrabani Roy, Riya Majumder, Sibashish Baksi. "Severity Of Oral Carcinoma With Respect To Various Addictions- A Study In West Bengal", International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
9. Madhusmita Padhi, Moumita Mukherjee, Sibashish Baksi*, Pritha Pal*. "Study Of Extent of Global Uranium Contamination in Groundwater", International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
10. Uzma Ghazal, Pritha Pal, Sibashish Baksi. "HPV Vaccination: A Comprehensive Approach to Control Cervical Cancer", International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
11. Rupesh Dutta Banik, Pritha Pal, Sibashish Baksi. "Green Strategy for Reclaiming Ecosystem: Microbial Remediation of Leather Industry Wastes", International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)

12. Ananya Samanta, Semanti Ghosh. Molecular insight of Q126P PINK1 mutation in Parkinson's disease. International Conference on Engineering Design and Computing (ICEDC-2023) (Accepted)
13. Mouli Nahar, Semanti Ghosh. Comprehensive In-silico study of PLAT domain containing protein 1 upregulated from salinity stress in *Oryza sativa*. International Conference on Engineering Design and Computing (ICEDC-2023) (Accepted)
14. Deep Saha, Prabahan Nath, Semanti Ghosh. Gene enrichment, network mapping and identification of potential core genes associated with Parkinson's disease. Submitted in ICALF 2024.
15. Debojyati Datta, Semanti Ghosh, A Review on role of long non coding RNA in Dengue Fever. Submitted in ICALF 2024.
16. Srijani Karmakar, Sahely Roy, Ritika Roy, Semanti Ghosh. Phage Therapy: A Promising Paradigm Shift in Antibiotic Resistance. Submitted in ICALF 2024.
17. Ritika Roy, Riya Ghosh, Tilatoma Dasgupta, Srijani Karmakar, Semanti Ghosh. Role of *Helicobacter pylori* in gastric carcinogenesis. Submitted in ICALF 2024.
18. Rajiv Gosai, Semanti Ghosh. Medicinal impact of *Costus igneus* on diabetes mellitus: Insulin Plant. Submitted in ICALF 2024.
19. Joysurya Kanthal, Semanti Ghosh. Nanotechnology-based immunotherapeutic medication for Cancer diagnosis and treatment. Submitted in ICALF 2024.
20. Manashi Paul, Semanti Ghosh. Functional effect of Secondary metabolites produced by Endophytic fungi. Submitted in ICALF 2024.
21. Pooja Kumari, Semanti Ghosh. Anticancer peptides: synthesis methods, modes of action, and future potential therapeutic uses for cancer treatment. Submitted in ICALF 2024.
22. Ramu Samanta, Semanti Ghosh. Functional effect of yogurt in human health. Submitted in ICALF 2024.
23. Kritika Das, Soumashree Mondal, Suranjana Dhara, Aditi Das, Daizy, Semanti Ghosh. Genetic diagnosis of Alagille syndrome: A genetic disorder. Submitted in ICALF 2024.
24. Pratim Patra, Srijita Ghosh, Ipsmita Pan, Tandrima Tikadar, Shaloni Das, Monisha Sarker, Semanti Ghosh. CYSTIC FIBROSIS: An inherited life threatened genetic disorder. Submitted in ICALF 2024.
25. Banik, et al., "Phytotoxicity Study of Biogenic Mono-metallic and Bi-metallic (Au-Ag) Alloy NPs", *Journal of Mines, Metals and Fuels*, 2023, 71(11), 2084-2088.
26. Bose et al., A review on phytoremediation capability of *Tagetes erecta* Linn. against heavy metals, *Journal of Advanced Zoology*, 44 (S6), 2023, 2333-2338.

27. Nabi, A. et al., EFFECT OF NITRATE CONTAMINATION IN GROUNDWATER - A WORLDWIDE CONCERN, *Journal of Survey in Fisheries Sciences*, 10(1S), 2023, 6493 – 6497.
28. Banerjee, D. et al., A Review on Phyto-Mediate Gold Nanoparticles for Efficient Dye Degradation, *Journal of Survey in Fisheries Sciences*, 10(1S), 2023, 6359 – 6363.
29. Chakraborty, A. et al., Potential Approach Of Mushrooms In Bioremediation –A Short Review, *Journal of Advanced Zoology*, 44 (S5), 2498-2501.
30. Das, D. et al., Aquatic Plants in phytoremediation of contaminated water: Recent knowledge and future prospects, *Journal of Advanced Zoology*, 44 (S6), 2023, 2322-2326.
31. Mistri et al., Importance of PGPR (Plant Growth Promoting Rhizobacteria) For Sustainable Agricultural Production, *Journal of Advanced Zoology*, 44 (S6), 2023, 2373-2378.
32. Ghosh, K. et al., The Significance of Nanomaterials In Enhancing Soil Microbial Community a Short Review, *Journal of Advanced Zoology*, 44 (S5), 2023, 2700-2705.
33. Mondal, K. et al., Ornamental Plant in phytoremediation of contaminated soils: Recent progress and future directions, *Journal of Advanced Zoology*, 44 (S6), 2023, 2339-2344.
34. Bera et al., Antimicrobial activity of Plant Extract: A review of recent literature, *Journal of Advanced Zoology*, 44 (S6), 2023, 2352-2356.
35. Roy et al., A review on organic nanoparticles for treatment of bacterial biofilms, *Journal of Advanced Zoology*, 44 (S6), 2023, 2345-2351.
36. Roy et al., A Review on Bioinspired and Green Synthesis of Silver Nanoparticles with Their Antimicrobial Activity, *Journal of Survey in Fisheries Sciences*, 10(1S), 2023, 6353 – 6358.
37. Mandal, S., Role of Algae-Bacterial Consortium In Heavy Metal Contaminated Water Treatment, *Journal of Survey in Fisheries Sciences*, 10(1S), 2023, 2252 – 2257.
38. Mukherjee, S., Nanotechnology in edible films and its future directions: A short review, *Journal of Survey in Fisheries Sciences*, 10(1S), 2023, 2252 – 2257.
39. Mitra, S., Sarkar, S., De, D., Ghosh, S., Ghosh, B., & Sarkar, S. (2023). MANAGEMENT OF MICROBIAL BIOFILM USING NANO PARTICLE: A REVIEW. *Journal of Advanced Zoology*, 44.
40. Biofertilizer Fertilizer And Food Scarcity Removal: A Path Towards Sustainable Agriculture In India: A Review. Adrija Nath, Arindum Roy, Srijan Haldar. 2652-2658.
41. Unlocking Agricultural Potential: Harnessing Zinc and Silicon Micro-Nutrient Releasing Bacteria as Biofertilizers for Sustainable Crop Growth”. Monalisa Mallik, Srijan Haldar. 2518-2522. 2023-12-05.
42. Nature’s Defenders: Microbes as Bio-Pesticide Guardians: A review. Sumana Mondal, SrijanHaldar2484-2487.

43. Embrace Biopesticides, Cultivate Green Solutions for a Flourishing India!” A review Adrija Nath, Sandip Sankar Ghosh, Srijan Haldar .2617-2624.

44. Unlocking Nutrient Potential: Harness The Power Of Micro- Nutrient Solubilizing Bacteria: A Review . Trina Dey, Srijan Haldar. 2671-2676.

b. Book Chapter

1. Recycling of waste water through natural filtration techniques: Possibilities and Challenges- Bidisha Ghosh, Pijush Mallick, Kaustuv Das, Sukhen Das.

2. Innovative and Hybrid Technologies for Waste water Treatment and Recycling “. Bidisha Ghosh, Suranjana Sarkar, Semanti Ghosh. CRC PRESS/Taylor & Francis Group (Communicated)

3. Carolina Krebs de Souza, Sabyasachi Ghosh, Swarup Roy, “Valorization of Agro-waste Derived Materials for Food Packaging Application”, Book Title: Sustainable Materials for Food Packaging and Preservation, Chapter 9, [ELSEVIER, ISBN: 9780443135675] (Review completed and will be published 1st Sep, 2024).

4. Pal P, De D, Dutta Banik R, Paul S. An overview of the mechanistic approach to RNA interference, 2023 (Submitted)

5. Banik, R. D., DE, D., & Pal, P. (2023). Horizontal Gene Transfer in the Evolution of Microbial Genomes (Submitted)

6. Chourasia S, Pal P. Impact of chlordecone exposure on reproductive system-a concise review (ICSA 2023) (Submitted)

7. Das R, Pal P. The mechanistic approach of arsenic mediated neurotoxicity-a concise review. (ICSA 2023) (Submitted)

8. Paul S, Pal P. Benzene-mediated hepato-toxicity: a review of the underlying mechanisms (ICSA 2023) (Submitted)

9. Mondal P, Pal P. Immunotoxicity caused by excessive mercury exposure: a brief overview. (ICSA 2023) (Submitted)

10. Banik, R.D., De, D., Pal, P. (2023). BOOK CHAPTER - HORIZONTAL GENE TRANSFER IN THE EVOLUTION OF MICROBIAL GENOMES

11. Paul, S., De, D., Pal, P., Ghosh, B. (2023). BOOK CHAPTER – UNVEILING EPIGENETICS AND HUMAN DISEASES: FOCUS ON CANCER EPIGENETICS. (In Submitted)

12. Pal, P., De, D., Banik, R.D., Paul, S. (2023). BOOK CHAPTER - AN OVERVIEW OF THE MECHANISTIC APPROACH TO RNA INTERFERENCE. (In Submitted)

13. De, D., Pal, P., Banik, R.D., Paul, S. (2023). BOOK CHAPTER - UNRAVELING THE

WONDERS OF GENOME SEQUENCING AND IT'S ADVANCE METHOD NEXT GENERATION SEQUENCING. (In Submitted)

14. De, D., Nayak, T., Dhal, P.K. (2023). BOOK CHAPTER - METAGENOMICS AND BIOINFORMATICS IN MICROBIAL ECOLOGY: CURRENT STATUS AND BEYOND. (In Press)

c. Journal

1. Samanta A, Ghosh S. (2023) Protein – protein Interaction Mapping of Neurodegenerative Disease. Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6449 – 6450.

2. Nahar M, Ghosh S. (2023) Comparative in-silico Study of The Major Prolamin Protein of Wheat and Rice in Relation to Celiac Disease, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6451 – 6453.

3. Ghosh, A., Naskar, P., Dey, S., Mukherjee, S., Biswas, S., Das, R., Sarkar, S., Ghosh, S., Ghosh, B., Sarkar, S. The Key to A Sustainable Future - Algal Biofuel, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6395-6400.

4. Nayak, S., Chakraborty, S., Roy, S., Roy, S., Ghosh, K., Ghorui, A., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S

5. The Role of Plant Hormone on Root Development, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6401 – 6407.

6. Ghosh, S., Ghosh, B., Ghosh, M., Paul, S., Pal, A., Dey, T., Sarkar, S., Ghosh, S., Ghosh, B., Sarkar, S. Phytoremediation- Friendlier and Affordable Approach to Remediate Heavy Metal Pollution, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6291-6296.

7. Pal, N., Das, P., Dutta, R., Sarkar, S., Mukherjee, S., Devi, P., Mukherjee, M., Dhar, S., Ghosh, S., Sarkar, S., Sarkar, S., Ghosh, B. Water Reclamation Through Nano-remediation & Bioremediation: A Weal Against Conventional Chemical Techniques, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6297-6305.

8. Banerjee, D., Sadhu, P., Das, S., Pal, S., Mitra, S., Ghosal, A., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. Phosphate Solubilizing Bacteria: A potential biotic component for solubilizing phosphate in soil and its application as Biofertilizer: A Review. Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6306-6315.

9. Biswas, D., Chourasia, A., Sasmal, A., Santra, S., Panigrahi, S., Kundu, M., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. Mycoremediation is a Potential Strategy for Environmental Clean-up of Heavy Metal: A Review, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6316- 6327.

10. Sen, A., Mondal, I., Das, S., Roy, S., Mondal, M., Roy, R., Sarangi, S., Banerjee, S., Sarkar, S., Ghosh, B., Sarkar, S., Ghosh, S. Analytical approach of micro-RNA interaction study in ovarian cancer, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6328-6335.

11. Chakraborty, B., Gosai, R., Saha, D., Nayek, B., Biswas, P., Das Gupta, A., Ghosh, R., Ghosh, B., Sarkar, S., Sarkar, S., Ghosh, S. Structural and functional relationship study in plant salinity stress, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6336-6343.
12. Dalalithakur, S., Singh, P., Singh, S., Sasmal, A., Deb, T., Karmakar, S., Dasgupta, T., Sarkar, S., Sarkar, S., Ghosh, B., Ghosh, S. Role of pathogenesis-related (PR) proteins in plant microbes defense mechanism, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6344- 6352.
13. Noor, S., Mondal, M., Singh, S., Sadhu, P., Chourasia, S., Patra, S., Ghosh, K., Pal., S., Sarkar, S., Sarkar, S., Ghosh, S., Ghosh, B. Scavenging of Waste Water Using Oyster Mushrooms, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6364-6371.
14. Saha, S., Devi, P., Das, S., Roy, S., Sing, P., Mitra, S., Banerjee, S., Mallick, J., Sarkar, S., Sarkar, S., Ghosh, S., Ghosh, B. Study About the Absorption Pattern of Soil Chromium By Perennial Flowering Herbs, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6372- 6377.
15. Sharma, P., Das, S., Sadhu, P., Pal, S., Mitra, S., Ghoshal, A., Biswas, S., Roy, S., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. Therapeutic Role of Probiotics In Managing Various Diseases, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6378-6380.
16. Ghoshal, A., Saha, P., Mallick, J., Sarkar, S., Chakaraborty, M., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. Phytoremediation: A Way Forward Towards Heavy Metal Management, *Journal of Survey in Fishery Sciences*. Vol. 10 No. 1S (Special issue 1), 6381-6394.
17. Bidisha Ghosh, Monoswita Chakraborty, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Genetic Basis And Clinical Perspectives Of Breast Cancer. *Journal of Advanced Zoology*, 44(S6). <https://doi.org/10.53555/jaz.v44iS6.3708>
18. Santanu Biswas, Subhajit Pal, Sayani Das, Soumili Banerjee, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Microbial Plastic Degradation: Nature's Solution for Sustainable Waste Management. *Journal of Advanced Zoology*, 44(S6), 2315–2321. <https://doi.org/10.53555/jaz.v44iS6.3720>
19. Abhishek Ghoshal, Joydev Mallick, Suranjana Sarkar, Semanti Ghosh, Bidisha Ghosh, & Subhasis Sarkar. (2023). Eflux Pumps In Antimicrobial Resistance: Mechanism, Regulation And Therapeutic Implications. *Journal of Advanced Zoology*, 44(S5), 2575–2580. <https://doi.org/10.53555/jaz.v44iS5.3282>
20. Dipti Das, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Recombinant Protein Production: Advancements And Applications. *Journal of Advanced Zoology*, 44(S6), 2236–2242. <https://doi.org/10.53555/jaz.v44iS6.3706>
21. Sayantani Chakraborty, Sampanna Roy, Aayushee Chatterjee, Falguni Pal, Ritu Das, Puja Sadhu, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Exosomal RNA: Interplay and Therapeutic Potential. *Journal of Advanced Zoology*, 44(S6),

2309–2314. <https://doi.org/10.53555/jaz.v44iS6.3718>

22. Puja Sadhu, Suranjana Sarkar, Aritri Laha, Semanti Ghosh, Bidisha Ghosh, & Subhasis Sarkar. (2023). Oncolytic Viral Nanoparticles: A Combination Of Targeted And Immunotherapeutic Approach For Cancer Treatment: A Review. *Journal of Advanced Zoology*, 44(S5), 2537–2550. <https://doi.org/10.53555/jaz.v44iS5.3277>

23. Sulogna Mitra, Suranjana Sarkar, Debjit De, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar. (2023). MANAGEMENT OF MICROBIAL BIOFILM USING NANO PARTICLE: A REVIEW. *Journal of Advanced Zoology*, 44(S6), 2070–2080. <https://doi.org/10.17762/jaz.v44iS6.2696>

24. Prity Singh, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Application Of Genetic Engineering In Crop Improvement. *Journal of Advanced Zoology*, 44(S6), 2301–2308. <https://doi.org/10.53555/jaz.v44iS6.3717>

25. Sourav Banerjee, Suranjana Sarkar, Subhasis Sarkar, Bidisha Ghosh, & Semanti Ghosh. (2023). Biofertilizer and their importance in sustainable agriculture. *Journal of Advanced Zoology*, 44(S5), 2526–2529. <https://doi.org/10.53555/jaz.v44iS5.3222>

26. Sayani Da, Suranjana Sarkar, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar. (2023). GUT MICROBIOME AND HUMAN HEALTH: A REVIEW. *Journal of Advanced Zoology*, 44(S6), 2062–2069. <https://doi.org/10.17762/jaz.v44iS6.2695>

27. Sulogna Mitra, Suranjana Sarkar, Debjit De, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar. (2023). Management Of Microbial Biofilm Using Nano Particle: A Review. *Journal of Advanced Zoology*, 44(S6), 2070–2080. <https://doi.org/10.17762/jaz.v44iS6.2696>

28. Sayani Das, Sulogna Mitra, Monalisa Mallik, Soumili Banerjee, Subhajit Pal, Abhijit Kumar, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Advancing Biomedical Frontiers: Unveiling The Potential Of 3d Bioprinting In Organ Regeneration. *Journal of Advanced Zoology*, 44(S5), 2488–2493. <https://doi.org/10.53555/jaz.v44iS5.3210>

29. Tilatoma Dasgupta, Bidisha Ghosh, Suranjana Sarkar, Subhasis Sarkar, & Semanti Ghosh. (2023). Tuberculosis - A multisystemic disease and antimicrobial resistance in Mycobacterium tuberculosis. *Journal of Advanced Zoology*, 44(S5), 2641–2645. <https://doi.org/10.53555/jaz.v44iS5.3304>

30. Ankit Pal, Shreyoshi Pal, Saikat Manna, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Unlocking The Potential of Phytochemicals in Anti-Diabetic Therapy: Mechanisms, Challenges, And Future Prospects. *Journal of Advanced Zoology*, 44(S6), 2284–2289. <https://doi.org/10.53555/jaz.v44iS6.3713>

31. Sahely Roy, Semanti Ghosh, Srijani Karmakar, Subhasis Sarkar, Suranjana Sarkar, & Bidisha Ghosh. (2023). Immunity Risk Associated with Cytomegalovirus Infection After Organ Transplantation. *Journal of Advanced Zoology*, 44(S5), 2451–2456. <https://doi.org/10.53555/jaz.v44iS5.3202>

32. Srijani Karmakar, Sahely Roy, Suranjana Sarkar, Bidisha Ghosh, Subhasis Sarkar, &

Semanti Ghosh. (2023). Genetic Diagnosis of Vexas Syndrome: A New Rare And Deadly

33. Auto inflammatory Disorder In Adults. Journal of Advanced Zoology, 44(S5), 2636–2640. <https://doi.org/10.53555/jaz.v44iS5.3302>

34. Anwesha Das, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Recombinant Hormones: Applications And Challenges. Journal of Advanced Zoology, 44(S6), 2279– 2283. <https://doi.org/10.53555/jaz.v44iS6.3712>

35. Deeti Das, Sudipta Chakraborty, Moumita Mukherjee, Susoma Garai, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Revolutionizing the Biological Landscape: the Power of Genome Editing. Journal of Advanced Zoology, 44(S5), 2446–2450. <https://doi.org/10.53555/jaz.v44iS5.3199>

36. Smarta Das, & Semanti Ghosh. (2023). Melittin based nano drug delivery system for cancer therapy. Journal of Advanced Zoology, 44(S5), 2607–2610. <https://doi.org/10.53555/jaz.v44iS5.3290>

37. S. Ghosh, et al., “Plant-mediated synthesis of mono and bimetallic (Au-Ag) nanoparticles: future prospects for food quality and safety”, Journal of Nanomaterials, 2023, 2781667. (IF: 3.791)

38. R. K. Mandal, S. Ghosh, T. P. Majumder, “Comparative study between degradation of dyes (MB, MO) in monotonous and binary solution employing synthesized bimetallic (Fe-CdO) NPs having antioxidant property”, Results in Chemistry, 2023, 5, 100788. (IF: 2.3).

39. R. K. Mandal, A.S. Mondal, S. Ghosh, A. Halder, T. P. Majumder, “Synthesis, characterisation and optical studies of CdO- NiO NCs for comparative dye degradation study between two hazardous dyes Congo red and Rose Bengal”, Results in Chemistry, 2023, 5, 100810. (IF: 2.3).

40. S. Jafarzadeh, M. Nooshkam, M. Zargar, F. Garavand, S. Ghosh, M. Hadidi, M. Forough, “Green Synthesis of Nanomaterials for Smart Biopolymer Packaging: Challenges and Outlooks”, Journal of Nanostructure in Chemistry, 2023, 1-24. (IF: 10.1).

41. N. Iqbal, S. Thirunavukkarasu, R. Krishna, D.K. Hazra, C. Jawale, S. Yadav, S. Alam, S. Ghosh, et al., “Environmentally Benign Design of Renewable Oleoresin- Bioenergized Imidacloprid Nanohydrocolloids for Improved Activity, Lower Toxicity, and Agroecological Sustainability” ACS Sustainable Chem. Eng. 2023, 11, 42, 15480–15491. (IF: 8.4).

42. Maity, J., Pal, P., Pal, R. et al. Co-administration of L-Ascorbic Acid and α -Tocopherol Alleviates Arsenic-Induced Immunotoxicities in the Thymus and Spleen by Dwindling Oxidative Stress-Induced Inflammation. Biol Trace Elem Res (2023). <https://doi.org/10.1007/s12011-023-03841-7>

43. Biswas S, Pal P, Mondal R, Mukhopadhyay PK. Casein and pea enriched high-protein diet attenuates arsenic provoked apoptosis in testicles of adult rats. June 2023, Toxicology Research. DOI: 10.1093/ toxres/tfad043

44. Mondal R, Pal P, Biswas S, Chattopadhyay A, Bandyopadhyay A, Mukhopadhyay A,

Mukhopadhyay PK. Attenuation of sodium arsenite mediated ovarian DNA damage, follicular atresia, and oxidative injury by combined application of vitamin E and C in post pubertal Wistar rats. *Naunyn Schmiedebergs Arch Pharmacol.* 2023 Oct;396(10):2701-2720.

45. Nath, S., Sarkar, M., Maddheshiya, A., De, D., Paul, S., Dey, S., Pal, K., Roy, S.K., Ghosh, A., Sengupta, S. and Paine, S.K., 2023. Upper respiratory tract microbiome profiles in SARS-CoV-2 Delta and Omicron infected patients exhibit variant specific patterns and robust prediction of disease groups. *Microbiology Spectrum*, 11(6), pp.e02368-23. Impact Factor – 9.043

46. Saha NC, Banerjee P, Chatterjee A, Bhattacharya R, Saha S, Pastorino P. “Haematological, biochemical, enzymological changes and mitochondrial dysfunction of liver in freshwater climbing perch *Anabas testudineus* during their acute and chronic exposure to sodium fluoride. "Environmental Toxicology and Pharmacology Elsevier. 2024.2:106:104360. doi: 10.1016/j.etap.2023.104360.(Scopus, Impact Factor: 4.3)

d. Books

- FRONTIERS IN BIOTECHNOLOGY: EMERGING APPROACHES AND STRATEGIES ISBN: 978-93-5980-245-9, Department of Biotechnology.

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

Seminars

1. National Technology Day Celebration.
2. Faculty Development Programme with Prof. Santasree Banerjee from Jilin University, China
3. Faculty Development Program by Dr. Saptarshi Chatterjee, Associate Director of Incubation & Chief Coordinator at the E-YUVA Centre, Adamas University, supported by BIRAC (Biotechnology Industry Research Assistance Council).
4. One day seminar by Dr. Subhra Chakraborty, Director of the National Institute of Plant Genome Research, and Prof. Prasanta Kumar Panigrahi, Director of IISER.
5. International Microorganism Day Celebration.
6. World Habitat Day Celebration.
7. World Cancer Awareness Day Celebration.
8. Seminar on Plant Genome Sequencing.
9. World Entrepreneurs' Day Celebration
10. Vivek Jyoti Ananya Samman Prof. Partha P. Majumder, a luminary in the field of academia and a distinguished National Science Chair for Scientific Excellence appointed by the Government of India.
11. World Cancer Day Celebration.
12. National Science Day Celebration.
13. National Vaccination Day Celebration.
14. World Down's Syndrome Day Celebration.
15. Journal Club- Department of Biotechnology.

Conference

1. ICSA- 2023
2. ICALF- 2024

Workshop

1. Student's Hands-on training on Molecular Biological Techniques conducted with Andragogy.
2. 2-Month Crash Course on Modern Biological Techniques and Soft Skills Grooming Program
3. International Workshop on Computer-aided Drug Designing and Discovery by PreScience.
4. Bioinformatics & Communicative English Workshop conducted by department of Biotechnology & Department of English.
5. Dr. Srijan Halder securing the York Environmental Sustainability Institute Knowledge Exchange Fellows scheme for the 2023- 24 term marks an extraordinary achievement for the entire department, as the Co-Principal Investigator (CoPI).
6. MoU with Andragogy.
7. MoU with SynBiogenesis.
8. Departmental faculty participation in Regional Young Investigators Meet by Dr Sibashish Baksi and Dr Santanu Paul.
9. Department of Biotechnology securing 2nd Position in Tech- Fest, 2024.
10. Dr. Priyajit Banerjee received project grant for the "Investigating Synergistic Antifungal Effects of Bioavailable Curcumin and Berberine to Combat Drug-Resistant Candida albicans" from Polyfeenolix Research Laboratory (OPC) Pvt. Ltd.
11. Central advanced research laboratory facility equipped with high-end instruments such as UV-Visible Spectroscopy, High Performance Liquid Chromatography (HPLC), Atomic Absorption Spectroscopy (AAS), Fourier Transform Infrared Spectroscopy (FTIR), Gas Chromatography Flame Ionization Detector (GC-FID), Rotary Evaporator, and Filtration Assembly has been set up by the department.
12. Departmental book "FRONTIERS IN BIOTECHNOLOGY: EMERGING APPROACHES AND STRATEGIES"; ISBN: 978-93-5980-245-9 published.

SCHOOL OF AGRICULTURE

ABOUT DEPARTMENT:

The School of Agriculture, established in 2020, aims at achieving excellence in academics and research. Bachelor's degree courses in Agriculture, Agricultural engineering and Master's degree courses in Agribusiness management are offered by the school. The school has designed dynamic and focused curricula as per the guidelines of Indian Council of Agricultural Research (ICAR) to develop well-trained manpower for academics, agro- based industry and extension-oriented applications. The Department of Agriculture at Swami Vivekananda University plays a critical role in advancing agricultural education, research, and outreach. Its primary objective is to equip students with knowledge and skills related to agriculture and contribute to the advancement of the agricultural sector through research and community engagement. In general, studying agriculture is vital for ensuring food security, supporting economic growth, safeguarding the environment, and addressing pressing global challenges such as climate change and malnutrition. By investing in agricultural education and research, we can build a more sustainable and resilient future for our planet.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|---------------------|--|
| Tanmoy Sarkar | Fruit Breeding; Production Technology of Fruits; Post-harvest Technology of Horticultural Crops; Germplasm Conservation |
| Sudip Sengupta | Agricultural Chemistry, Soil Science, Arsenic, Water Management, Environmental Science, Soil pollution and contamination, Soil Chemistry, Soil Fertility and Nutrient dynamics, Soil physics |

| | |
|----------------------|--|
| Suprabuddha Kundu | Plant tissue culture, Genetic engineering, Germplasm conservation, Secondary metabolites, Molecular markers, Mushroom technology |
| Parijat Bhattacharya | Agricultural Chemistry, Soil Science, Soil Chemistry, Soil Fertility & Nutrient dynamics, Soil pollution & contamination, Environmental Science |
| Ria Mukhopadhyay | Plant Pathology: Biological control of plant pathogens, Nanotechnology in managing biotic stress in planta |
| Anirneeta De | Germplasm conservation, Molecular markers, Abiotic stress, Rice breeding |
| Rakesh Das | Germplasm Conservatio |
| Tanmoy Majhi | Surface water modelling, Flood routing, Sediment yield modelling, Soil conservation, Remote sensing, Drip and sprinkler irrigation, Watershed management, Water harvesting |
| Sayani Bhowmick | Agricultural Meteorology, Climate change, Climate |
| Arpan Dey | modelling, Agroclimatic zones |
| Amit Kumar Bar | Environmental Science, Soil pollution and contamination |
| Premasis Sukul | Crop rotation, Rice based cropping system |
| Brati Acharya | Soil Chemistry, Soil Fertility and Nutrient dynamics, Soil physics |
| Avishek Chatterjee | Agronomy, Conservation Agriculture, Bio-stimulants, |

| | |
|--------------------|---|
| | Crop rotation, Rice based cropping system |
| Jayita Hore | Soil Chemistry, Soil Fertility and Nutrient dynamics, Soil physics |
| Achintya Kumar Pal | Crop rotation, Rice based cropping system |
| Puran Pokhrel | Plant Pathology, Plant Virology, Molecular Biology, Virus Transmission Biology, Virus-Vector Interaction Dynamics, Molecular Diagnostics, 3D viral protein modeling |
| Aniket Baishya | Agronomy, Conservation Agriculture, Bio-stimulants, Crop rotation, Rice based cropping system |
| Sukhram Thapa | Agronomy, Conservation Agriculture, Bio-stimulants, Crop rotation, Rice based cropping system |
| Sahely Kanthal | Plant Pathology, Plant Virology, Molecular Biology, Virus Transmission Biology, Virus-Vector Interaction Dynamics, Molecular Diagnostics, 3D viral protein modeling |
| Sujosh Nandi | Agricultural Meteorology, Climate change, Climate |
| Naznin Khatun | Soil Chemistry, Soil Fertility and Nutrient dynamics, Soil physics |
| Pranay Sarkar | Agricultural Meteorology, Climate change, Climate |

PUBLICATIONS

a. Conference Publications

1. Choudhury, R. K., Bhattacharya, P., Parveen, S., Bhattacharyya, K., & Sengupta, S. (2023). Modeling The Uptake Of Cationic Micronutrients And Rice Grain Yield At Different Graded Dose Of Nitrogen Fertilization. *Journal of Survey in Fisheries Sciences*, 10(1S), 7017-7021.
2. Sarkar, S., Sengupta, S., Bhattacharyya, K., Parveen, S., & Bhattacharya, P. (2023). Influence Of Varietal Duration And Nitrogen Fertilization In Augmenting Micronutrient Uptake And Yield Of Rice. *Journal of Survey in Fisheries Sciences*, 10(1S), 6973-6978.
3. Bhattacharya, P., Sengupta, S., & Bhattacharyya, K. (2023). Relating Soil Available Zinc with Physicochemical Properties in New Alluvial Zone of West Bengal, India. *Journal of Survey in Fisheries Sciences*, 10(1S), 7037-740.
4. Sarkar, T., Sengupta, S., Kundu, S., & Das, K. (2023). Vegetative Multiplication of *Psidium Guajava* L. Through Stem Cutting. *Journal of Survey in Fisheries Sciences*, 10(1S), 754-7056.
5. Salma, U., Giri, D., Sinha, M. K., & Kundu, S. (2023). Ethyl Methanesulfonate (EMS)-Mediated Fruit Mutants of Bitter Gourd (Meghna-2): A Popular Landrace of West Bengal. *Journal of Survey in Fisheries Sciences*, 10(1S), 6889-6894.
6. Sarkar, M., Kundu, S., Salma, U., & Mandal, N. (2023). In Vitro Tetraploidization Towards Enhancement of Charantin Biosynthesis in *Momordica Charantia* (L.). *Journal of Survey in Fisheries Sciences*, 10(1S), 6895-6902.
7. Bhattacharjee, S., Hazra, S., Hasan, W. U., Roy, P., Chatterjee, A., Maji, A., & Gorai, S. (2023). Genetic Analysis of Advanced Wheat (*Triticum Aestivum* L.) Lines Grown Under Different Sowing Conditions. *Journal of Survey in Fisheries Sciences*, 10(1S), 7057- 7066.
8. Anjum, I., Bandyopadhyay, S., Chatterjee, A., Bhattacharya, S., Maji, A., & Ali, M. N. (2023). Genetic Analysis And Character Association In Bread Wheat (*Triticum Aestivum* L.) Under Terminal Heat Stress. *Journal of Survey in Fisheries Sciences*, 10(1S), 7045- 7050.
9. Das, R., Layek, A., Nandi, T., & Jha, S. (2023). *Luffa Cylindrica* (L.) As Potential Foraging Source for Insect Pollinators During Post Monsoon Season—A Study in Gangetic Plain of West Bengal. *Journal of Survey in Fisheries Sciences*, 10(1S), 6913-6920.
10. Layek, A., Pramanik, K., Das, R., & Seal, D. (2023). A Study on Bio Efficacy of Cyantraniliprole 10.6% OD Against Major Sucking Pests of Watermelon. *Journal of Survey in Fisheries Sciences*, 10(1S), 6903-6907.
11. Pal, A. K., Sarkar, N., & Majhi, T. (2023). Identification of a Suitable Probability Distribution for Rainfall Analysis of Bankura District in West Bengal. *Journal of Survey in Fisheries Sciences*, 10(1S), 7074-7081.
12. Majhi, T., & Biswas, R. K. (2023). Development Of Equation of Curve to Estimate Volumetric Soil Moisture Content in Case of Tensiometer to Overcome the Moisture Measurement Error Due to Time Lag Issues. *Journal of Survey in Fisheries Sciences*, 10(1S),

7067-7073.

13. Kanthal, S., & Garai, S. (2023). Identification Of Different Indigenous Technical Knowledge Application In Agriculture And Allied Sector In Some Selected Areas Of West Bengal. *Journal of Survey in Fisheries Sciences*, 10(1S), 7022-7025.

14. Mondal, T., Layek, S., Sarkar, T., Roy, S., Mohanta, R., & Bauri, F. K. (2023). Morpho-Physicochemical Studies Of Kusum (*Schleichera Oleosa* (Lour.) Oken): A Potential Multipurpose Tree Species. *Journal of Survey in Fisheries Sciences*, 10(1S), 6984-6986.

15. Layek, S., Mondal, T., Mohanta, R., Roy, S., Sarkar, T., & Majhi, D. (2023). Physico-Chemical Properties Of Star Gooseberry (*Phyllanthus Acidus*) Fruits Grown In New Alluvial Zone Of West Bengal. *Journal of Survey in Fisheries Sciences*, 10(1S), 751-753.

b. Book Chapter

1. Laha, A., Sengupta, S., Mandal, J., Bhattacharyya, K., & Bhattacharyya, S. (2023). The Journey of Arsenic from Soil to Plant. In *Arsenic Toxicity Remediation: Biotechnological Approaches* (pp. 3-14). Cham: Springer Nature Switzerland.

2. Laha, A., Sengupta, S., Mandal, J., Bhattacharyya, K., Bhattacharyya, S. (2023). The Role of Plant Growth Promoting Bacteria on Arsenic Removal: A Review of Existing Perspectives. In: Kumar, N., Kumar, S. (eds) *Arsenic Toxicity Remediation: Biotechnological Approaches*. Environmental Science and Engineering. Springer, Cham

3. Das, R., Layek, A., Kunal, G. (2023). Ecosystem Diversity with Ecological Management for Insect Pollinators' Sustainability: A Need of The Hour. In *Recent Advances in Agricultural Entomology* Sr edu Publications, Telengana, India.

4. Mukhopadhyay, R., Nath, S., Kumar, D., Sahana, N., & Mandal, S. (2024). Basics of the Molecular Biology: From Genes to Its Function. In *Genomics Data Analysis for Crop Improvement* (pp. 343-374). Singapore: Springer Nature Singapore.

5. Ganguly, P., Mandal, J., Sengupta, S., & Sinha, B. (2024). Basics of Environment, Pollution, and Bioremediation Techniques. In *Environmental Contaminants* (pp. 1-17). Apple Academic Press.

6. Bhattacharya, P., Banerjee, P., Hazra, S., Sengupta, S., & Dey, S. (2024). Lead, Cadmium, and Chromium Contamination in Soil–Plant System: Global Situation, Impact, and Dietary Risk Delineation. In *Environmental Contaminants* (pp. 47-79). Apple Academic Press.

7. Sarkar, T., Sengupta, S., Kanthal, S., & Kundu, S. (2024). Climate Change Mitigation Through Agro-Forestry Improves Natural Resource and Livelihood Security. In *Agroforestry to Combat Global Challenges: Current Prospects and Future Challenges* (pp. 219-246). Singapore: Springer Nature Singapore.

c. Journal

1. Thapa, S., Mahapatra, S., Baral, D., Chatterjee, A., Shivakoty, P., Subba, B., & Das, S. (2023). Morpho-molecular variability of different isolates of *Ustilagoidea virens* causing false smut of rice. *Archives of Phytopathology and Plant Protection*, 56(6), 489-502.
2. Chatterjee, A., Hazra, S., Sen, P., Gorai, S., Bhattacharya, S., Gupta, V., ... & Ali, M. N. (2023). Physico-biochemical traits and differential expression of genes linked with terminal heat tolerance in bread wheat (*Triticum aestivum* L.). *Cereal Research Communications*, 1-18.
3. Das, R., Layek, A., Kunal, G., & Jha, S. (2023). Status of Migratory Beekeeping with *Apis Mellifera* L in the Gangetic Plain of West Bengal. *Indian Journal of Entomology*, 01-09.
4. Baishya, A., Chowdhury, A., Chakrabarty, R., Sengupta, S., Das, A., Panda, A., ... & Mandal, D. (2023). Spatiotemporal Analysis and Trend Detection of Groundwater Levels Using Gis Techniques in Nadia District of West Bengal, India. *Journal of the Geological Society of India*, 99(6), 868-874.
5. Phonglosa, A., Bhattacharyya, K., Pari, A., Ray, K., Banerjee, H., Haldar, S., Sengupta, S., Bhattacharya, P. and Mandal, J., (2023). Assessment of the suitability of selected extractants for boron in some inceptisols of Eastern India under sunflower (*Helianthus annuus* L.). *Journal of Plant Nutrition*, 46(17), 4340-4355.
6. Chatterjee, A., Sen, P., Chattopadhyay, T., Maji, A., Gorai, S., Sarkar, A., & Ali, M. N. (2023). Omics for Elucidating Heat Stress Tolerance Mechanisms in Wheat: A Review Update. *Current Agriculture Research Journal*, 11(2).
7. Sengupta, S., Bhattacharyya, K., Mandal, J., Bhattacharya, P., & Chattopadhyay, A. P. (2023). Zinc and iron enrichment of vermicompost can reduce the arsenic load in rice grain: an investigation through pot and field experiments. *Journal of Cleaner Production*, 419, 138267.
8. Baishya, A., Mishra, A., & Sengupta, S. (2024). Modelling and Assessment of Climate Change Impact on Rainfed Rice Cultivation in a Sub-humid Subtropical Region. *Agricultural Research*, 13(1), 85-95.
9. Sengupta, S., Patra, S. K., Laha, A., Poddar, R., Bhattacharyya, K., Dey, P., & Mandal, J. (2023). Replacing conventional surface irrigation with micro-irrigation in vegetables can alleviate arsenic toxicity and improve water productivity. *Groundwater for Sustainable Development*, 23, 101012.
10. Sengupta, S., Bhattacharya, P., Bhattacharyya, K., Pandian, B. J., & Chinchmalatpure, A. R. (2024). Assessment of the Suitability of Extractants for Predicting Plant Available Arsenic in Some Tropical Rice Growing Inceptisols of Eastern India. *Communications in Soil Science and Plant Analysis*, 55(2), 243-260.
11. Chintala, S., Laishram, R., Mondal, P., Pal, K., Kantamraju, P., Ghosh, S., Karmakar, K., Chakdar, H., Mukhopadhyay, R., Sen, R. and Choudhury, A. (2023). Turmeric (*Curcuma longa* L.) rhizome extract mediated silver nanoformulation exhibits enhanced antifungal property against *Rhizoctonia solani* and boosts innate immunity of rice. *Industrial Crops and Products*, 206, 117616.

12. Das, R., Kumar, R., Kunal, G., Goldar, S., Dutta, S., & Jha, S. (2023). Detection of *Ascosphaera apis*, causing chalkbrood disease in the colonies of European honey bee, *Apis mellifera* in West Bengal, India. *Sociobiology*, 70(4), e9192-e9192.
13. Laha, A., Sengupta, S., Bhattacharyya, S., Bhattacharyya, K., & GuhaRoy, S. (2024). Isolation and characterization of rhizobacteria from lentil for arsenic resistance and plant growth pro- motion. *3 Biotech*, 14(1), 30.
14. Kumar, D., Chaudhury, R.S., Mandal, K., Pradhan, P., Bhattacharya, S., Oas, B., Mukhopadhyay, R., Phani, V., Prudveesh, K., Nath, S. and Mandal, R., 2024. Identification of genes associated to r:-N oxalyl-L-r:, r:-diaminopropionic acid and their role in mitigating salt stress in a low-neurotoxin cultivar of *Lathyrus sativus*. *Plant Physiology and Biochemistry*, 207, 108388.
15. Layek, A., Pramanik, K., Das, R., Nandi, P., & Debnath, P. (2024). Assessing the bio efficacy of Cyantraniliprole 10.26% OO against fruit borer and thrips on chilli under field condition. *Environ- ment Conservation Journal*, 25(1), 41-49.
16. Sen, P., Chatterjee, A., Kumar, D., Bhattacharyya, S., Bandyopadhyay, S., & Sarkar, A. (2024). Genetic and functional mechanisms of yield-related genes in rice. *Acta Physiologiae Planta- rum*, 46(3), 29.
17. Laha, A., Sarkar, S., Sengupta, S., Das, A., Paul, S., & Bhattacharyya, S. (2024). Unraveling the potential of *Acinetobacter calcoaceticus* for arsenic resistance and plant growth promotion in contaminated lentil ffield. *South African Journal of Botany*, 168, 61-70.
18. Das, S., Sengupta, S., Patra, P. K., & Dey, P. (2024). Limestone and yellow gypsum can reduce cadmium accumulation in groundnut (*Arachis hypogaea*): A study from a three-decade old landfill site. *Chemosphere*, 353, 141645.
19. Bhattacharya, P., Sengupta, S., & Bhattacharyya, K. (2024). Cat- ionic micronutrient fractions in some tropical Alfı sols and Inceptisols as affected by organic amendments and simulated moisture regimes: an incubation study. *Journal of Plant Nutrition*, 47(10), 1527-1545.

d. Books

1. Sarkar, T., Kundu, S., Sengupta, S., & Chatterjee, A. (2023). *Modern Facets of Agriculture in India*. Published by Swami Vivekanan- da University, India. ISBN: 978-93-5967-754-5
2. Sarkar, T., Kanthal, S., Bhattacharya, P., & Mukhopadhyay, R. (2024). *Emerging Trends in Sustainable Agriculture*. Published by Swami Vivekananda University, India. 978-93-3400-372-7

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

Workshops organized

1. **Title of event: Bio-loc Fish Training Program**

Date of the event: 13-20 July 2023

Delegates:

- Prof. Subrata Kumar Dey, Vice Chancellor, SVU
- Prof. Sukumar Mukhopadhyay, Controllor of Examination, SVU
- Dr. Tanmoy Sarkar, HOD, Agriculture, SVU.
- Mr. Asim Kumar Basak, Specialist, Bio-loc Technology.

2. Title of event: Scientific Beekeeping Training

Date of the event: 23rd to 25th August, 2023

Delegates:

- Prof. Subrata Kumar Dey, Vice Chancellor, SVU,
- Dr. Tanmoy Sarkar, HOD, Agriculture, SVU.
- Mr. Rakesh Das, Asst Prof. Agriculture, SVU.

3. Title of event: Plantation and Beautification of Campus and Nursery Raising & Management

Date of the event: 13th to 18th September, 2023

Delegates:

- Prof. Subrata Kumar Dey, Vice Chancellor, SVU.
- Dr. Pinak Pani Nath, Registrar, SVU.
- Dr. Tanmoy Sarkar, HOD, Agriculture, SVU.

Conferences organized

1. Name: International Conference on Scientific Advances in Life Sciences, Agriculture and Food & Nutrition- ICSA 2023 Date: 28-30th September, 2023

Delegates:

- Prof. Suman Kumar Dhar, Professor, Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi
- Dr. Pradip Dey, Director, ICAR-ATARI Kolkata, Salt Lake, Kolkata 700097, West Bengal, India
- Prof. (Dr.) Madhumita Dobe MBBS, DCH, MD, MCH, Former Dean and Director, Professor (Public Health) and Former HOD, Department of Health Promotion & Education All India Institute of Hygiene & Public Health, Kolkata (Ministry of Health & Family Welfare, Government of India)
- Dr. Parag Prakash Sutar, Head, Department of Food Process Engineering, National Institute of Technology Rourkela, Odisha, India
- Prof. Koushik Pramanick, Professor, Department of Life Sciences, Presidency University
- Dr. Pier Paolo Piccaluga, Associate Professor, Department of Medical and Surgical Sciences, University of Bologna, Italy
- Prof. Shankarashis Mukherjee, Professor and Head, Dept. Food and Nutrition, WBSU, W.B., India
- Prof. Partha Saha, Dean of Science, Chemical and Life Sciences Division, Saha Institute of Nuclear Physics
- Prof. Debnath Chaudhury, Former Professor and Head, Department of Biochemistry and Nutrition, All-India Institute of Hygiene and Public Health, Kolkata

- Prof. Angshuman Bagchi Professor and BIF Coordinator, Department of Biochemistry and Biophysics, University of Kalyani
- Prof. Prasun Kumar Mukherjee, Head, Nuclear Agriculture and Biotechnology Division, Bhabha Atomic Research Centre (BARC), Mumbai
- Dr. Jajati Mandal, School of Science, Engineering and Environment, University of Salford, Manchester, M5 4WT, United Kingdom

2. Name: 2nd International Conference on Technological Innovations in Agriculture, Life Sciences and Food & Nutrition- ICALF 2024

Date: 22-24th February, 2024

Delegates:

- Dr. Jajati Mandal, School of Science, Engineering and Environment, University of Salford, Manchester, M5 4WT, United Kingdom
- Dr. Rubina Khanam, Scientist, ICAR-National Rice Research Institute in Cuttack, Odisha
- Dr. Rakesh Bhowmick, Scientist, ICAR-CRIJAF, Barrackpore
- Dr. Raghupathi B., Scientist B, KSCSTE- Malabar Botanical Garden and Institute for Plant Sciences, Kozhikode, Kerala.
- Dr. Anindita Ray (Chakravarti), Assistant Professor and HOD, Department of Food & Nutrition, Maharani Kasiswari College
- Dr. Madhumita Dobe, Dean and Director - Professor (Public Health) and Former HOD Department of Health Promotion & Education All India Institute of Hygiene & Public Health, Kolkata (Ministry of Health & Family Welfare, Government of India)
- Dr. Dilip Kumar Nandi, Professor of Allied Health Sciences, Midnapore City College
- Dr Pratiti Ghosh, Professor and Head of the Department of Physiology, West Bengal State University
- Dr. Chirantan Sarkar, Principal project Scientist, CSIR-National Environmental Engineering Research Institute-Kolkata.

DEPARTMENT OF PHYSIOTHERAPY

ABOUT DEPARTMENT:

The Department of Physiotherapy was set up to impart quality education interspersed with hands-on practice to the undergraduate students of Bachelor of Physiotherapy. Physiotherapy is a health-care profession that focuses on the use of physical techniques to promote health and prevent, treat, and manage disease and disability. It is the world's fourth largest healthcare profession, focusing on movement dysfunction and pain caused by musculoskeletal, neurological, respiratory, and chronic disability disorders, as well as mental illness and intellectual impairment. The department boasts of a fully equipped Electrotherapy and Exercise Therapy laboratory, installed with the latest equipment and instruments for the study of Physiotherapy.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|----------------------------------|---|
| Dr. Sourav Mitra (PT) | Neuroplasticity, Graded Motor Imagery, Neurorehabilitation |
| Dr. Sunayana Ghosh Dostider (PT) | Modern concepts on orthopedic rehabilitation, Kinesiotaping and Rigid taping, Manual therapy, Sports rehabilitation |
| Dr. Khairul Islam (PT) | Neurorehabilitation |
| Dr. Mainak Sur (PT) | Sports rehabilitation |
| Dr. Pritam Singha (PT) | neuro-orthopedic Physiotherapy |
| Dr. Patralika Nath (PT) | Critical care rehabilitation |
| Dr. Barnana Roy (PT) | Musculoskeletal rehabilitation, chronic Pain management, sports injury prevention and recovery, Paediatric orthopedic Physiotherapy, neuro-orthopedic Physiotherapy |
| Dr. Kamalika Bhattacharya (PT) | Modern concepts on orthopedic rehabilitation, Kinesiotaping and Rigid taping, Manual therapy, Sports rehabilitation |
| Dr. Sujata Deb Roy (PT) | Cardio and Respiratory Rehabilitation, Manual Therapy, Prehabilitation for athletes, Advanced evidence-based physiotherapy treatments, Sports Physiotherapy |

| | |
|-----------------------------|--|
| Dr. Arpita Chakraborty | Pulmonary rehabilitation |
| Dr. Koushik Bhattacharya | neuro-orthopedic Physiotherapy |
| Dr. Bikramaditya Sahoo (PT) | Neuroplasticity, Graded Motor Imagery, Neurorehabilitation |
| Dr. Suvradeep Ganguly (PT) | Cardio and Respiratory Rehabilitation, Manual Therapy, Prehabilitation for athletes, Advanced evidence- based physiotherapy treatments, Sports Physiotherapy |

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ABOUT DEPARTMENT:

The department of Electronics & Communication Engineering (ECE) was established in the year 2019 with a moderate capacity of students. Based on available infrastructure and capabilities of faculties of this University, the intake has been grown rapidly. The undergraduate (UG), post graduate (PG) and PhD programs of the ECE department disclose innovative expertise among the stakeholders which help them to excel in their respective fields. There are various courses like electronic devices, electromagnetic waves, power electronics, information technology, microprocessor, robotics and control, communications, Nano-Electronics, VLSI and other circuits etc. The department puts all initiatives for making the students to compete internationally as per the cutting-edge requirement. Besides, different workshops as well as seminars organized by this department periodically are targeted towards the latest industrial trends in lieu with inter-alia between industry and academics.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|-----------------------------|--|
| Diganta Bhattacharyya | Space Science and Communication using AI/ML |
| Dr. Debasis Mondal | Electrical Biosensor, Statistical data analysis, IoT based healthcare system, Silicon fabrication technology, FEM based simulation |
| Ms. Shreya Adhikary | Medical image processing, microscopy development, early cancer detection |
| Sk Babul Akhtar | Kalman Filter, Precise Point Positioning, Object Tracking, Internet of Things (IoT) |
| Tomal Suvro Sannyashi | Communication Engineering, VLSI |
| Dr. Debraj Chakraborty | IOT, Signals Processing, Chaotic Cryptography |
| Dr. Pradipto Maiti | Communication Engineering, VLSI |
| Dr. Somdeb Chanda | Medical image processing, microscopy development, early cancer detection |
| Dr. Sagar | Mobile Communication |
| Dr. Somdatta Paul | IOT, Embedded Systems, & Healthcare Analytics |
| Dr. Jenifar Sultana | Renewable Energy, Automation |
| Ms. Sayantani Bhattacharyya | Power Electronics, Electric Drives, Renewable Energy, Automation |
| Dr. Arindam Sadhu | Electrical Biosensor, Statistical data analysis, IoT based healthcare system, Silicon fabrication technology, FEM based simulation |
| Dr. Tanmay Sinha Roy | AI & ML, Biomedical Signal Processing, IOT, Embedded Systems, & Healthcare Analytics |

Conference

- Rupam Ray Chaudhuri, Bidisha Mitra, Debasis Mondal, Shreya Adhikary, Congestive Heart Disease Prediction by using various Machine Learning Algorithms on two Dataset, International Conference on Integrative Science and Engineering (ICISE) 2023
- Nirmalya Samanta, Paulami Nayek, Kakali Senguta, Arup Ratan Biswas, Shreya Adhikary, Debasis Mondal, Determination of the quality of irrigation water by Fuzzy Logic based system in irrigation, International Conference on Integrative Science and Engineering (ICISE) 2023
- Priyanshi Das, Shreya Adhikary, Tomal Suvro Sannyashi, Debasis Mondal, Optical Imaging for Cancer Detection through Machine Learning Approaches, International Conference on Integrative Science and Engineering (ICISE) 2023
- Pradipta Maiti, TVWS scenario: Global and Indian Perspective, International Conference on Integrative Science and Engineering (ICISE) 2023
- Arnab Karmakar, Dipendu Mondal, Debasis, Shreya Adhikary, Future Smart Kitchen: A Modern Comfortable Packaging, International Conference on Integrative Science and Engineering (ICISE) 2023
- Sk Babul Akhtar, Pradipta Maiti, Debraj Chakraborty, Somdeb Chanda, Kalman Filter based Multiple Object Tracking using Hungarian Algorithm and performance tuning using RMS Index, International Conference on Integrative Science and Engineering (ICISE) 2023
- Somdeb Chanda , P Vanajakshi , Dilip Sing , Pradipta Maity, Debraj Chakraborty and Sk Babul Akhtar, Selection of Wavelength region for Prediction of Caffeine Content in Inward Tea Leaves using Near Infrared Reflectance (NIR) Spectroscopy, International Conference on Integrative Science and Engineering (ICISE) 2023
- Shreya Adhikary, Debasis Mondal, Tomal Suvro Sannyashi, 5G Technology in Healthcare: A detailed Survey, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore.
- Debasis Mondal, Shreya Adhikary, Tomal Suvro Sannyashi, IoT- Based Health Care Monitoring For Marginalized People, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore.
- Saurabh Basak, Debraj Chakraborty, Predictive Photo Responsivity of FASnBr_3 using simulation, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore
- Debasis Mondal, Shreya Adhikary, Tomal Suvro Sannyashi, Electrical Characterization of Mammalian Cells in Real-time: A Comprehensive Review, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore
- Shayeri Das, Tomal Suvro Sannyashi, Debasis Mondal, Shreya Adhikary, Prabhat Ranjan, Tanmoy Chakraborty, Computational study of FeAsn ($n=1-4$) clusters invoking DFT based descriptors, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore
- Tomal Suvro Sannyashi Debasis Mondal, Shreya Adhikary, Advances and Innovations in Heart Disease Detection: A Detailed Survey, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore
- Shreya Adhikary, Debasis Mondal, Tomal Suvro Sannyashi, Automated Detection and Classification of Mass Calcifications in Breast Cancer Mammograms using Image Processing Techniques, 2nd International Conference on Engineering Design and

Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore

- Sk Babul Akhtar, Pradipta Maiti, Enhanced Performance in Multiple Object Tracking: Kalman Filter Integration with Hungarian Algorithm and RMS Index Optimization, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore
- Sk Babul Akhtar, Optimizing Object Tracking Precision through Extended Kalman Filter Dynamics: A Comprehensive Investigation and Performance Evaluation, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore
- Sk Babul Akhtar, Modeling Error Factors in GNSS Observations for Precise Point Positioning and Accurate Position Estimation of Low Earth Orbit Satellites, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore
- Pradipta Maiti, TVWS landscape: International and Indian Outlook, 2nd International Conference on Engineering Design and Computing (ICEDC), 2024, Swami Vivekananda University, Barrackpore
- Tanmoy Sinha Roy et. al, Comparison of Different Machine Learning Algorithms for EEG Signal Analysis, ICDAI 2024, Springer Conference, 2024

Journal

- Tanmoy Sinha Roy et. al, Improvement in the Performance of Deep Learning Based on CNN to Classify the Heart Sound by Evaluating Hyper-Parameters, Soft Computing, Springer (SCIE), 2024 (Accepted)

Books

- New Developments in Electronics Editors: Shreya Adhikary, Debasis Mondal, Debraj Chakraborty, ISBN No.: 978-93-6039-440-0

Patent

- Patent application No. 6304212, Pradipta Maiti, “AI based Hand hygiene monitoring”.

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

- Patent application No. 401672-001, Pradipta Maiti “IOT BASED WATER PURIFIER”.

Conference / Workshop Organized:

- International Conference on Integrative Science and Engineering (ICISE) 2023 at SVU
- 2nd International Conference on Engineering Design and Computing (ICEDC)-2024 at SVU

DEPARTMENT OF MICROBIOLOGY

ABOUT DEPARTMENT:

The Department of Microbiology within the School of Life Sciences at Swami Vivekananda University is renowned for its exceptional faculty and commitment to nurturing an environment of experiential learning, entrepreneurship, and innovation. Our department delves deeply into the intricate world of microorganisms, highlighting their profound influence on the environment, health, and industry. We emphasize the mastery of advanced microbiological techniques and the cultivation of scientific acumen, ensuring our students can collaborate seamlessly with professionals across various scientific disciplines. This holistic approach not only enhances international understanding and collaboration but also equips our students for a multitude of rewarding career opportunities in research and development, healthcare, industry, academia, pharmaceuticals, environmental sciences, and beyond. To further enrich our students' expertise, the department consistently organizes events, hands-on training workshops, and seminars. These initiatives are designed to impart practical skills and professional knowledge, thereby preparing our students to excel in their chosen fields and contribute meaningfully to scientific and industrial advancements.

Department of Microbiology currently mentors approximately 21 research scholars under the guidance of dedicated and student-centric supervisors. The Department has a distinguished history of hosting numerous national and international conferences, seminars, and expert lectures, including prestigious events such as IACL-2023, ICSA-2023, and ICAL-2024. These events have featured honorable and diverse internal and international resource persons, including Prof. Suman Kumar Dhar from the Special Centre for Molecular Medicine, Dr. Rejina Afrin from the Department of Pharmacy at East West University, Dr. Subhra Chakraborty, Director at NIPGR, Dr. Saptarshi Chatterjee, Associate Director of Incubation and Chief Coordinator at the E-YUVA Centre, Adamas University, amongst countless more stellar personalities.

These eminent speakers and several other valued professionals have contributed their priceless insights, helping to shape the Department into its current dynamic and escalating form. Their participation has significantly enriched the academic environment, encouraging a culture of innovation and brilliance. The Department of Microbiology boasts a state-of-the-art central research laboratory facility equipped with advanced scientific instruments such as Fourier Transform Infrared Spectroscopy (FTIR), High Performance Liquid Chromatography (HPLC), Atomic Absorption Spectroscopy and Gas Chromatography-Mass Spectrometry (ASS), Thermal Cycler (PCR), Bioreactor, amongst others. This facility is designed to empower faculty members and scholars to engage in advanced scientific research, driving innovative contributions to their respective departments. Additionally, the department is preparing to launch a series of skill development workshops cum hands-on-training, like "Molecular Ecology and Molecular Farming", "Next Generation Sequencing & Computational Biology" and Nano-Biotechnology and Fourier Transform Infrared Spectroscopy (FTIR)", led by our esteemed faculties, to further enhance outside participation, strengthen scientific community reach and student expertise and broaden their academic horizons.

Additionally, the department has also launched a series of student skill development workshops combined with hands-on training. These include "Molecular Ecology and Molecular Farming," "Next Generation Sequencing & Computational Biology," and "Nano-Biotechnology and Fourier Transform Infrared Spectroscopy (FTIR)." led by our esteemed faculties, aim to enhance external participation, strengthen the scientific competence, and broaden student

expertise and academic horizons. These workshops are specifically open to students from outside the university to help them enhance their technical expertise. The Department of Microbiology is committed to equip students for the demands of the modern workforce, fostering an entrepreneurial mindset and a scientific problem-solving approach. Our dedicated faculty members continuously develop innovative research areas to bridge the gap between academia and industry segments.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|-----------------------|---|
| Dr Subhasis Sarkar | The Industrially important enzymes/ value added product generation from solid waste; Exploration of potential microorganism for waste remediation |
| Dr Pritha Pal | Oncology And Medical Biotechnology, Molecular Biology, Medical Microbiology, Toxicology, And Cytology |
| Ms Suranjana Sarkar | Drug Discovery and Protein Interaction |
| Dr. Aritri Laha | Agriculture Microbiology & Biotechnology |
| Ms. Ankita Das | Medical Microbiology |
| Mr Rupesh Dutta Banik | Environmental Microbiology |

PUBLICATIONS

a. Conference Publications

- Rupesh Dutta Banik, Uparna Dutta, Sneha Sahani, Shreya Saha, Subhankar Paul, Sibashish Baksi, Pritha Pal. “Impact Of Chronic Arsenic Toxicity on Human Health- A Review”, International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
- Pritha Pal, Rittick Dutta, Shrabani Roy, Riya Majumder, Sibashish Baksi. “Severity Of Oral Carcinoma With Respect To Various Addictions- A Study In West Bengal”, International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
- Madhusmita Padhi, Moumita Mukherjee, Sibashish Baksi*, Pritha Pal*. “Study Of Extent of Global Uranium Contamination in Groundwater”, International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
- Uzma Ghazal, Pritha Pal, Sibashish Baksi. “HPV Vaccination: A Comprehensive Approach to Control Cervical Cancer”, International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
- Rupesh Dutta Banik, Pritha Pal, Sibashish Baksi. “Green Strategy for Reclaiming Ecosystem: Microbial Remediation of Leather Industry Wastes”, International Conference on Agriculture, Life Sciences, and Food Science 2023 (ICALF 2023) (published)
- Mitra, S., Sarkar, S., De, D., Ghosh, S., Ghosh, B., & Sarkar, S. (2023). MANAGEMENT OF MICROBIAL BIOFILM USING NANO PARTICLE: A REVIEW. Journal of Advanced Zoology, 44.
- Das, D., Mandal, K., Bose, S.K, Chakraborty, Mistri, G., Laha, A., Ghosh, S., Aquatic Plants in phytoremediation of contaminated water: Recent knowledge and future

prospects. *Journal of Advanced Zoology*.

- Ghosh, K., Pal, S., Das, D., Ghosh, S., Laha, A. The Significance of Nanomaterials In Enhancing Soil Microbial Community Short Review. *Journal of Advanced Zoology*.
- Datta, S., Sinha, A., Saha, A., Sardar, S., Bhattacharya, P., Laha, A. Phosphate Solubilizing Bacteria: A Promising Approach For Improving Phosphorus In Agricultural Soils. Laha, A. *Journal of Advanced Zoology*
- Pal, S., Ghosh, K., Das, Laha, A. Importance of PGPR in organic farming A Short Review. *Journal of Advanced Zoology*.
- Mandal, S., Chakraborty, A., Ghosh, S., Laha, A. Role Of Algae-Bacterial Consortium In Heavy Metal Contaminated Water Treatment. *Journal of Advanced Zoology*.
- Mandal, K., Das, D., Bose, S.K., Chakraborty, A., Mistri, G., Acharya, J., Laha, A. Ghosh, S. Ornamental Plant in phytoremediation of contaminated soils: Recent progress and future directions. *Journal of Advanced Zoology*.
- Das, D., Laha, A. Utilizing Nanomaterials Linked With Plant Growth-Promoting Bacteria For Agricultural Advancements A Short Review. *Journal of Advanced Zoology*.
- Saha, S., Maity, A., Laha, A. Phosphorus Solubilizing Microbes: Propitious Strategy For Biofertilization. *Journal of Advanced Zoology*.
- Bose, S.K., Chakraborty, A., Mandal, K., Das, D., Mistri, G., Kar, S., Laha, A., Ghosh, S. A review on phytoremediation capability of *Tagetes erecta* Linn. against heavy metals. *Journal of Advanced Zoology*.
- Sadhu, P., Sarkar, S., Laha, A., Ghosh, S., Ghosh, B., Sarkar, S., Oncolytic Viral Nanoparticles: A Combination Of Targeted And Immunotherapeutic Approach For Cancer Treatment: A Re- view. *Journal of Advanced Zoology*.
- Pal, S., Ghosh, K., Laha, A. Application Of Metagenomics In Agri- culture. *Journal of Advanced Zoology*.
- Chakraborty, A., Mandal, S., Mandal, K., Das, D., Bose, S.K., Laha, A., Ghosh, S. Potential Approach Of Mushrooms In Bioremediation –A Short Review.
- Pal, S., Ghosh, K., Laha, A. Application Of Metagenomics In Agri- culture. *Journal of Advanced Zoology*.
- Dutta, E., Ghosh, K., Pal, S., Laha, A. The importance of microbes in plastics degradation: A sustainable approach A Short Re view. *Journal of Advanced Zoology*.
- Mistri, G., Mandal, K., Das, D., Kundu, S., Ghosh, S., Laha, A. Importance Of PGPR (Plant Growth Promoting Rhizobacteria) For Sustainable Agricultural Production. *Journal of Advanced Zoology*.
- Sutradhar, B.D., Ghosh, K., Halder, S., Sarkar, S., Laha, A. Revitalization Of Plant Growth Promoting Rhizobacteria As An Effective Bioinoculant To Enhance The Growth, Production, And Stress Tolerance Of Vegetable Crops. A Short Review. *Journal of Advanced Zoology*.
- Dutta, U., Jyote, S., Ghosh, K., Pal, S., Sengupta, S., Laha, A. Bioremediation Of Contaminated Environments Through Mycology: A Review Of Current Advancements And Future Prospects A Short Review. *Journal of Advanced Zoology*.
- Bhattacharya, T., Ghosh, K., Laha, A., & Pal, P. (2023). STUDY OF ACUTE ARSENICTOXICITY ON A GLOBAL SCENARIO. *Journal of Survey in Fisheries Sciences*, 10(1S), 6442-6448.
- Ghorui, A., Pal, S., Pal, S., Ghosh, K., & Dutta, U. Laha, A (2023). Cadmium (Cd) Resistant Bacteria. *Journal of Survey in Fisheries Sciences*, 10(1S), 6463-6469.
- Pal, S., Ghosh, K., & Ghorui, A. Laha, A (2023). Potential of plant growth promoting bacteria to alleviate chromium pollution. *Journal of Survey in Fisheries Sciences*,

10(1S), 6454-6462.

- Banik, R.D., Mandal, R.K., Das, B., Pal, P., Bakshi, S., Ghosh, S. "Phyto- toxicity Study of Biogenic Mono-metallic and Bi-metallic (Au- Ag) Alloy NPs." *Journal of Mines, Metals and Fuels*, 71(11): 2084- 2088; 2023. DOI: 10.18311/jmmf/2023/36098.
- Banik, R.D., Dutta, U., Sahani, S., Saha, S., Paul, S., Bakshi, S., & Pal, P. "Impact of chronic arsenic toxicity on human health: A review." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6408-6413.
- Gharami, M., Chakraborty, S., Maira, S., Chatterjee, A., & Pal, P. "Impact of fluoride toxicity: A worldwide threat." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6486-6492.
- Nabi, A., Garai, S., Mondal, P., Pal, F., Ghosh, S., & Pal, P. "Effect of nitrate contamination in groundwater: A worldwide concern." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6493-6497.
- Padhi, M., Mukherjee, M., Bakshi, S., & Pal, P. "Study of the extent of global uranium contamination in groundwater." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6470-6479.
- Bhattacharya, T., Ghosh, K., Laha, A., & Pal, P. "Study of acute arsenic toxicity on a global scenario." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6442-6448.
- Roy, S., Ghoshal, A., Panda, R., Pal, P., & Ghosh, S. "A review on bio- inspired and green synthesis of silver nanoparticles with their antimicrobial activity." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6353-6358.
- Ghazal, U., Pal, P., & Bakshi, S. "HPV vaccination: A comprehensive approach to control cervical cancer." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6480-6485.
- Banik, R.D., Pal, P., & Bakshi, S. "Green strategy for reclaiming eco- system: Microbial remediation of leather industry wastes." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6432-6441.
- Ghorui, A., Pal, S., Pal, S., Ghosh, K., Dutta, U., Sutradhar, B.D., Das, D., Pal, P., Laha, A. "Cadmium (Cd) bacteria." *Journal of Survey in Fisheries Sciences*, 10(1S), 2023; 6463 – 6469.
- Barik, R., Pal, P. "Study of Impact of Dietary Factors on Prevalence of Colon Cancer." *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023; 1674-1683. <https://doi.org/10.17762/jaz.v44iS6.2590>.
- Maira, S., Dhar, S., Pal, P. "A Review on Association of Diet and Lifestyle with the occurrence of Hepatocarcinoma." *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023; 2557-2566. <https://doi.org/10.53555/jaz.v44iS5.3280>.
- Halder, S.D., Bandopadhyay, B., Pal, P. "Role of Live Microorganisms in Colon Cancer- A Review on Probiotic Effect." *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023; 2625-2629. <https://doi.org/10.53555/jaz.v44iS5.3485>.
- Juned, U., Pal, P. "Deciphering Nitrogen Fixing Role Of Various Fungal Species – A Study." *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023; 2507-2512. <https://doi.org/10.53555/jaz.v44iS5.3216>.
- Chourasia, A., Pal, P. "Black Pepper Being a Potent Anti-Carcinogen- A Short Review." *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023; 2665-2670. <https://doi.org/10.53555/jaz.v44iS5.3477>.
- Banik, R.D., Pal, P. "Study of Microbial Impact on Lead Remediation in Industrial Wastewater." *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023; 2472-2477. <https://doi.org/10.53555/jaz.v44iS5.3209>.
- Chatterjee, A., Pal, P. "Diet and Epidemiology- Their Effect on Esophageal

- Carcinoma.” *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023;2600-2606. <https://doi.org/10.53555/jaz.v44iS5.3289>.
- Dey, D., Pal, P. “Garlic — A Diet Therapy for Various Cancers.” *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023;2368-2375.
 - Chakraborty, S., Pal, P. “Impact of Lifestyle & Diet on Prevalence of Oral Cancer.” *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023;2591-2599. <https://doi.org/10.53555/jaz.v44iS5.3287>.
 - Banik, R.D., Pal, P. “Microbial Remediation as An Emerging Industrial Wastewater Treatment Process for Arsenic Extenuation.” *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023; 1621-1628. <https://doi.org/10.53555/jaz.v44iS6.2581>.
 - Pal, F., Pal, P. “Study of Impact of Diet and Lifestyle Factors on Prevalence of Gastric Cancer.” *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023;2581-2590. <https://doi.org/10.53555/jaz.v44iS5.3285>.
 - Sarkar, S., Pal, P. “Arsenic as a Therapy in Cancer: A Short Review.” *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023;1605- 1610. <https://doi.org/10.17762/jaz.v44iS6.2579>.
 - Garai, S., Pal, P. “Diet and Lifestyle in Renal Carcinoma- a Possible Relation.” *Journal of Advanced Zoology*. Vol. 44 No. S6, 2023;2567-2574. <https://doi.org/10.53555/jaz.v44iS5.3281>.
 - Banik, R. D., Dutta, U., Sahani, S., Saha, S., Paul, S., Baksi, S., & Pal, P. (2023). Impact Of Chronic Arsenic Toxicity on Human Health-A Review. *Journal of Survey in Fisheries Sciences*, 10(IS) 6408- 6413.
 - Banik, R. D., Pal, P., & Baksi, S. (2023). GREEN STRATEGY FOR RE- CLAIMING ECOSYSTEM: MICROBIAL REMEDIATION OF LEATHER IN DUSTY WASTES. *Journal of survey in fisheries sciences*, 10(IS) 6432-6441, DOI: 10.53555/sfs.v10i1S.2161
 - Banik, R. D., Mandal, R. K., Pal, P., Das, B., Baksi, S., & Ghosh, S. (2023). Phytotoxicity Study of Biogenic Mono-metallic and Bimetallic (Au-Ag) Alloy NPs. *Journal of Mines, Metals and Fuels*, 71(11): 0-0; 2023, DOI: 10.18311/jmmf/2023/
 - Banik, R. D., & Pal, P. (2023). Green approach to remediate leather industry waste using fungi. (Communicated)
 - Nandi, P., & Banik, R. D. (2023). TOXIC COMPONENTS OF PLASTIC POSE CARCINOGENIC THREAT TO PUBLIC HEALTH. *Journal of Advanced Zoology*, ISSN: 0253-7214, DOI: 10.17762/jaz.v44iS6.2582
 - Banik, R. D., & Pal, P. (2023). Study Of Microbial Impact On Lead Remediation In Industrial Wastewater. *Journal Of Advanced Zoology* 44(S5), DOI:10.53555/jaz.v44iS5.3209
 - Saha, T., & Banik, R. D. (2023). INFLUENCE OF A POOR LIFESTYLE ON THE DEVELOPMENT OF CYSTS IN WOMEN. *Journal of Advanced Zoology*, ISSN: 0253-7214, DOI: 10.17762/jaz.v44iS6.2697
 - Banik, R. D., & Pal, P. (2023). MICROBIAL REMEDIATION AS AN EMERGING INDUSTRIAL WASTEWATER TREATMENT PROCESS FOR ARSENIC EXTENUATION, *Journal of Advanced Zoology*, 44(S6), 1621–1628. <https://doi.org/10.53555/jaz.v44iS6.2581>

b. Book Chapter

- Recycling of waste water through natural filtration techniques: Possibilities and Challenges- Bidisha Ghosh, Pijush Mallick, Kaustuv Das, Sukhen Das.

- Innovative and Hybrid Technologies for Waste water Treatment and Recycling “. Bidisha Ghosh, Suranjana Sarkar, Semanti Ghosh. CRC PRESS/Taylor & Francis Group (Communicated)
- Carolina Krebs de Souza, Sabyasachi Ghosh, Swarup Roy, “Valorization of Agro-waste Derived Materials for Food Packaging Application”, Book Title: Sustainable Materials for Food Packaging and Preservation, Chapter 9, [ELSEVIER, ISBN: 9780443135675] (Review completed and will be published 1st Sep, 2024).
- Pal P, De D, Dutta Banik R, Paul S. An overview of the mechanistic approach to RNA interference, 2023 (Submitted)
- Banik, R. D., DE, D., & Pal, P. (2023). Horizontal Gene Transfer in the Evolution of Microbial Genomes (Submitted)
- Chourasia S, Pal P. Impact of chlordecone exposure on reproductive system-a concise review (ICSA 2023) (Submitted)
- Das R, Pal P. The mechanistic approach of arsenic mediated neuro toxicity-a concise review. (ICSA 2023) (Submitted)
- Paul S, Pal P. Benzene-mediated hepato-toxicity: a review of the underlying mechanisms (ICSA 2023) (Submitted)
- Mondal P, Pal P. Immunotoxicity caused by excessive mercury exposure: a brief overview. (ICSA 2023) (Submitted)
- Banik, R.D., De, D., Pal, P. (2023). BOOK CHAPTER - HORIZONTAL GENE TRANSFER IN THE EVOLUTION OF MICROBIAL GENOMES
- Paul, S., De, D., Pal, P., Ghosh, B. (2023). BOOK CHAPTER - UNVEILING EPIGENETICS AND HUMAN DISEASES: FOCUS ON CANCER EPI GENETICS. (In Submitted)
- Pal, P., De, D., Banik, R.D., Paul, S. (2023). BOOK CHAPTER - AN OVERVIEW OF THE MECHANISTIC APPROACH TO RNA INTERFERENCE. (In Submitted)
- De, D., Pal, P., Banik, R.D., Paul, S. (2023). BOOK CHAPTER - UNRAVELING THE WONDERS OF GENOME SEQUENCING AND IT'S ADVANCE METHOD NEXT GENERATION SEQUENCING. (In Submitted)
- De, D., Nayak, T., Dhal, P.K. (2023). BOOK CHAPTER - METAGENOMICS AND BIOINFORMATICS IN MICROBIAL ECOLOGY: CURRENT STATUS AND BEYOND.(In Press)
- Laha, A., Sengupta, S., Mandal, J., Bhattacharyya, K., & Bhattacharyya, S. (2023). The Role of Plant Growth Promoting Bacteria on Arsenic Removal: A Review of Existing Perspectives. In Arsenic Toxicity Remediation: Biotechnological Approaches (pp. 3-14). Cham: Springer Nature Switzerland.
- Laha, A., Sengupta, S., Mandal, J., Bhattacharyya, K., & Bhattacharyya, S. (2023). The Journey of Arsenic from Soil to Plant. In Arsenic Toxicity Remediation: Biotechnological Approaches (pp. 3-14). Cham: Springer Nature Switzerland.
- Banik, R. D., Baksi, S., & Pal, P. (2024). Advanced strategies in microbial bioremediation of dyes from industrial wastewater. Springer nature. (Submitted)
- Banik, R. D., DE, D., & Pal, P. (2023). Horizontal Gene Transfer in the Evolution of Microbial Genomes (Submitted)
- Pal P, De D, Dutta Banik R, Paul S. An overview of the mechanistic approach to RNA interference, 2023 (Submitted)
- Suranjana Sarkar, Tina Basu, Subhamoy, Banerjee, Ruchira Mukherjee. (2024). An Overview of Bioremediation Using Bio- adsorbents. Taylor Frances, CRC Press.

c. Journal

- Ghosh, A., Naskar, P., Dey, S., Mukherjee, S., Biswas, S., Das, R., Sarkar, S., Ghosh, S., Ghosh, B., Sarkar, S. The Key to A Sustainable Future - Algal Biofuel, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6395-6400.
- Nayak, S., Chakraborty, S., Roy, S., Roy, S., Ghosh, K., Ghorui, A., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. The Role of Plant Hormone on Root Development, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6401 – 6407.
- Ghosh, S., Ghosh, B., Ghosh, M., Paul, S., Pal, A., Dey, T., Sarkar, S., Ghosh, S., Ghosh, B., Sarkar, S. Phytoremediation- Friendlier and Affordable Approach to Remediate Heavy Metal Pollution, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6291-6296.
- Pal, N., Das, P., Dutta, R., Sarkar, S., Mukherjee, S., Devi, P., Mukherjee, M., Dhar, S., Ghosh, S., Sarkar, S., Sarkar, S., Ghosh, B. Water Reclamation Through Nano-remediation & Bioremediation: A Weal Against Conventional Chemical Techniques, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6297-6305.
- Banerjee, D., Sadhu, P., Das, S., Pal, S., Mitra, S., Ghosal, A., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. Phosphate Solubilizing Bacteria: A potential biotic component for solubilizing phosphate in soil and its application as Biofertilizer: A Review. Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6306-6315.
- Biswas, D., Chourasia, A., Sasmal, A., Santra, S., Panigrahi, S., Kundu, M., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. Mycoremediation is a Potential Strategy for Environmental Clean-up of Heavy Metal: A Review, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6316- 6327.
- Sen, A., Mondal, I., Das, S., Roy, S., Mondal, M., Roy, R., Sarangi, S., Banerjee, S., Sarkar, S., Ghosh, B., Sarkar, S., Ghosh, S. Analytical approach of micro-RNA interaction study in ovarian cancer, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6328- 6335.
- Chakraborty, B., Gosai, R., Saha, D., Nayek, B., Biswas, P., Das Gupta, A., Ghosh, R., Ghosh, B., Sarkar, S., Sarkar, S., Ghosh, S. Structural and functional relationship study in plant salinity stress, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6336- 6343.
- Dalalithakur, S., Singh, P., Singh, S., Sasmal, A., Deb, T., Karmakar, S., Dasgupta, T., Sarkar, S., Sarkar, S., Ghosh, B., Ghosh, S. Role of pathogenesis-related (PR) proteins in plant microbes defense mechanism, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6344- 6352.
- Noor, S., Mondal, M., Singh, S., Sadhu, P., Chourasia, S., Patra, S., Ghosh, K., Pal, S., Sarkar, S., Sarkar, S., Ghosh, S., Ghosh, B. Scavenging of Waste Water Using Oyster Mushrooms, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6364- 6371.

- Saha, S., Devi, P., Das, S., Roy, S., Sing, P., Mitra, S., Banerjee, S., Mallick, J., Sarkar, S., Sarkar, S., Ghosh, S., Ghosh, B. Study About the Absorption Pattern of Soil Chromium By Perennial Flowering Herbs, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6372- 6377.
- Sharma, P., Das, S., Sadhu, P., Pal, S., Mitra, S., Ghoshal, A., Biswas, S., Roy, S., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. Therapeutic Role of Pro- biotics In Managing Various Diseases, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6378-6380.
- Ghoshal, A., Saha, P., Mallick, J., Sarkar, S., Chakarborty, M., Sarkar, S., Ghosh, B., Ghosh, S., Sarkar, S. Phytoremediation: A Way Forward To- wards Heavy Metal Management, Journal of Survey in Fishery Sciences. Vol. 10 No. 1S (Special issue 1), 6381-6394.
- Bidisha Ghosh, Monoswita Chakraborty, Semanti Ghosh, Bidi- sha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Genetic Basis And Clinical Perspectives Of Breast Cancer. Journal of Advanced Zoology, 44(S6). <https://doi.org/10.53555/jaz.v44iS6.3708>
- Santanu Biswas, Subhajit Pal, Sayani Das, Soumili Banerjee, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suran- jana Sarkar. (2023). Microbial Plastic Degradation: Nature's Solution for Sustainable Waste Management. Journal of Advanced Zoology, 44(S6), 2315–2321. <https://doi.org/10.53555/jaz.v44iS6.3720>
- Abhishek Ghoshal, Joydev Mallick, Suranjana Sarkar, Semanti Ghosh, Bidisha Ghosh, & Subhasis Sarkar. (2023). Efflux Pumps In Antimicrobial Resistance: Mechanism, Regulation And Therapeutic Implications. Journal of Advanced Zoology, 44(S5), 2575–2580. <https://doi.org/10.53555/jaz.v44iS5.3282>
- Dipti Das, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Recombinant Protein Production: Advancements And Applications. Journal of Advanced Zoology, 44(S6), 2236–2242. <https://doi.org/10.53555/jaz.v44iS6.3706>
- Sayantani Chakraborty, Sampanna Roy, Aayushee Chatter- jee, Falguni Pal, Ritu Das, Puja Sadhu, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Exosomal RNA: Interplay and Therapeutic Potential. Journal of Advanced Zoology, 44(S6), 2309–2314. <https://doi.org/10.53555/jaz.v44iS6.3718>
- Puja Sadhu, Suranjana Sarkar, Aritri Laha, Semanti Ghosh, Bidi- sha Ghosh, & Subhasis Sarkar. (2023). Oncolytic Viral Nanoparticles: A Combination Of Targeted And Immunotherapeutic Approach For Cancer Treatment: A Review. Journal of Advanced Zoology, 44(S5), 2537–2550. <https://doi.org/10.53555/jaz.v44iS5.3277>
- Sulogna Mitra, Suranjana Sarkar, Debjit De, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar. (2023). MANAGEMENT OF MI- CROBIAL BIOFILM USING NANO PARTICLE: A REVIEW. Journal of Advanced Zoology, 44(S6), 2070–2080. <https://doi.org/10.17762/jaz.v44iS6.2696>

- Prity Singh, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Application Of Genetic Engineering In Crop Improvement. Journal of Advanced Zoology, 44(S6), 2301–2308. <https://doi.org/10.53555/jaz.v44iS6.3717>
- Sourav Banerjee, Suranjana Sarkar, Subhasis Sarkar, Bidisha Ghosh, & Semanti Ghosh. (2023). Biofertilizer and their importance in sustainable agriculture. Journal of Advanced Zoology, 44(S5), 2526–2529. <https://doi.org/10.53555/jaz.v44iS5.3222>
- Sayani Da, Suranjana Sarkar, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar. (2023). GUT MICROBIOME AND HUMAN HEALTH: A REVIEW. Journal of Advanced Zoology, 44(S6), 2062–2069. <https://doi.org/10.17762/jaz.v44iS6.2695>
- Sulogna Mitra, Suranjana Sarkar, Debjit De, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar. (2023). Management Of Microbial Biofilm Using Nano Particle: A Review. Journal of Advanced Zoology, 44(S6), 2070–2080. <https://doi.org/10.17762/jaz.v44iS6.2696>.
- Sayani Das, Sulogna Mitra, Monalisa Mallik, Soumili Banerjee, Subhajit Pal, Abhijit Kumar, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Advancing Bio- medical Frontiers: Unveiling The Potential Of 3d Bioprinting In Organ Regeneration. Journal of Advanced Zoology, 44(S5), 2488–2493. <https://doi.org/10.53555/jaz.v44iS5.3210>.
- Tilatoma Dasgupta, Bidisha Ghosh, Suranjana Sarkar, Subhasis Sarkar, & Semanti Ghosh. (2023). Tuberculosis - A multisystemic disease and antimicrobial resistance in Mycobacterium tuberculosis. Journal of Advanced Zoology, 44(S5), 2641–2645. <https://doi.org/10.53555/jaz.v44iS5.3304>
- Ankit Pal, Shreyoshi Pal, Saikat Manna, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Unlock- ing The Potential of Phytochemicals in Anti-Diabetic Therapy: Mechanisms, Challenges, And Future Prospects. Journal of Advanced Zoology, 44(S6), 2284–2289. <https://doi.org/10.53555/jaz.v44iS6.3713>
- Sahely Roy, Semanti Ghosh, Srijani Karmakar, Subhasis Sarkar, Suranjana Sarkar, & Bidisha Ghosh. (2023). Immunity Risk As- sociated with Cytomegalovirus Infection After Organ Trans- plantation. Journal of Advanced Zoology, 44(S5), 2451–2456. <https://doi.org/10.53555/jaz.v44iS5.3202>
- Srijani Karmakar, Sahely Roy, Suranjana Sarkar, Bidisha Ghosh, Subhasis Sarkar, & Semanti Ghosh. (2023). Genetic Diagnosis of Vexas Syndrome: A New Rare And Deadly Autoinflammatory Disorder In Adults. Journal of Advanced Zoology, 44(S5), 2636–2640. <https://doi.org/10.53555/jaz.v44iS5.3302>
- Anwesha Das, Semanti Ghosh, Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Recombinant Hormones: Appli- cations And Challenges. Journal of Advanced Zoology, 44(S6), 2279–2283. <https://doi.org/10.53555/jaz.v44iS6.3712>
- Deeti Das, Sudipta Chakraborty, Moumita Mukherjee, Susoma Garai, Semanti Ghosh,

Bidisha Ghosh, Subhasis Sarkar, & Suranjana Sarkar. (2023). Revolutionizing the Biological Landscape: the Power of Genome Editing. *Journal of Advanced Zoology*, 44(S5), 2446–2450. <https://doi.org/10.53555/jaz.v44iS5.3199>

- Laha, A., Sengupta, S., Bhattacharyya, S., Bhattacharyya, K., & Guha Roy, S. (2024). Isolation and characterization of rhizo- bacteria from lentil for arsenic resistance and plant growth promotion. *3 Biotech*, 14(1), 1-13.
- Sengupta, S., Patra, S. K., Laha, A., Poddar, R., Bhattacharyya, K., Dey, P., & Mandal, J. (2023). Replacing conventional surface irrigation with micro-irrigation in vegetables can alleviate arsenic toxicity and improve water productivity. *Groundwater for Sustainable Development*, 101012.
- Pal, P., Dutta, R., Roy, S., Majumder, R., Baksi, S. 2023. “Severity of Oral Carcinoma with Respect to Various Addictions- A Study in West Bengal.” *Journal of Survey in Fisheries Sciences*, 10(1S), 6658-6662.
- Basak, T., Pal, P., Sarkar, S. 2023. “Study of Correlation of Arsenic in Fish Flesh and Occurrence of Oral Carcinoma in Effected Areas of West Bengal.” *Journal of Mines, Metals and Fuels*, 71(11): 2126-2131. DOI: 10.18311/jmmf/2023/36036.

d. Books

“Microbiome Principles and Explorations”, ISBN: 978-93-5980-246-6

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

1. National Technology Day Celebration.
2. Faculty Development Programme with Prof. Santasree Banerjee from Jilin University, China
3. Faculty Development Program by Dr. Saptarshi Chatterjee, Associate Director of Incubation & Chief Coordinator at the E-YUVA Centre, Adamas University, supported by BIRAC (Bio- technology Industry Research Assistance Council).
4. One day seminar by Dr. Subhra Chakraborty, Director of the National Institute of Plant Genome Research, and Prof. Prasanta Kumar Panigrahi, Director of IISER.
5. International Microorganism Day Celebration.
6. World Habitat Day Celebration.
7. World Cancer Awareness Day Celebration.
8. Seminar on Plant Genome Sequencing.
9. World Entrepreneurs’ Day Celebration
10. Vivek Jyoti Ananya Samman Prof. Partha P. Majumder, a luminary in the field of academia and a distinguished National Science Chair for Scientific Excellence appointed by the Government of India.
11. World Cancer Day Celebration.
12. National Science Day Celebration.
13. National Vaccination Day Celebration.
14. World Down’s Syndrome Day Celebration.
15. Journal Club- Department of Biotechnology.

Conference

1. ICSA- 2023
2. ICALF- 2024

Workshop

1. Student's Hands-on training on Molecular Biological Techniques conducted with Andragogy.
2. 2-Month Crash Course on Modern Biological Techniques and Soft Skills Grooming Program
3. International Workshop on Computer-aided Drug Designing and Discovery by PreScience.
4. Bioinformatics & Communicative English Workshop conducted by department of Biotechnology & Department of English.

ACHIEVEMENT OF THE DEPARTMENT

1. MoU with Andragogy.
2. MoU with SynBiogenesis.
3. Departmental faculty participation in Regional Young Investigators Meet by Dr Pritha Pal and Dr Aritri Laha.
4. Central advanced research laboratory facility equipped with high-end instruments such as UV-Visible Spectroscopy, High Performance Liquid Chromatography (HPLC), Atomic Absorption Spectroscopy (AAS), Fourier Transform Infrared Spectroscopy (FTIR), Gas Chromatography Flame Ionization Detector (GC-FID), Rotary Evaporator, and Filtration Assembly has been set up by the department.
5. Departmental book publication "Microbiome Principles and Explorations", ISBN: 978-93-5980-246-6.

DEPARTMENT OF OPTOMETRY

ABOUT DEPARTMENT:

Swami Vivekananda University is among one of the Best University in West Bengal for Optometry courses. Optometry means a health care professional that is autonomous, educated and regulated concerned with examination of eye and visual system, detection and management of refractive error, visual rehabilitation, investigative diagnosis and primary management of ocular diseases. Optometry as a profession has the primary health care responsibility for eliminating uncorrected refractive error. Optometrist as a comprehensive eye care practitioners have vital role in detecting potentially serious eye diseases such as cataract, glaucoma and Diabetic retinopathy, age-related maculopathy, as well as general health conditions such as hypertension, diabetes which means Optometrists also helps to reduce the burden of other causes of blindness. Optometry can and should play a leading role in eye care provision at the primary level, and can also assist at secondary and tertiary levels where possible, working with ophthalmologists and other eye care providers towards the unified goal of combating blindness.

The primary roles of our department of optometry is to educate and train future optometrists. This involves offering undergraduate and graduate programs in optometry, which typically include coursework in anatomy, physiology, optics, pharmacology, and clinical training. Departments of optometry also engage in research activities aimed at advancing the understanding of eye diseases, improving treatment methods, developing new technologies for vision correction, and exploring the relationship between eye health and overall health. In addition to academic programs, departments of optometry also provide clinical services to the community. That include routine eye exams, fitting contact lenses, managing eye diseases like glaucoma or macular degeneration, and providing vision therapy. Department of optometry frequently engage in outreach programs to educate the public about eye health and the importance of regular eye exams. This involve partnerships with schools, community centers, and healthcare organizations to provide screenings and educational materials.

Structure and Organization:

- **Faculty:** We have senior Optometrists, vision scientists, and other healthcare professionals as faculty members who teach students, conduct research, and provide clinical care.
- **Facilities:** Include clinics, laboratories, classrooms, and research spaces equipped with specialized equipment for diagnosing and treating eye conditions.
- **Accreditation:** Department of Optometry meets accreditation standards set by professional bodies and regulatory agencies to ensure that their educational programs and clinical services meet quality benchmarks.

Why Department?

Choosing a Bachelor of Optometry (BOPT) course at Swami Vivekananda University can offer several advantages and benefits. Here are some reasons why you might consider pursuing a BOPT course at this university:

- Swami Vivekananda University provides a well-structured and comprehensive curriculum that covers all the essential aspects of Optometry. You can expect to receive in-depth knowledge and practical training in various Optometric and vision science and

procedures.

- This university is accredited by relevant educational authorities, ensuring that the program meets established standards.
- Swami Vivekananda University has experienced faculty members who are experts in the field of Optometry. They can provide valuable insights, mentorship, and guidance throughout your academic journey.
- This university has well-equipped laboratories and access to the latest instruments for eye examination. This ensures that you gain hands-on experience with advanced tools commonly used in the health care sectors.
- In our university, BOPT program incorporates clinical rotations or internships in eye hospitals. This allows you to apply your theoretical knowledge in clinical settings, preparing you for the demands of the profession.
- Here you are provided with a conducive environment for networking and collaboration. You have the opportunity to interact with peers, faculty, and professionals in the medical and healthcare fields, expanding your professional connections.
- Pursuing a degree at a university can contribute to your personal growth and development. Apart from academic knowledge, you can cultivate critical thinking, problem-solving skills, and effective communication abilities.
- A BOPT course from this university can serve as a stepping stone to advanced degrees or specialization in Optometry. If you have aspirations to pursue higher education, a university background can be beneficial.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|------------------------|---|
| Dipanwita Ghosh | Public health and community eye care, Binocular Vision and Orthoptics |
| Prabirendranath Sinha | Clinical Optometry & Disease |
| Manas Chakraborty | Contact Lenses & Vision Therapy |
| Arup Saha | Clinical Refraction and Ocular disease |
| Srimanti Sarkar | Occupational Optometry & Vision Therapy |
| Anusua Das | Neuro Optometry & Low Vision |
| Rikta Paul | Low Vision Rehabilitation |
| Partha Pratim Seal | Pediatric Optometry |
| Nalini Ranjan Singh | Geriatric Optometry |
| Sriparna Das | Binocular Vision & Orthoptics |
| Raya Sinha | Contact Lens Specialist |
| Subhra Chandra Chandra | Vision Therapy & Neuro-Optometry |
| Sudha Prasad | Refractive Surgery Co-management |

PUBLICATIONS

- Dipanwita Ghosh. Does eye exercises along with physical training helps in achieving better sports performance? Effect of vision therapy on basketball players. Int. J. Ophthalmol. Optometry 2024;6(1):14-19. DOI: 10.33545/26648547.2024.v6.i1a.26

- Juhi Verma and Dipanwita Ghosh. Association of congenital ptosis and prematurity of infants with refractive error, strabismus and Amblyopia and their prevalence in pediatric age group. Int. J. Ophthalmol. Optometry 2024;6(1):20-23. DOI: 10.33545/26648547.2024.v6.i1a.27
- Arup Saha and Bulti Saha Debnath. A review study on prevalence of refractive error among school going, pre-school going and adults in urban and suburban areas. Int. J. Ophthalmol. Optometry 2024;6(1):01-06. DOI: 10.33545/26648547.2024.v6.i1a.24.
- Monika Ojha B, Arup Saha, Dr. Manas Chakrabarty, Dr. Prabi Monika Ojha B, Arup Saha, Dr. Manas Chakrabarty, Dr. Prabi rendra Nath Sinha and Bulti Saha Debnath. Prevalence of diabetic eye diseases among target population in urban area of India. Int. J. Ophthalmol. Optometry 2024;6(1):07-13. DOI: 10.33545/26648547.2024.v6.i1a.25

Research Papers:

- Ghoshal, Rituparna & Ghosh, Dipanwita & Ghosh, Somnath & Mukherjee, Gopeswar. (2023). Impact of climate change and related environmental factors on eye health in India - A narrative review. Ecology, Environment and Conservation. 29. 845- 850. 10.53550/EEC.2023.v29i02.051.
- Ghoshal, R., Ghosh, D., & Ghosh, S. (2023). Dichoptic Vision Therapy in Adults with Anisometropic Amblyopia: A Systematic Review. Malaysian Journal of Medicine & Health Sciences, 19(4).
- Saeed A, Razvi J, Dubey G, Kumari V, Ali J, Bano S, Chhugan M, Kamat O S, Sharma K, Paul R, Ocular morbidity pattern in Kashmir – A hospital-based study. Indian J Clin Exp Ophthalmol 2022;8(2):239-244.

Book Chapter :

- “Pearls of Clinical Optometry”, ISBN 978-93-6076-131-8, by Dipanwita Ghosh, Arup Saha, Prabirendranath Sinha, Manas Chakraborty.
- “Contact Lens Practice Manual”, ISBN 978-93-340-7136-8, by Dipanwita Ghosh, Rikta Paul, Arup Saha, Sudha Prasad, Prabirendranath Sinha, Manas Chakraborty, Srimanti Sarkar, Anusua Das.

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

- Two Days workshop on “Contact Lens Conclave” on 7th & 8th July 2023
- Hands on Workshop on “Arts of Ophthalmic Dispensing” on 5th August 2023
- Hands on Workshop on “ Decoding Patients Through Orthoptic Evaluation” on 22nd July’ 2023
- Hands on Workshop on “Pearls of Low Vision & Rehabilitation” on 21st August 2023.
- World Sight Day Celebration awareness campaign on 12th October 2023
- “Global Healthcon 2023” – two days international conference on 28th and 29th September 2023
- Workshop on “Binocular Vision & Vision therapy” on 12th March 2024

- Hands on Workshop on “Scleral Contact Lens” on 13th March 2024
- Hands on Workshop on “Low Vision & Rehabilitation” on 15th March 2024
- Seminar on “Advancing Optometry Commitment to global Eye Care” to celebrate World Optometry Day on 23rd March 2024
- “Global Healthcon-2024 (Phase 1)” – two days international on 22nd & 23rd February’2024
- “Global Healthcon-2024 (Phase 2)” – two days international conference on 21st & 22nd June’2024

Journal :

“Journal of Vision Sciences & Clinical Optometry”

ACHIEVEMENT OF THE DEPARTMENT

- Best Poster Award at Bengal Optometry Conference 2024
- Best Poster Award at 2nd Mini ICLEP at LVPEI Eye Hospital

DEPARTMENT OF CIVIL ENGINEERING

ABOUT DEPARTMENT:

The Civil Engineering Department at Swami Vivekananda University is a hub of academic excellence, offering a comprehensive range of programs including Diploma, B. Tech, M. Tech, and Ph.D. The department is committed to providing a holistic education, blending theoretical knowledge with practical skills. With state-of-the-art laboratories, students have access to cutting edge equipment and technology, ensuring hands on learning experiences. Our distinguished faculty, hailing from prestigious institutions such as IITs and NITs, brings a wealth of expertise to the department. Their commitment to quality education and research enhances the overall academic environment. Additionally, the department fosters a culture of continuous learning and professional development, providing ample opportunities for students to engage in internships, industry collaborations, and skill building activities. Recognizing the importance of a smooth transition from academia to industry, the department places a strong emphasis on training and placement. Through strategic partnerships with leading companies, students benefit from exposure to real world challenges, preparing them for successful careers in civil engineering. At Swami Vivekananda University's Civil Engineering Department, we take pride in shaping the future leaders of the field.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|--------------------------|---|
| Dr. Abir Sarkar | Vibration mitigation, finite element analysis, soil dynamics, application of AI in civil engineering |
| Dr. Ashes Bannerjee | Flow through porous media, Water quality and quantity estimation and monitoring, |
| Mr. Sunil Priyadarshi | Soil stabilization, Ground improvement techniques |
| Dr. Avishek Adhikary | Environmental and geo environmental engineering, wastewater treatment |
| Ms. Debanjali Adhikary | Geotechnical and Geoenvironmental Engineering, Soil stabilization and Ground Improvement |
| Dr. Nilanjan Tarafder | All analytical and experimental studies regarding RCC, STEEL and Bridge Structures including earthquake, wind or fire load. |
| Ms. Sushmita Ghosh | Geotechnical and Environmental Engineering |
| Dr. Tamal Kundu | Structural Health Monitoring, Structural Dynamics, Earthquake Engineering. |
| Ms. Indrani Halder | Structural Engineering |
| Mr. Anand Shaw | Urban & Regional Planning |
| Dr. Partha Sarathi Nayek | Environmental Engineering. Water Resources Engineering |
| Mr. Saptarshi Sen | Materials Engineering |
| Mr. Soumya Sadhukhan | Coastal & Ocean Engineering |
| Mr. Bahnisikha Das | Surveying & Geomatics Engineering |
| Ms. Sneha Das | soil dynamics, application of AI in civil engineering |
| Mr. Bappaditya Halder | Geo informatics |
| Dr. Mofijul Molla | Environmental and geo environmental engineering, wastewater treatment |
| Ms. Sutapa Paul | Environmental and geo environmental engineering, wastewater treatment |
| Ms. Supriya Ghosal | Coastal & Ocean Engineering |

| | |
|----------------------|--|
| Mr. Arghya Das | Soil stabilization, Ground improvement techniques |
| Dr. Argha Kamal Guha | Surveying & Geomatics Engineering |
| Dr. Bishnu Pada Bose | Vibration mitigation, finite element analysis, soil dynamics, application of AI in civil engineering |
| Mr. Arka Mitra | Transportation Engineering |
| Dr. Joy Kumar Mondal | Urban & Regional Planning |
| Mr. Samir kumar | Materials Engineering |

PUBLICATIONS

a. Conference Publications:

1. Abir Sarkar, "Application of Soft Computing Techniques for Prediction of Seismic Wave Velocity," 9th International Conference on Control, Decision and Information Technologies (CoDIT), 2023.
2. Avishek Adhikary, "Transformation of heavy metals and Amelioration of saline and sodic soils on Wetland Rice Fields," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
3. Avishek Adhikary, "Growth and effect on weed on Wetland Rice Fields," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
4. Avishek Adhikary, "Review on Soil Stabilization Techniques using Geopolymer," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
5. Avishek Adhikary, "Study on Partial Replacement of Cement by Rice Husk Ash in Concrete," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
6. Avishek Adhikary, "Arsenic laden drinking water treatment: A review," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
7. Avishek Adhikary, Debanjali Adhikary, "Fly ash and Bentonite mixed Laterite Soil: A potential cost-effective and sustainable ash pond liner," International Conference on Integrative Science and Engineering (ICISE-2023).
8. Avishek Adhikary, Debanjali Adhikary, "Evaluation of Heavy Metal Contamination Levels in Industrial Areas Near Durgapur," International Conference on Integrative Science and Engineering (ICISE-2023).
9. Debanjali Adhikary, Avishek Adhikary, "Calcite precipitation caused by microbes biostabilizing cohesive soil," International Conference on Integrative Science and Engineering (ICISE-2023).
10. Debanjali Adhikary, Avishek Adhikary, "2,4-Dichlorophenoxyacetic Acid, (2,4-D) Contaminated Soil Electro-restoration: An Experimental Approach," International Conference on Integrative Science and Engineering (ICISE-2023).

11. Debanjali Adhikary, Avishek Adhikary, "Efficacy evaluation of laterite Soil as liner in waste containment structures for removal of Ni and Pb from leachate: Physical and numerical modelling," International Conference on Integrative Science and Engineering (ICISE-2023).
12. Debanjali Adhikary, Joy Kumar Mondal, "Correlation for estimating amplification factors due to sub-soil condition and input motion PHA for Guwahati," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
13. Debanjali Adhikary, "A review on the potential of Biomass Briquettes Ash (BBA), used as pozzolan in cement, as an alternative to Fly Ash (FA)," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
14. Debanjali Adhikary, "A Review on Performance Improvement of Differential Pressure Flowmeter," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
15. Debanjali Adhikary, "Review on the Positive Impacts of Blue Green Algae and Azolla on Wetland Rice Fields," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
16. Debanjali Adhikary, "Role of ammonia Volatilization and phosphorus transformation on Wetland Rice Fields," 2nd International Conference on Engineering Design and Computing (ICEDC-2024).
17. Sunil Priyadarshi, "Optimizing the use of Reclaimed Paving Materials in Granular Sub Base for Road Construction: An Ex- tensive Analysis," International Conference on Integrative Science and Engineering (ICISE)-2023.
18. Sunil Priyadarshi, "Review on the Influence of Alccofine on Concrete Characteristics with Different Grades," International Conference on Integrative Science and Engineering (ICISE)-2023.
19. Sunil Priyadarshi, "Biochar's Impact on Soil Mechanical Properties: A Comprehensive Review of Mechanisms and Implications," International Conference on Integrative Science and Engineering (ICISE)-2023.
20. Sunil Priyadarshi, "Reviewing the Landscape of Fiber Reinforced Concrete (FRC): A Comprehensive Examination of Enhancements for Structural Integrity," International Conference on Integrative Science and Engineering (ICISE)-2023.
21. Sunil Priyadarshi, "Innovative Roof Waterproofing Using Crushed Rubber Tire Crumb in M25 Concrete," International Conference on Integrative Science and Engineering (ICISE)-2023.
22. Sunil Priyadarshi, "Enhancing black cotton Soil Stability through Bagasse Ash: A Comprehensive Study on Soil Stabilization Techniques," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
23. Sunil Priyadarshi, "Exploring Sustainable Practices: A Study on the Utilization of Reclaimed Asphalt Pavement (RAP) Materials in Flexible Pavements," 2nd International

Conference on Engineering Design and Computing (ICEDC)-2024.

24. Sunil Priyadarshi, "Investigating the Impact of Silica Fume on Concrete tensile characteristics : A Comprehensive Review," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

25. Sunil Priyadarshi, "Utilization of Alternative Technologies and Materials for the Development of Rural Roads with Low Traffic Volume," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

26. Sunil Priyadarshi, "Bamboo's Contribution to Sustainable Development in the Construction Industry: A Comprehensive Review," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

27. Ashes Banerjee, "Optimized Water Supply Network Design for Rural West Bengal: A Case Study," International Conference on Integrative Science and Engineering (ICISE)-2023.

28. Ashes Banerjee, "Proposing a Characteristic Length Definition for Flow Characterization in Porous Media: A Methodology for Estimating Hydraulic Radius," International Conference on Integrative Science and Engineering (ICISE)-2023.

29. Ashes Banerjee, "Optimizing Furrow Irrigation for Sustainable Agriculture in a Changing World," International Conference on Integrative Science and Engineering (ICISE)-2023.

30. Ashes Banerjee, "Applicability of Random Forest Model for Predicting Groundwater Table in Birbhum District, West Bengal India," International Conference on Integrative Science and Engineering (ICISE)-2023.

31. Ashes Banerjee, "Adaptive Strategies for Sustaining Sagar Island: A Comprehensive Review of Climate Resilience, Erosion Management, and Community Engagement," International Conference on Integrative Science and Engineering (ICISE)-2023.

32. Ashes Banerjee, "A Comprehensive Review on the Strength Properties of Laterite Stabilized with Sand: Implications for Sustainable Construction Practices," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

33. Ashes Banerjee, "Comprehensive Overview of Kamrup Metropolitan District: Demographics, Geography, and Challenges in Water and Energy Availability," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

34. Ashes Banerjee, "Improvement of Soil Index Properties by Adding Stone Dust Mix-A Review," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

35. Ashes Banerjee, "Integrated Coastal Management Strategy for Safeguarding Riverine Islands Against the Impacts of Climate Change," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

36. Ashes Banerjee, "Application of Machine Learning Techniques in Modeling Porous Media Flow for Enhanced Understanding and Predictive Analysis," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

37. Samir Kumar, "Review Paper on Eccentric Wings in Bridge Deck," International Conference on Integrative Science and Engineering (ICISE)-2023.
38. Samir Kumar, "Reviewing the Landscape of Fiber Reinforced Concrete (FRC): A Comprehensive Examination of Enhancements for Structural Integrity," International Conference on Integrative Science and Engineering (ICISE)-2023.
39. Samir Kumar, "Innovative Strategies for Enhancing Flutter Resistance in Bridge Structure: A Focus on Eccentric Wing Flutter stabilizer," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
40. Samir Kumar, "Advancement in Fiber Reinforcement Concrete: A Comprehensive Review," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
41. Samir Kumar, "Review Paper on Multistorey Building Structure and Seismic Analysis," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
42. Samir Kumar, "Innovative Solution for Sustainable Construction: A Comprehensive Study on Environment Challenges, Structural Optimization, and Performance Evolution of Bubble Deck Slabs in Concrete Construction," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
43. Tamal Kundu, "Concept and Different Aspects of Artificial Intelligence," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
44. Tamal Kundu, "Advancements in Structural Engineering Through Artificial Intelligence: A Comprehensive Review," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
45. Tamal Kundu, "Advancements in Data Generation with Artificial Intelligence," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
46. Tamal Kundu, "Understanding Train Accidents Due to Rail Track Failure," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
47. Tamal Kundu, "Train Accidents in India: Addressing the Need for Track Health Monitoring Systems," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
48. Abir Sarkar, "Effect Of Nano Silica On The Compressive Strength Of Concrete," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
49. Abir Sarkar, "Improvement in Different Material Properties Using a Mix of Red Mud and Pond Ash as Filling and Embankment Material," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
50. Abir Sarkar, "Enhancing Geotechnical Properties of Expansive Soil with Bagasse Ash, Lime, and Quarry Dust," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.

51. Abir Sarkar, "Vulnerability Analysis Of Cantilever Retaining Wall Subjected To Pulse Like Ground Motion," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
52. Abir Sarkar, "Vulnerability Analysis Of Cantilever Retaining Wall Subjected Seismic Loading," 2nd International Conference on Engineering Design and Computing (ICEDC)-2024.
53. Bishnu Pada Bose, "Development of light weight bricks for energy efficient buildings using rice husk," International Conference on Integrative Science and Engineering (ICISE)-2023.
54. Bishnu Pada Bose, "Effective utilizations of red mud with emphasis on circular economy," International Conference on Integrative Science and Engineering (ICISE)-2023.
55. Abir Sarkar, "Dynamic seismic analysis of multi-storied buildings having different heights for all seismic zones in India," International Conference on Integrative Science and Engineering (ICISE)-2023.
56. Abir Sarkar, "Modelling Approaches and Machine Learning In Structural Engineering," International Conference on Integrative Science and Engineering (ICISE)-2023.
57. Abir Sarkar, "Experimental Study on Determination of Crack Depth Using Ultrasonic Pulse Velocity Test (USPV)," International Conference on Integrative Science and Engineering (ICISE)-2023.
58. Abir Sarkar, "Vibration screening by using High-density poly- ethylene," International Conference on Integrative Science and Engineering (ICISE)-2023.

b. Book Chapter:

1. Ashes Banerjee, and Asha Rani N. R (2023) Application of Artificial Intelligence and Machine Learning Technique for Nonlinear Flow Modelling Applicable in Petroleum Exploration and in Porous Media Flow. In International Symposium on Sustainable Energy and Technological Advancements, pp. 105-112. Singa- pore: Springer Nature Singapore.

c. Journal :

1. Barman, R., Sarkar, A., & Bhowmik, D. (2023). Composite Sand- Crumb Rubber and Geofoam Wave Barrier for Train Vibration. Geotechnical and Geological Engineering. <https://doi.org/10.1007/s10706-023-02674-4>
2. Bisui, M., Chatterjee, S., Sarkar, A., & Ralli, R. (2023). Numerical and Experimental Analysis of Vibration Mitigation Using a Series of Hollow Boreholes. Journal of Vibration Engineering & Technologies, 0123456789. <https://doi.org/10.1007/s42417-023-01181-3>
3. Sarkar, A., Mazumdar, A., & Bhowmik, D. (2023). Application of Soft Computing Techniques for Prediction of Seismic Wave Velocity. 2023 9th International Conference on Control, Decision and Information Technologies (CoDIT), 2532–2537. <https://doi.org/10.1109/CoDIT58514.2023.10284120>

4. Sarkar, A., Bhowmik, D. (2023). Prediction of Seismic Wave Velocity Using Artificial Intelligence. In: Sil, A., N. Kontoni, DP., Pancharathi, R.K. (eds) Recent Trends in Civil Engineering. Lecture Notes in Civil Engineering, vol 274. Springer, Singapore. https://doi.org/10.1007/978-981-19-4055-2_42
5. Maitra, S., & Sarkar, A. (2024). Effect of nano-silica in construction practices. International Journal of All Research Education and Scientific Methods (IJARESM), 12(5), 4059. Available online at: www.ijaresm.com. ISSN: 2455-6211.
6. Das, B., & Sarkar, A. (2024). Improvement in different properties of material using pond ash & red mud mix as embankment & filling materials. International Journal of All Research Education and Scientific Methods (IJARESM), 12(5), 3766. Available online at: www.ijaresm.com. ISSN: 2455-6211.
7. Majumdar, H. G., & Sarkar, A. (2024). Improvement in geotechnical properties of expansive soil using different grain sizes of bagasse ash, lime, & quarry dust. International Journal of All Research Education and Scientific Methods (IJARESM), 12(5), 3432. Available online at: www.ijaresm.com. ISSN: 2455-6211.
8. Joy Kumar Mondal (2023). A new frequency domain frame- work of inverse ground response analysis for the determination of dynamic soil properties in a two-layered system. International Journal of Geomechanics. 31-08-2023. (SCOPUS, SCIE, Web of Science, 1532-3641).
9. Bishnupada Bose (2023). Valorization of iron ore tailing (IOT) waste through the circular economy concept: A sustainable solution. International Journal of Earth Sciences Knowledge and Applications. 25-08-2023. (2687-5993).
10. Sourav Ghosh & Debanjali Adhikary (2024). A review on the potential of biomass briquettes ash (BBA) used as pozzolan in cement as an alternative to fly ash (FA). Journal of Cement and Concrete Research. 03-04-2024. (Scopus Indexed Journal, 2292-1399).
11. Ashes Banerjee, Sunil Priyadarshi, & Samir Kumar (2024). Proposing a Characteristic Length Definition for Flow Characterization in Porous Media: A Methodology for Estimating Hydraulic Radius. Journal of Mines, Metals and Fuels, 71(12A), 398–403. (Scopus)
12. Soumya Guchhait, Ashes Banerjee, Ketan Kumar Nandi, Subashisa Dutta, Socio-Economic Dimensions of Assam Flood damage, Natural Hazards, Springer, SCIE, IF: 3.102 (Under Review) 16.
13. Ashes Banerjee, Ayan Chatterjee, Ashwin Singh, Srinivas Pasupuleti, Venkatesh Uddameri A Copula-Based Risk Assessment Approach for Monitoring Water Quality Parameters in Remote Rural Area under review Environmental Science and pollution Research (Accepted, Springer, SCIE, I.F: 5.6)
14. Avishek Adhikary, Sandeep Kumar, Supriya Pal, Sudipta Ghosh, Hirok Chaudhuri, Mrinal Kanti Mondal (2023) "Efficacy evaluation of silty-sandy soil and Chrysopogon zizanioides to attenuate doxycycline from wastewater in a Constructed wetland system" Journal of Environmental Engineering (ASCE). 149 (6): 04023024. <https://doi.org/10.1061/JOEEDU.EEENG-7117>
15. Avishek, Tapabrata Chakraborty, Pradyumna Konar, Supriya Pal, Sudipta Ghosh (2023)

“Attenuation of erythromycin-laden waste water using the constructed wetland technique” Environmental Geotechnics (ICE). <https://doi.org/10.1680/jenge.22.00082>

16. Avishek Adhikary, Suchhanda Mondal, Jhili Gantait, Supriya Pal, Sudipta Ghosh (2023) “Evaluation of Lightweight Expanded-Clay Aggregates as Bed Material in Constructed Wetlands for Attenuation of Antibiotics” Journal of Environmental Engineering (ASCE). 149 (11): 04023074. <https://doi.org/10.1061/JOEE-DU.EEENG-7368>

17. Abdul Waris Kenue, Eedy Sana, Avishek Adhikary, Supriya Pal, Majid Hussain (2023) "Assessment of Landfill Leachate and Its Surface and Subsurface Migration: Experimental and Numerical Investigations" Journal of Hazardous Toxic and Radioactive Waste (ASCE) 27(4): 05023003. <https://doi.org/10.1061/JHTRBP.HZENG-1227>

18. Chandrima Bhadra, Avishek Adhikary, Supriya Pal, Kalyan Adhikari (2023) “Modelling of Migration of Cr (VI) contaminant through clay liner using HYDRUS-3D” Sustainable Technologies for Industrial Pollution Control (Springer). Pp-271-286.

d. Books:

1. Integrated Perspectives in Civil Engineering: Geotechnical, Structural, Water Resources and Environmental Aspects, Volume I, 978-93-5967-828-3, (<https://doi.org/10.5281/zenodo.11208122>)

2. Integrated Perspectives in Civil Engineering: Geotechnical, Structural, Water Resources and Environmental Aspects, Volume II, 978-93-5967-828-3, Second Edition: June, 2024 Publisher: Swami Vivekananda University (Institutional Publisher), Kolkata- 700121, India

ACHIEVEMENT OF THE DEPARTMENT

- Organised keynote speech of 2nd International Conference on Integrated Science and Engineering, September, 2023.
- International Conference on Engineering Design and Computing (ICEDC)-2024-February, 2024.
- 2nd International Conference on Engineering Design and Computing (ICEDC)-2024-June, 2024.

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

- Provided quality assurance service over 20 construction projects in and around Barrackpore.

DEPARTMENT OF JOURNALISM AND MASS COMMUNICATION

ABOUT DEPARTMENT:

The Department of Journalism and Mass Communication at Swami Vivekananda University, Barrackpore, is a prestigious academic division dedicated to cultivating skilled media professionals and scholars. The department offers a comprehensive range of programs, including undergraduate (graduation), postgraduate (masters), and doctoral (PhD) courses. These programs are meticulously designed to provide students with a robust theoretical foundation, practical skills, and a deep understanding of the ethical dimensions of journalism and mass communication. The department's curriculum is meticulously designed to be skill-centric, ensuring that students gain practical competencies alongside theoretical knowledge. The courses cover essential aspects of journalism and mass communication such as news writing, reporting, editing, multimedia production, public relations, and advertising. Emphasis is placed on hands-on learning, with students engaging in real-world projects, simulations, and workshops that mirror professional media environments. This approach ensures that graduates are industry-ready, equipped with the skills needed to thrive in the fast-paced media landscape. In line with the New Education Policy (NEP), the department offers a flexible and holistic educational framework. The NEP-aligned syllabus promotes interdisciplinary learning, critical thinking, and creativity. Students are encouraged to explore various domains within journalism and mass communication, fostering a broad understanding of the media industry. The Department provides students with unparalleled exposure to various professional media fields. Through partnerships with leading media organizations, students have access to internships, industry visits, and guest lectures from seasoned professionals. Recognizing the importance of visual storytelling, the department includes comprehensive courses on film and movie studies. Students learn the art and craft of filmmaking, from scriptwriting and direction to production and editing. One of the standout features of this department is its team of exceptional faculty members, who are excellent in their respective fields.

Undergraduate Program (Graduation)

The undergraduate program provides a solid foundation in journalism and mass communication, blending theoretical concepts with hands-on experience. Students are introduced to the fundamentals of media studies, including news writing, reporting, editing, and multimedia production. Courses cover a broad spectrum of topics such as media ethics, communication theories, public relations, advertising, and digital journalism. Emphasis is placed on developing critical thinking and analytical skills, fostering an understanding of the role of media in society, and preparing students for various careers in print, broadcast, and digital media. Internships and fieldwork are integral parts of the curriculum, offering students practical experience and professional networking opportunities. In adherence to the New Education Policy (NEP), the department offers a flexible and interdisciplinary educational framework. The NEP-aligned syllabus encourages critical thinking, creativity, and holistic learning. Students are exposed to a broad range of subjects within journalism and mass communication, promoting a well-rounded understanding of the media industry.

Postgraduate Program (Masters)

The master's program is designed for students seeking advanced knowledge and specialized skills in journalism and mass communication. It offers a deeper dive into media theory, research

methodologies, and professional practices. Core courses include advanced reporting, investigative journalism, media management, and communication research. Students can choose from various electives to tailor their studies to their interests and career goals, such as international journalism, multimedia storytelling, political communication, and media law. The program also emphasizes the importance of media ethics and the social responsibilities of journalists. A key component of the master's program is the thesis or capstone project, which requires students to conduct original research or produce a substantial piece of journalistic work, demonstrating their ability to apply academic knowledge to real-world issues.

Doctoral Program (PhD)

The Ph.D. program is geared towards individuals aiming to contribute to the academic and professional fields of journalism and mass communication through original research. Doctoral candidates engage in rigorous coursework in communication theory, research methods, and specialized areas of interest. The program fosters an environment of intellectual curiosity and critical inquiry, encouraging students to explore contemporary issues in media and communication. Research topics may include media effects, digital communication, media policy, and the impact of emerging technologies on journalism. Doctoral students are expected to produce a dissertation that offers new insights into the field, contributing to academic scholarship and potentially informing media practice and policy. The PhD program also prepares graduates for careers in academia, research institutions, and high-level professional roles within the media industry.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|----------------------------|--|
| Ms. Kankana Ghosh | Corporate /organisational Communication. |
| Ms. Dipika Mondal | New media and Global communication. |
| Ms. Ipsita Banerjee | Advertising, Media Management |
| Dr. Mahendra Jena | Public Relations, Political Communication |
| Mr. Sandipan Dey | Traditional media, Advertising |
| Mr. Ayan Roy | Audio- Visual Production, Broadcast |
| Dr.Pramiti Roy | Public Relations, Political Communication, Corporate /organisational Communication. |
| Dr. Moumita Chakraborty | Traditional media, Advertising, Development communication, New media and Global communication. |
| Mr. Kishor Kumar Hira | New Media, AR & VR Concept, Artificial Intelligence, Digital Marketing. |
| Mr. Sujoy Goswami | Audio- Visual Production, Broadcast |
| Ms. Pritha Misra | Health Communication, Development Communication |
| Ms.Monisha Shaw | Health Communication |
| Ms. Olivia Ghosh | Non-Fiction Entertainment, Sports Broadcasting |
| Ms. Sukanya Das | Advertising, Media Management |

PUBLICATIONS

1. Pramiti Roy, "Independent Content Creation – Empowering Filmmakers and Artists in OTT Era" International Conference On Media, Culture And Audience: Contemporary Issues And Challenges (ICMCA-2023) (Accepted).
2. Pramiti Roy, "Narrative of Political Communication through Opinion and Exit Poll: An Experience in West Bengal, 2014- 2021" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).
3. Moumita Chakraborty, "Health communication campaign, and their impact on behaviour- An analysis." International Conference On Media, Culture And Audience: Contemporary Issues And Challenges (ICMCA-2023) (Accepted).
4. Moumita Chakraborty, "Digital media convergence: a trans- formative paradigm in the digital age"." International Conference On Media, Culture And Audience: Contemporary Issues And Challenges (ICMCA-2023) (Accepted).
5. Moumita Chakraborty, "Portrayal of transgender in Indian cinema, with special reference to Taali" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).
6. Moumita Chakraborty, "Growth of Over the Top (OTT) Video Services: A Possible Threat to Traditional Pay Television Services- An Analysis". International Conference On Media, Culture And Audience: Contemporary Issues And Challenges (IC- MCA-2023) (Accepted).
7. Moumita Chakraborty, "Impact of Social Media on political and public opinion in India - A comparative study". International Conference On Media, Culture And Audience: Contemporary Issues And Challenges (ICMCA-2023) (Accepted).
8. Pritha Misra, "The Role of Memes in Political Discourse and Public Opinion Formation: A Study" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).
9. Pritha Misra, "Depiction of Lonliness in the Films of Rituparno Ghosh: An Analysis of Selected Films" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).
10. Pritha Misra, "Media Representation and the Reinforcement of Stereotypes regarding Women's Contraceptive Choices: An analysis of selected magazines", International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).
11. Pritha Misra, "The Function of ICTs in Enhancing Government-Citizen Engagement and Public Service Delivery in India" International Conference On Media, Culture And Audience: Contemporary Issues And Challenges (ICMCA-2023) (Accepted).
12. Mahendra Kumar Jena, "Shifting Tides of Representation: Exploring the Fluidity of LGBTQA+ Characters in Cinema" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).

13. Mahendra Kumar Jena, "The Rise of Citizen Journalism and User Generated Content: Implications for News Quality and Credibility" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).

14. Mahendra Kumar Jena, "The Impact of AI and CGI Generated Content on the Media and Entertainment Industry" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).

15. Mahendra Kumar Jena, "Impact of OTT Platforms on the Advertising Revenue of Traditional Broadcasting" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).

16. Mahendra Kumar Jena, "Sociological perspectives on Media, Gender and cultural studies" International Conference on Media, Culture and Audience: Contemporary Issues and Challenges (ICMCA-2023) (Accepted).

Research papers:

1. Pramiti Roy, "Independent Content Creation – Empowering Filmmakers and Artists in OTT Era; Theatre International" (ISSN-2278-2036).

2. Pramiti Roy, "Narrative of Political Communication through Opinion and Exit Poll: An Experience in West Bengal, 2014-2021" International Journal of Cultural Studies and Social Sciences. (ISSN- 2347-4777).

3. Moumita Chakraborty Growth of Over the Top (OTT) Video Services: A Possible Threat to Traditional Pay Television Services- An Analysis. Theatre International. ISSN- 2278-2036.

4. Moumita Chakraborty, "Impact of Social Media on political and public opinion in India - A comparative study "International Journal of Cultural Studies and Social Sciences. ISSN-2347-4777.

5. Pritha Misra," Beyond Deepfakes: An Ethical Framework for AI In Countering Disinformation", International Journal of Creative Research Thoughts (IJCRT), ISSN- 2320-2882.

6. Pritha Misra, "Depiction of Lonliness in the Films of Rituparno Ghosh: An Analysis of Selected Films," Theatre International. ISSN- 2278-2036.

7. Pritha Misra, "The Role of Memes in Political Discourse and Public Opinion Formation: A Study "International Journal of Cultural Studies and Social. ISSN- 2347-4777.

8. Mahendra Kumar Jena, "Shifting Tides of Representation: Exploring the Fluidity of LGBTQA+ Characters in Cinema", Theatre International, (ISSN- 2278-2036).

9. Mahendra Kumar Jena, "The Rise of Citizen Journalism and User Generated Content: Implications for News Quality and Credibility", International Journal of Cultural Studies and Social Sciences, ISSN- (2347-4777).

Book chapter:

1. Pramiti Roy, Book Editor, Sociological perspectives on Media, Gender and cultural studies. ISBN: 978-93- 91741-73-0.
2. Pramiti Roy, Book Editor, Media culture and Audience. ISBN: 978-93- 5529-948-2.
3. Pramiti Roy, "Internet- A Competitive Displacement for Traditional Media on the News Domain", Media Gender and Society, Emerging Trends and Interpretations, ISBN: 978-87-967932-4- 1, ISBN 10:81- 967932-4-3.
4. Pramiti Roy, "The Indian Youth And The Changing Paradigm: From Television To The Internet." Emerging Trends in Media and Communication Studies. ISBN 978-93- 6128-689-6.
5. Moumita Chakraborty, "Health communication campaign, and their impact on behaviour - An analysis" Media culture and Audience, ISBN: 978-93- 5529-948-2.
6. Moumita Chakraborty, "Digital media convergence: a transformative paradigm in the digital age", Sociological perspectives on Media, Gender and cultural studies, ISBN: 978-93- 91741-73- 0.
7. Moumita Chakraborty, "Portrayal of transgender in Indian cinema, with special reference to Taali, An Indian web series- A critical review." Media Gender and Society, ISBN: 978-81-967932-4-1, ISBN 10:81-967932-4-3.
8. Moumita Chakraborty, "Journalism in the Era of Artificial Intelligence", Emerging Trends in Media and Communication Studies. ISBN 978-93- 6128-689-6.
9. Pritha Misra, "Impact of Natural Disaster on Public Health and the role of Extension workers: An analysis of selected case studies", New Media Landscape in India: Dimensions, Issues, Trends and Future. ISBN- 978- 81963402-0-9.
10. Pritha Misra, "Media Representation and the Reinforcement of Stereotypes regarding Women's Contraceptive Choices: An analysis of selected magazines", Media culture and Audience. ISBN- 978-93- 5529-948-2.
11. Pritha Misra, "The Function of ICTs in Enhancing Government- Citizen Engagement and Public Service Delivery in India", Sociological perspectives on Media, Gender and cultural studies. ISBN- 978-93- 91741-73-0.
12. Pritha Misra, "Cultural Imperialism in the Digital Age: Analyzing the Dominance of Western Media in Global Markets", La Panorama: An International Anthology of Critical Essays on Literature in English and on Media Culture. ISBN- 978-81- 965132-6-9.
13. Pritha Misra, "The Future of Print Media: Sustainability and Innovation in a Digital Age", Emerging Trends in Media and Communication Studies. ISBN 978-93- 6128-689-6.
14. Mahendra Kumar Jena, "The Impact of AI and CGI Generated Content on the Media and Entertainment Industry," Media culture and Audience, ISBN: 978-93- 5529-948-2.

15. Mahendra Kumar Jena, "Impact of OTT Platforms on the Advertising Revenue of Traditional Broadcasting", Sociological perspectives on Media, Gender and cultural studies. SBN- 978- 93- 91741-73-0.

16. Mahendra Kumar Jena, "Study of Impact of AI in Indian Print Media – Emerging Trends & Challenges". Emerging Trends in Media and Communication Studies. ISBN 978-93- 6128-689-6.

17. Mr. Sujoy Goswami, "Podcasting Evolves as a new form of mass Communication in this Digital Era". Emerging Trends in Media and Communication Studies. ISBN 978-93- 6128-689-6.

18. Mr. Kishor Kumar Hira, "Visual evolution: The Transformative role of Graphic Design in Media studies", Emerging Trends in Media and Communication Studies. ISBN 978-93- 6128-689-6.

19. Mr. Ayan Roy, "Data Journalism: A Rising News Trend in Media Studies," Emerging Trends in Media and Communication Studies. ISBN 978-93- 6128-689-6.

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

1. **Anchor Hunt** held on 11-08-2023, Resource person- Rhitobrata Bhattacharya, Group Editor-in-Chief, RPlus News.

2. **Photography Exhibition**, held on 18-08-2023, Resource person- Mr. Nabonil Basu, Senior Photography Trainer.

Guest lecture series, held from 21-08-2023 to 25-08-2023, Resource person- Mr. Snehasis Sur, President, Press Club Kolkata; Mr. Anindya Jana, Editor, Anandabazar Digital; Ms. Pew Roy, Senior Assistant Editor, TV9 Bangla; Mr. Rupak Saha, Veteran Sports Journalist.

International Seminar held on 28-09-2023 To 30-09-2023, Resource person- Srinivas Melkote, professor emeritus, school of Media and Communication, Ohio, USA. Maithili Ganjoo, Director and Professor at Manav Rachna Educational Institutions. Kaberi Gayen, a Bangladeshi academic, author, and social activist .Shashwati Goswami, Professor at IIMC Delhi. Snehasis Sur, Senior Journalist Doordarshan. Dr. Sithara Venkatesh Puli, Dr Rajesh Das, teacher-in-charge, Department of Mass Communication, University of Burdwan. Mr Rhitobrata Bhattacharya (coordinator) Group Editor-in-Chief, RPlus News. Prof. Vibodh Parthasarathi, Associate Professor, Centre for Culture, Media and Governance, Jamia Milia Islamia, New Delhi ,Dr. Mugdha Sengupta, Chairperson ,Assistant Professor, Department of Mass Communication ,The University of Burdwan .Prof. Buro- shiva Dasgupta, Chairperson, Professor, School of Media and Communication, Sister Nivedita University, Kolkata .Dr. Rakesh Batabyal, Associate Professor, Centre for Media Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi. Prof. Ashutosh Ghosh, Former Vice Chancellor, Rani Rashmoni Green University.

Media Fest, held on 19.02.2024 to 21.02.2024, Resource person- Mr. Gourab Chatterjee (Gabu), Eminent Musician, Drummer of Lokkichara Band ,Ms. Swarnali Sarkar, Eminent

Anchor & Journalist, Republic TV, Ms. Sreelekha Mitra, Eminent Actress, Mr. Pradipta Bhattacharya, National Award-Winning Director. RJ Pragya, Eminent RJ, Mr. Sanjoy Bhattacharya, Quiz Master, Dr. Ritendra Roy, HOD, Department of Visual Arts, University of Kalyani, Mr. Rajaditya Banerjee, Eminent Documentary Filmmaker, Ms. Suchandra Ghatak, Editor (Special Features) @ ABP Digital, Mr. Soumyadip Bhattacharya, Base Guitarist, Underground Authority, Mr. Navhonil Basu, Eminent Photographer, Mr. Soumyadip Bhattacharya, Base Guitarist, Under- ground Authority, Mr. Parambrata Chatterjee, Eminent Actor & Director, Ms. Sayani Ghosh, Eminent Actress, Mr. Debashish Sen Sharma, Eminent Director, Mr. Abhishek Ray, Eminent Fashion Designer and Academician.

Workshop on ‘Film and Music Video Production’, from 17th -18th April 2024, Resource person Dr. Arkaprava Chatyopadhyay, Filmmaker, Musician, Author & Assistant Professor, SRM University Sikkim.

DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY & MEDICAL RADIOLOGY AND IMAGING TECHNOLOGY

ABOUT DEPARTMENT:

Swami Vivekananda University is among the best medical laboratory technology colleges, and its BSc Medical Laboratory Technology Course is designed to equip students with the skills required to contribute effectively to the healthcare sector. The medical laboratory technician course emphasizes laboratory procedures, diagnostic techniques, and analytical skills necessary for accurate medical testing and research.

Medical Radiology & Imaging Technology (MRIT) is the degree course dedicated to utilization of modern techniques such as CT scan, MRI, X-ray, etc. for diagnosing diseases. Radiographic machinery takes internal images of the human body to enable diagnosis. Department of MRIT in Swami Vivekananda University is equipped with cutting edge instruments, biological models and professionals that enable students to understand the detailed internal image of the human body. The faculties of the University are at the forefront of research in their field and their expertise benefits students greatly.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|----------------------------|--|
| Dr. Oly Banerjee | Endocrine & Reproductive physiology and Environmental Toxicology |
| Dr. Rajen Dey | Immunology and Microbiology, Basic Neuroimmunology |
| Mr. Manojit Bysack | Immunology and Microbiology |
| Dr. Titlee Majumder | Hematology |
| Dr. Koumi Dutta | Medical Microbiology |
| Dr. Ruchira Mukherjee | Endocrine & Reproductive physiology and Environmental Toxicology |
| Dr. Rubia Mondal | Sports and Exercise Physiology |
| Ms. Suvathi Basu | Immunology and Microbiology |
| Mr. Subhranil Mukherjee | Radiographic Diagnostics |
| Mr. Amit Sharma | Radiography |

PUBLICATIONS

b. Book Chapter: 11

1. Rajen Dey, Herpesviridae family: structure, classification and pathogenesis, Recent Trends in Hematology and Infectious Diseases. 2024: 11-22. ISBN: 978-93-6076-130-1.
2. Manojit Bysack, An in-depth exploration of the potential threat posed by staphylococcus aureus, Recent Trends in Hematology and Infectious Diseases. 2024: 23-44. ISBN: 978-93-6076-130-1.
3. Rupak bera, An In-Depth Analysis of the Consequences of Zoonotic Disease, Recent Trends in Hematology and Infectious Diseases. 2024: 45-53. ISBN: 978-93-6076-130-1.
4. Titlee Majumder, Prevention of HCV: Exploring predictive measures for autoimmune indications. Recent Trends in Hematology and Infectious Diseases. 2024: 54-72. ISBN: 978-93-6076-130-1.
5. Titlee Majumder, Conception of hai (healthcare acquired infection): an illustrative scenario on recent approaches, Recent Trends in Hematology and Infectious Diseases. 2024: 73-84. ISBN: 978-93-6076-130-1.
6. Oly Banerjee, Approaches to minimize cross infections with- in healthcare environment, Recent Trends in Hematology and Infectious Diseases. 2024: 85-96. ISBN: 978-93-6076-130-1.
7. Oly Banerjee, A comprehensive examination of anemia: classifications, origins, indications, and therapeutic approaches, Regulatory Hematoindices, 2024; 1. 13-26. ISBN: 978-93-340-7137-5.
8. Rajen Dey, Acute myeloid leukaemia-types and treatment strategies, Regulatory Hematoindices, 2024; 1. 27-37. ISBN: 978-93-340-7137-5.
9. Rupak Bera, An In-Depth Analysis of Thalassemia: Causes, Diagnosis & Management, Regulatory Hematoindices, 2024; 1. 38-47. ISBN: 978-93-340-7137-5.
10. Manojit Bysack, An in-depth investigation of risk factors associated with sepsis and the potential treatment modality, Regulatory Hematoindices, 2024; 1. 48-62. ISBN: 978-93-340-7137-5.
11. Titlee Majumder, Purpura fulminans: a hemorrhagic infarction, Regulatory Hematoindices, 2024; 1. 63-81. ISBN: 978-93-340-7137-5.

c. Journal: 26

1. Dey R, Bishayi B. Microglial Inflammatory Responses to SARS-CoV-2 Infection: A Comprehensive Review. Cell Mol Neurobiol. 2023;44(1):2. Published 2023 Dec 15. doi:10.1007/s10571-023-01444-3
2. Dey, R., Bhattacharya, K., Basak, A.K. et al. Inflammatory perspectives of polycystic ovary

syndrome: role of specific mediators and markers. *Middle East Fertil Soc J* 28, 33 (2023). <https://doi.org/10.1186/s43043-023-00158-2>

3. Bhattacharya K, Dey R, Sen D, et al. Polycystic ovary syndrome and its management: In view of oxidative stress. *Biomol Concepts*. 2024;15(1):10.1515/bmc-2022-0038. Published 2024 Jan 19. doi:10.1515/bmc-2022-0038

4. Banerjee O, Singh S, Prasad SK, et al. Exploring aryl hydrocarbon receptor (AhR) as a target for Bisphenol-A (BPA)-induced pancreatic islet toxicity and impaired glucose homeostasis: Protective efficacy of ethanol extract of *Centella asiatica*. *Toxicology*. 2023;500:153693. doi:10.1016/j.tox.2023.153693

5. Sultana, J., Paul, T., Banerjee, O., Bhaduri, R., Roy, S. S., Ghosh, S., Bandyopadhyay, R., Mukherjee, S., & Syamal, A. K. (2023). Hazardous Impact of Coal Dust on Hematological Parameters of Underground Coal Mine Workers. *Journal of Ecophysiology and Occupational Health*, 23(3), 153–161. <https://doi.org/10.18311/jeoh/2023/34029>

6. Banerjee, O., Singh, S., Paul, T. et al. *Centella asiatica* mitigates the detrimental effects of Bisphenol-A (BPA) on pancreatic islets. *Sci Rep* 14, 8043 (2024). <https://doi.org/10.1038/s41598-024-58545-2>

7. Rajen Dey. (2024). Covid-19 Induced Neuro inflammation. *Journal of Advanced Zoology*, 45(2), 1544–1548. <https://doi.org/10.53555/jaz.v45i2.4447>.

8. Subhrajyoti Paul, Sudipta Patra, Ayan Mondal, Gungun Sharma Adhikari, Piu Ghosh, Manojit Bysack, & Rajen Dey. (2024). Pathogenesis And Consequences Of Zika Virus Infection. *Journal of Advanced Zoology*, 45(2), 1549–1553. <https://doi.org/10.53555/jaz.v45i2.4448>.

9. Rajen Dey, & Manojit Bysack. (2024). Ascorbic Acid: Therapeutic Implications In Neurodegenerative Diseases. *Journal of Advanced Zoology*, 45(2), 1554–1558. <https://doi.org/10.53555/jaz.v45i2.4450>.

10. Manojit Bysack, & Rajen Dey. (2024). Abrogation Of Gram Negative Bacteria Induced Inflammation. *Journal of Advanced Zoology*, 45(2), 1564–1573. <https://doi.org/10.53555/jaz.v45i2.4453>.

11. Ayan Sengupta, Priyanshu Ganguly, Preeti Patra, Ankita Ballav, Banashree Ash, Shayani Das, Rajen Dey, & Manojit Bysack. (2024). A Systematic Review On Consequential Interventions Of *Mucuna Pruriens* In Male Infertility. *Journal of Advanced Zoology*, 45(2), 1574–1580. <https://doi.org/10.53555/jaz.v45i2.4455>.

12. Rupak Bera, Titlee Majumder Modak, & Rajen Dey. (2024). Effect Of Selenium In Altering Hypertension Within Indian Population: A Review. *Journal of Advanced Zoology*, 45(2), 1600–1602. <https://doi.org/10.53555/jaz.v45i2.4461>.

13. Ballav A, Dey R. Staphylococcal brain abscesses: a review. *The Bioscan*. 2024(Supplement); 19(2): 19-21. <https://doi.org/10.63001/tbs.2024.v19.i02.S1.pp19-21>.

14. Anwesha Samanta, Rabishankar Taladhi, Papon Mondal, Sayed Golam Tanbir, Mijanur

Rahaman, Saumadip Fadikar, & Manojit Bysack. (2024). Review: Beneficial Effect Of Bark Extract Of Terminalia Arjuna On Human Heart. *Journal of Advanced Zoology*, 45(2), 1559–1563. <https://doi.org/10.53555/jaz.v45i2.4452>

15. Manojit Bysack, Ayan Sengupta, Banashree Ash, Preeti Patra, Anki- ta Ballav, Shayani Das, & Priyanshu Ganguly. (2024). A Review: Sup- pressed Activity Of Respiratory System After Covid-19. *Journal of Advanced Zoology*, 45(2), 1581–1586. <https://doi.org/10.53555/jaz.v45i2.4456>

16. Rupak Bera. (2024). Procalcitonin, The Most Reliable Biomarker For Early Diagnosis Of Bacterial Septicaemia. *Journal of Advanced Zoology*, 45(2), 1587–1589. <https://doi.org/10.53555/jaz.v45i2.4457>

17. Oly Banerjee, Siddhartha Singh, Tiyes Paul, & Sandip Mukherjee. (2024). Effect Of Folic Acid And Vitamin B12 On Nicotine Mediated Ovarian Dysfunction. *Journal of Advanced Zoology*, 45(2), 1594–1599. <https://doi.org/10.53555/jaz.v45i2.4460>

18. Neha Tyagi, Oly Banerjee, Tiyes Paul, Titlee Majumder, & San- dip Mukherjee. (2024). Assessment Of Oral Mucosal Epithelium In Type 2 Diabetic Patients Using Exfoliative Cytology: A Preliminary Study. *Journal of Advanced Zoology*, 45(2), 1590–1593. <https://doi.org/10.53555/jaz.v45i2.4458>

19. Urmimekhala Das, Oly Banerjee, Siddhartha Singh, Sangeeta Das, Ti- yesh Paul, & Sandip Mukherjee. (2024). Bisphenol A-A Major Concern For Ovarian Function: Protective Role Of Black Tea Extract. *Journal of Advanced Zoology*, 45(2), 1609–1614. <https://doi.org/10.53555/jaz.v45i2.4463>

20. Oly Banerjee, Siddhartha Singh, Tiyes Paul, & Sandip Mukherjee. (2024}. Catalase Deficiency Worsens Toxic Effects Of Bisphenol A (BPA) On Ovarian Steroidogenesis. *Journal of Advanced Zoology*, 45(2), 1603–1608. <https://doi.org/10.53555/jaz.v45i2.4462>

21. Rupak Bera. Iron deficiency anaemia in active pulmonary tuberculosis patients: understanding the interplay and implications for management. 19(2): 30-32, 2024 (Supplement). DOI: <https://doi.org/10.63001/tbs.2024.v19.i02.S1.pp30-32>

22. Dr. Titlee Majumder, Dr. Subrata Ghosh, Mr. Shibam Koley, Miss. Anwesha Samanta, Miss. Poulami Modak, Miss. Aditi Paul, & Mr. Avijit Manna. (2024). Brain-Derived Nerve Factor, A Novel Marker For Ag- gression Correlating Cognitive Ergonomics: A Retrospective Analy- sis Supporting Anthropometry Amongst The Pre-Pubertal Children Of West Bengal. *Educational Administration: Theory and Practice*, 30(3), 2237–2240. Retrieved from <https://kuey.net/index.php/kuey/article/view/3679>.

23. Dr. Titlee Majumder, & Dr. Subrata Ghosh. (2024}. Identification of A Novel Anthropometric Indices Correlating Aggression: A Case Study Based On Extremes Of Bengal. *Educational Administration: Theory and Practice*, 30(3), 2204–2210. <https://doi.org/10.53555/kuey.v30i3.3664>

24. Dr. Krishnendu Sarkar, Dr. Titlee Majumder, Dr. Subrata Ghosh, & Prof. Dr. Somnath Gangopadhyay. (2024). Musculoskeletal Disorders Among The Seed Sower Workers - A Review. *Educational Administration: Theory and Practice*, 30(3), 2211–2214.

<https://doi.org/10.53555/kuey.v30i3.3667>

25. Oly Banerjee, Urmimekhala Das, Tiyyesh Paul, Siddhartha Singh, & Sandip Mukherjee. (2024). Prevalence of Lean Diabetes in West Ben- gal. Educational Administration: Theory and Practice, 30(3), 2226– 2231. <https://doi.org/10.53555/kuey.v30i3.3674>

26. Oly Banerjee, Urmimekhala Das, Tiyyesh Paul, Siddhartha Singh, & Sandip Mukherjee. (2024). Prevalence of Lean Diabetes in West Ben- gal. Educational Administration: Theory and Practice, 30(3), 2226– 2231. <https://doi.org/10.53555/kuey.v30i3.3674>

d. Books: 02

1. Dr. Titlee Majumder, Dr. Rajen Dey, Mr. Manojit Bysack, Ms. Oly Banerjee, Mr. Rupak Bera. Recent Trends in Hematology and Infectious Diseases. 2024. ISBN: 978-93-6076-130-1.

2. Dr. Titlee Majumder, Dr. Rajen Dey, Mr. Manojit Bysack, Ms. Oly Banerjee, Mr. Rupak Bera. Regulatory Hematoindices, Vol 1, 2024. ISBN: 978-93-340-7137-5.

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

1. Global Healthcon 2023, Challenges & Explications, September 2023

2. Global Healthcon 2024, Challenges & Explications, February 2024

- Seminar- 03

- 1. Physiology, Friday, November 2023

- 2. International Day of Radiology, November 2023

- 3. National Cancer Awareness Day, November 2023

DEPARTMENT OF FOOD AND NUTRITION

ABOUT DEPARTMENT:

The Department of Food and Nutrition at Swami Vivekananda University, under the guidance of our respected Advisory Board Members, is striving each day to narrow down the gap between scientific findings and practical day-to-day life. We are trying to understand the several dynamics of food the chemical constituents, their biochemical aspects, as well as their interaction with the host and environment, across myriad geographical and demographic boundaries. We, the Faculties of Department of the Food & Nutrition, SVU, work diligently, dedicatedly and with a high level of efficacy in order to impart an optimal amount of knowledge to our students, which will help them with their future endeavors in the fields of Food Processing, Food Science & Nutrition. In this age of technological advancement, where industry trends change by the day, the institute understands the necessity of adapting to the technological requirements of the hour. Based on Swami Vivekananda's educational ethos, our department aims to adopt an analytical, detailed, job oriented and skill- based approach to education. We, the faculties of Food and Nutrition, SVU, work with a high level of efficacy to influence every facet of the student's growth and develop their innate potential; to bridge the gap between academic intellect and professional proficiencies by instilling an optimal amount of knowledge which will facilitate them in their future work.

FACULTY DETAILS

| Name of the Teacher | Specialization |
|------------------------|--|
| Dr. Manisha Maity | Microbial biotechnology, Enzyme Technology, Waste valorization |
| Ms. Paromita Mukherjee | Functional Food Product Development |
| Dr. Souvik Tewari | Probiotics & Functional Food Product Development |
| Dr. Rupali Dhara Mitra | Nutraceuticals, Food product development, Food product analysis, Chromatography, Biostatistics, Structured lipid, Biopolymer |
| Ms. Shreyasi Das | Food Product Development |
| Dr. Jagannath Ghosh | Ergonomics, Community Health and Nutritional Survey |
| Dr. Moumita Dev | Food product development, Technology of spice, Product analysis |
| Dr. Moumita Das | Nutritional Biochemistry, Bioactive compound and metabolic disorder |
| Ms. Megha Roy | Community survey and functional food product development |
| Ms. Ishani Ganguly | Technology of spice, Product analysis |
| Ms. Arpita Benerjee | Food Product Development |
| Dr. Saheli Ghosal | Nutraceuticals, Food product development, Food product analysis, Chromatography, Biostatistics, Structured lipid, Biopolymer |

| | |
|-----------------------|---|
| Dr. Nabanita Ghosh | Functional Food Product Development |
| Dr. Parul Thapar | Food Microbiology, Gut Microbiome, Fermentation Technology, Food Safety and Quality Control, Bioinformatics |
| Ms. Anapurba Kanjilal | Bioactive compound and metabolic disorder |

PUBLICATIONS

a. Conference Publications

- Maity, M., Hembram, A., & Bhowal, J* (2016). Screening and isolation of enzyme producing bacteria from soil, Research Scholars Colloquium, ISBN:978-93-80813-44-8
- Bedi, S., Ghosh, S., Bandyopadhyay, B., Bedi, S., & Maity, M*. (2023). Fermentation enhanced nutritional quality of food:A review. Journal of Survey in Fisheries Sciences, 10(1S), 6139-6145.
- Roy, P., Rana, R., Neogi, S., Dutta, K., Maity, M., & Tewari, S. (2023). Postbiotics: potential applications in early life nutrition and beyond. Journal of Survey in Fisheries Sciences, 10(1S), 6161-6169.
- Feroz, F., Sarkar, A., Afreen, A., Mukherjee, M., Paul, T., Chakraborty, S & Maity, M*. (2023). Illuminating focus on the health benefits of fermented foods against cancer. Journal of Survey in Fisheries Sciences, 10(1S), 6188-6194.

[PAGE-139]

- Koner, D., Ansari, G. A., Roy, P., Paul, A., Fatma, A., & Maity, M. (2023). Effects of Diet on Endometriosis. Journal of Survey in Fisheries Sciences, 10(1S), 6195-6203.
- Bedi, S., Maity, M*, Bandhopadyay, B., Bedi, S., & Ghosh, S. (2023). An insight into the health-promoting effects of foods to prevent Antibiotic-associated Diarrhoea: A Review. Journal of Survey in Fisheries Sciences, 10(1S), 6204- 6211.
- Hazra, A., Saha, D., Banik, S., Banik, S., Das, S., & Maity, M*. (2023). INDUSTRIALLY IMPORTANT XYLANASE FROM MICROBIAL SOURCES AND THEIR APPLICATIONS. Journal of Survey in Fisheries Sciences, 10(1S), 6089-6098
- Singha, P., Karmakar, I., Ghosh, J. (2024). Prevalence of Malnutrition Among School Going Children: A Review. The Bioscan, 19(2): 16-18.
- Karmakar, I., Ghosh, J. (2024). A Comparative Study on Prevalence of Stroke and Associate Problems Among Physically Active Adults and Sedentary Adults – A Review. The Bioscan, 19(1): 01-04.
- Chakraborty, R., Saha, R., Ghosh, J., Ghosh, P., & Haldar, P. (2023). Prevalence Of Work-Related Musculoskeletal Disorders Among Construction Workers. Journal of Advanced Zoology, 44.

- Saha, R., Chakraborty, R., Ghosh, P., Ghosh, J., & Haldar, P. (2023). Work- Related Musculoskeletal Disorder an Increasing Concern in Garment Industry. *Journal of Advanced Zoology*, 44.
- Mukhopadhyay, S., Bhattacharyya, D., & Ghosh, J. (2023). From Gut to Gray Matter: The Surprising Links Between The Microbiome and Brain. *Journal of Advanced Zoology*, 44.

b. Journal Publication:

- Paul, D. and Tewari, S. (2024). Utilization of banana peels in several industry: an overview. *The Bioscan*, 19(2): 5-8.
- Bedi, S. and Tewari, S. (2024). Nutritional composition, bioactive components, and health benefits of pumpkin seeds: an overview. *The Bioscan*, 19(2): 33- 36.
- Mukherjee, P., Tewari, S., & Chakravarti, A. R. Nakhale, S., (2024) “Formulation and Sensory Evaluation of Non-Dairy Synbiotic Chocolates Enriched with Almond Milk, Oats Powder and Probiotic Microorganism (*Streptococcus thermophilus* BURD PB 8)”.*Acta Scientific Nutritional Health* 8 (6): 02-10.
- Bedi, S., Tewari, S., Bandyopadhyay, B., Parida, S., Pramanik, P., Chatterjee, P. (2024). Formulation and sensory evaluation of chapati fortified with different vegetable waste powders. *International Journal of Research in Agronomy* 7(4):142-147.
- Mukherjee, P., Tewari, S., Jombo, T. Z. (2024). A review on bioactive compounds presents in garden beet and beetroot powder and their potential prebiotic properties. *International Journal of Research in Agronomy* 7(3):178- 180
- Mukherjee, P., Tewari, S., & Chakravarti, A. R. (2024). Biochemical parameters and potential health benefits of functional probiotic chocolates: A systematic review. *International Journal of Advanced Biochemistry Research* 8 (3), 218-223.
- Sur, M., Ray, S., Pattanayak, A., Tewari, S., Pramanik, P. (2023). Effect of diet and physiotherapy for reducing gout associated symptoms. *Journal of Current Research in Food Science*, 4 (1): 91-94.
- Tewari, S., Pramanik, P., Mondal, M., Khalua, RK. (2023). Current understanding of the pathogenesis of Dengue virus infection and therapeutic diet for controlling associated symptoms. *International Journal of Mosquito Research*, 10(6): 52-57
- Chakravarti, A. R., Dutta, P., Paul, S., & Tewari, S. (2023). THERAPEUTIC AND PREVENTIVE ROLE OF NUTRACEUTICALS AND PRODUCTION OF VITAMINS & LOW-CALORIE SUGARS FROM FOOD-GRADE MICROORGANISMS AS NUTRACEUTICALS. *Journal of Advanced Zoology*, 44.
- Bedi, S., Tewari, S., Bandhopadhyay, B., & Pramanik, P. (2023). A Review on Food Wastes for Manufacturing New Food Products. *Journal of Advanced Zoology*, 44.
- Paul, D., Chakraborty, S., Tewari, S., & Das, J. (2023). Effect of Flavonoids in

Preventing Breast Cancer: A Review. *Journal of Advanced Zoology*, 44.

- Paliwal, M., Nakhale, S., Tewari, S., & Chakraborty, A. (2022). Potential health benefits of Onion (*Allium cepa*), Garlic (*Allium sativum*) and Turmeric (*Curcuma*) as Prebiotics. *Industrial Engineering Journal*, 15(10).
- Garai, U., Chakrabort, P., Sur, M., & Tewari, S. Nutrition and post covid infection: A critical review. *International Journal of Food Science and Nutrition*, 8 (3); 66-72.
- Maity, M., Bhattacharyya, D. K. and Bhowal, J*. (2023). Improvement of β -galactosidase production by solid-state fermentation using cauliflower (*Brassica oleracea* var. botrytis) waste by *Enterobacter aerogenes* KCTC2190. *Research Journal of Biotechnology*, 18(3), 18-23.
- Mukherjee, M., Paul, T., Halder, S., & Maity, M*. (2023). Illuminating Focus on The Food Preservation with Different Essential Oils and Their Effects: A Review. *Journal of Advanced Zoology*, 44. <https://doi.org/10.17762/jaz.v44iS6.2667>
- Prakash, N., Ghosal, S., & Maity, M*. (2023). A Review on Therapeutic Effects of L-Carnitine: An Update. *Journal of Advanced Zoology*, 44. <https://doi.org/10.17762/jaz.v44iS6.2700>
- Rana, R & Maity, M*. (2023). Novel Trends in The Development of Hydrogel from Plant Sources and Their Effect in Environment and Human Health: A Review. *Journal of Advanced Zoology*, 44 <https://doi.org/10.17762/jaz.v44iS6.2671>
- Bose, S., Maity, M., & Kar, S*. (2023). Antinutrient Phytic acid: Can be proved to be a Boon for Colorectal Cancer. *Journal of Advanced Zoology*, 44. <https://doi.org/10.17762/jaz.v44iS6.2681>
- Saha, J., Maity, M., Roy, S. K., & Ghosal, S*. (2023). Nutritional and Health status of tribal people: A review. *Journal of Advanced Zoology*, 44. <https://doi.org/10.17762/jaz.v44iS6.2676>
- Rozario, P. C., Maity, M*., Dhara, A & Wasiqa, S. (2024). Survey on the evolution of severity of Diebetic patientsamong different age groups and sexes in Central Kolkata. *Journal of Advanced Zoology*, 45, 546-553. <https://doi.org/10.53555/jaz.v45i1.4576>
- Bedi, S., Maity, M*., Bandhopadhyay, B., Kar, T. K., Pahari, S., & Panda, T. (2024). Isolation and characterization of *Lactobacillus* sp. From different dairy products and fermented foods for their application on gastrointestinal disorder. *Journal of Advanced Zoology*, 45, 554-559. <https://doi.org/10.53555/jaz.v45i1.4579>
- Pramanik, P., Tewari, S., Mukherjee, P., Banka, R., & Sen, S. (2023). Indian traditional plants: medicinal properties and Human health. *Journal of Survey in Fisheries Sciences*, 10(1S), 6170-6179.
- Dash, N., Mukherjee, P., Pattanayak, A., Bhattacharya, T., & Barik, M. (2023). Pregnancy induced diabetes mellitus (Gestational diabetes mellitus): A review. *International Journal of Food Sciences and Nutrition*, 8(03), 1-4.

- Kotal, S., Mukherjee, P., Chakraborty, D. & Tewari, S. (2023). A Review on Role of Different Adipokines in Gestational Diabetes. *Journal of Advanced Zoology*, 44(S-6), 2109-2113.
- Dash N., Mukherjee P., Pattanayak A., Bhattacharya T., Barik M. (2023). Pregnancy induced diabetes mellitus (Gestational diabetes mellitus) and Nutrition: A review. *International Journal of Food Science and Nutrition*, 8(03), 1-4.
- Sameena S., Mukherjee P., Chatterjee P., Dash N. (2024). Antimicrobial activity of mint: An overview. *Journal of advances in Microbiology Research*, 5(1), 01-03.
- Mukherjee P., Tewari S., Jombo T. (2024), A review on bioactive compounds presents in garden beet and beetroot powder and their potential prebiotic properties. *International Journal of Research in Agronomy*, 7(3), 178-180
- Singha, P., Karmakar, I., Ghosh, J. (2024). Prevalence of Malnutrition Among School Going Children: A Review. *The Bioscan*, 19(2): 16-18.
- Karmakar, I., Ghosh, J. (2024). A Comparative Study on Prevalence of Stroke and Associate Problems Among Physically Active Adults and Sedentary Adults – A Review. *The Bioscan*, 19(1): 01-04.
- Chakraborty, R., Saha, R., Ghosh, J., Ghosh, P., & Haldar, P. (2023). Prevalence Of Work-Related Musculoskeletal Disorders Among Construction Workers. *Journal of Advanced Zoology*, 44.
- Saha, R., Chakraborty, R., Ghosh, P., Ghosh, J., & Haldar, P. (2023). Work- Related Musculoskeletal Disorder an Increasing Concern in Garment Industry. *Journal of Advanced Zoology*, 44.
- Mukhopadhyay, S., Bhattacharyya, D., & Ghosh, J. (2023). From Gut to Gray Matter: The Surprising Links Between The Microbiome and Brain. *Journal of Advanced Zoology*, 44.
- Ghosh, S., Bhowmick, S., & Das, S. (2023). A Comprehensive Review of the Relationship between Junk Food, Obesity, Polycystic Ovary Syndrome (PCOS), and Menstruation. *Journal of Advanced Zoology*, 44.
- Gayen, A., Nayek, P., Ghosh, N., & Das, S. (2023). Water Melon Seed Oil: A Review. *Journal of Advanced Zoology*, 44.
- Mondal, E., Ghosal, S. & Das, S. (2023). A Review on the effect of fruit juice on Cardiovascular Disease. *Journal of Advanced Zoology*, 44
- Mondal, E. & Das, S. (2024) . Harmonising Well-Being: A In Depth Review Of The Impact Of Ayurvedic Dosha On The Choice Of Food And Nutritional Guidance . *The Bioscan*, 19(2).
- Thapar P, Kaur V. Application of Bioinformatics Tools in Validation of an In-vivo

Research on Plant Extracts. International Journal of Advanced Multidisciplinary Research and Studies, 2024, 4(3): 1345-1348

- Thapar P, Dev M, Gemedar N, Kumar JA. Novel Synthesis of Polylactic Acid from Whey and its Application as Green Biofilms (laminates). Letters of Applied NanoBioscience Journal. Accepted for publication in 2024
- S Ishani, D Moumita, B Dipsikha, D Sayani (2023b). Effects of phytochemicals on Type 2 diabetes mellitus -A short review. Journal of Advanced Zoology, 44(S6), 1891–1897. <https://doi.org/10.17762/jaz.v44is6.2663>
- Dev, M., Bhattacharyya, D. K., & Ghosh, M. (2024c). Effect of different roasting methods on clove bud extracted oil. Food and Humanity, 2, 100224.
- Alieozaman, M. S., Chwdhury, M., Fatima, A., & Dev, M. (2024b). An overview of spices and herbs as natural antioxidant sources. Journal of Current Research in Food Science, 5(1), 31–35.
- Gayen, A., & Dev, M. (2024). AN OVERVIEW OF THERAPEUTIC EFFECTS OF SESAME SEED CURD. The Bioscan, 19(1), 13–15.
- Parul Thapar, Moumita Dev, Niharika Gemedar N, Ajay Kumar Swarnakar (2024).Novel Synthesis of Polylactic Acid from Whey and its Application as Green Biofilms (laminates). Letters of Applied Nano Bioscience Journal. ISSN No.: 2069-5837
- Bhattacharyjee S., Das S, Ghosh S., Maity D., Saha P., Roy S., Mitra D. R. (2023) Regulation of Uncontrolled Cell Growth (cancer) by Curcumin and Piperine- A Review. Journal of Surveys of Fisheries Sciences, 10 (1S) 6104-6110. <https://doi.org/10.53555/sfs.v10i1S.2114>
- Dutta S, Mitra D. R. (2023). Applications of Diacylglycerol (dag) rich Microencapsulated Vitamin-c in Food Processing -A Review. Journal of Advanced Zoology, 44(S6), 2006–2011. <https://doi.org/10.17762/jaz.v44iS6.2687>
- Mondal T, Chitra S, Mitra D. R. (2023). Investigating the Comparative Antioxidant Partitioning in Fried Oils and Fried Potatoes: A Scientific Evaluation. Journal of Advanced Zoology, 44(S6), 1999–2005. <https://doi.org/10.17762/jaz.v44iS6.2685>
- Sen S, Saha D , Mitra D. R. (2023). Exploring the Scientific Benefits of Phytosterol Enriched Soya-butter- A Comprehensive Review. Journal of Advanced Zoology, 44(S6), 1992–1998. <https://doi.org/10.17762/jaz.v44iS6.2684>
- Bhattacharjee B, Nag M S, Bhattacharjee A, Singh K, Roychowdhury S, Roy A, Sarkar S, Raza M A, Khaita J, Dutta S, Bhowmick S, Mitra D. R (2023). Association Of Handgrip Strength, Body Mass Index, Waist Circumference And Depression Scale Among Adults: A Hospital Based Cross-Sectional Observational Study. Journal of Advanced Zoology, 44(S5), 2630–2635. <https://doi.org/10.53555/jaz.v44iS5.3297>
- Ruj M, Biswas S, Mitra D. R. (2023). Phytosterol (ps) Enriched Nutella Spread From

Yam Bean Milk -A Review . Journal of Advanced Zoology, 44(S6), 1986–1991.
<https://doi.org/10.17762/jaz.v44iS6.2683>.

- Shabnom M, Datta A, Mitra D. R (2023). Probotics: A Promising Solution for Irritable Bowel Syndrome (Ibs). Journal of Advanced Zoology, 44(S6), 1663–1667. <https://doi.org/10.17762/jaz.v44iS6.25883>
- Hait R, Das A, Mitra D. R. (2023). Exploring The Effect of Wheat Grass Juice on Thalassaemia: A Comprehensive Review. Journal of Advanced Zoology, 44(S6), 1636–1639
- Ash S, Saha P, Mitra D. R. (2023). Comparitive Nutritional Analysis Of Sweet Yam Bean (Jicama) Milk With Soya Milk -- A Review. Journal of Advanced Zoology, 44(S5), 2617–2623.
- Ghosh, B Bhowmik I, Dey S, Mitra D. R. (2023). A Review On Phytosterol (Ps) Enriched Mayonnaise. Journal of Advanced Zoology, 44(S5), 2624–2629.
- Shabnom M, Mitra D. R (2023). Prevalance Of Substance Abuse Among Street Children In West Bengal, India. Journal of Advanced Zoology, 44(S5), 2611–2616.
- Ghosh R.P, Saha D, Chowdhury S, Mitra. D. R. (2023). Waste To Wonder: Production Of Bio-Diesel From Agri-Waste- A Comprehensive Review. Journal of Advanced Zoology, 44(S5), 2551–2556.
- Biswas A., Pal S, Mitra D. R. (2024). A Review on- Preparation of Bioplastics from agri-waste. Bioscan, 19(2), 9-12.
- Pimpley, Vaibhavi A., Moumita Das, Suresh Kumar Gurusiddhaiah, and Pushpa S. Murthy. "Modulatory effect of green coffee bioactives on high-fat diet–induced obesity in C57BL6 mice model." Nutrition 115 (2023): 112141.
- Patil, Siddhi, Moumita Das, G. Suresh Kumar, and Pushpa S. Murthy. "Coffee leaf extract exhibits anti-obesity property and improves lipid metabolism in high-fat diet-induced C57BL6 obese mice." 3 Biotech 13, no. 8 (2023): 278.
- Geetha, V., Mayookha, V. P., Das, M., & Kumar, G. S. (2024). Bioactive carbohydrate polymers from marine sources as potent nutraceuticals in modulating obesity: a review. Food Science and Biotechnology, 1-12.
- Venkatesh, G., Das, M., Ramakrishna, C., & Kumar, G. S. (2023). Development and Characterization of Functional Low Calorie Gelatin Gummies Enriched with Glycosaminoglycans Extracted from Mackerel Fish Waste. Journal of Aquatic Food Product Technology, 32(8-9), 599-613
- Jadhav, H. B., Das, M., Das, A., Geetha, V., Choudhary, P., Annapure, U., & Alaskar, K. (2024). Enhancing the functionality of plant-based proteins with the application of ultrasound–A Review. Measurement: Food, 100139.

Patent:

1. Sampa Chowdhury, Dr. Anindita Ghosh, Sumona Mondal, Dr. Swati Nakhale, Dr. Souvik Tewari, Anirban Pattanayak (2024). Formulation of protein enriched powder from banana peel and pumpkin seed waste, Application No. 202431045489. Date: 21/06/2024
2. Maji D Sucheta, Giri A., Biswas Wendrila, Ghata A., Sarkar S., Sarangi K Ashok, Mitra D.R., Negi, P.N., Pandey P Ramendra, Chang M C., Koley (2024). An Enhanced Method of Immobilization of Microbial Alkaline Protease for Industrial Application. Indian patent Application no.: 202431038779, Date of Filing: 17/05/2024 Date of Publication: 31/05/2024

Book Chapter :

- Rupali Dhara Mitra. Fundamentals of Food Science and beyond, Chapter 7, Food Quality Evaluation, Pg-99-119. Swami Vivekananda University, Barrackpore (Institutional publisher), 1st edition, November, 2023, ISBN: 978-93-6039- 536-0.
- Ishita Bhowmik, Rupali Dhara Mitra. A Review on Yam Bean Milk: Application in Production of Phytosterol Enriched Chocolate, Futuristic Trends in Agriculture Engineering & Food Sciences e-ISBN: 978-93-5747-615-7 IIP Series, Volume 3, Book 9, Part 3, Chapter 1, Page-47-52. Publishers {IIP} Selfpage Developer Pvt LTD.
- Thapar P, G. Niharika. Whey: An Emerging Solution for a Sustainable Environment, Emerging Technology and Management Trends in Environment and Sustainability, Taylor and Francis Publisher, London, 2023, pp. 1-12. DOI: 10.4324/9781003356233
- Thapar P, Salooja M.K., Gatadi S. Single Nucleotide Polymorphism (SNP) in Gut Microbiome through Foods: A review, Ed- Laranjo, M. Exploring Lactobacilli - Biology, Roles and Potential Applications in Food Industry and Human Health, Intech Open Publications, London. Accepted for publication in 2024.

Books:

- Fundamentals of Food Sciences and Beyond (2023); Functional Foods, Swami Vivekananda University, 978-93-6039-536-0

Others (if any) :

- Training on “Food Safety Supervisor (FSS) through Food Safety Training and Certification (FoSTaC) on 5th February, conducted by Bharat Chambers of Commerce in collaboration with Food Safety and Standards Authority of India (FSSAI).

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

- i) Hosted 1st International Conference on Scientific Advances in Life Sciences, Agriculture and Food and Nutrition-ICSA 2023, held on 28th-30th September, 2023, organized by department of Food and Nutrition, School of Agriculture and Life Sciences, Swami Vivekananda University, Kolkata West Bengal-700121.
- ii) Conducted 2nd International Conference on Technological Innovations in Agriculture, Life Sciences and Food & Nutrition- ICALF 2024, held on 22-24 February, 2024, department of

Food and Nutrition, School of Agriculture and Life Sciences, Swami Vivekananda University, Kolkata West Bengal-700121.

iii) Hosted 2nd International Conference on Scientific Advances in Life Sciences, Agriculture and Food and Nutrition-ICSA 2023, held on 20th-21st September, 2024, organized by department of Food and Nutrition, School of Agriculture and Life Sciences, Swami Vivekananda University, Kolkata West Bengal-700121.

DEPARTMENT OF MANAGEMENT STUDIES

ABOUT DEPARTMENT:

Department of Business Management

Department of Business Management of Swami Vivekananda University (SVU) offers skill-based and industry oriented Under Graduate (UG) programs such as Bachelor of Business Administration (BBA), Bachelor of Business Administration in Agri-business Management (BBA-ABM), and Post Graduate (PG) programs such as Master of Business Administration (MBA), Master of Business Administration in Agri- business Management (MBA -ABM) which have been crafted with utmost care in collaboration with academicians and professionals. Besides that, our department also offers Doctorate of Philosophy (Ph.D.) programs for researchers in the field of Management. The entire curriculum of the Department of Business Management facilitates the development of skills, abilities and knowledge that enable students to handle their respective positions with lots of responsibilities in the corporate world and academia. In these years, the Department of Business Management has emerged as a professional Department with a focus on Business Management, agri-business, industry-academia interface, and sectoral business strategies. The focus is reflected in several major areas under this school like Innovation, Research, Expertise, and Entrepreneurship which leads to creating a knowledge hub of ultimate business excellence. The competency-directed curriculum puts together the latest carefully aligned inputs sourced from the best of leading B-Schools. Department of Management has emerged to establish itself as one of the best Management Department through its unique style of teaching & experiential learning.

Mission & Vision

Mission: To provide quality-based management education to build business leaders in a competitive global environment and conduct technology-based innovative research for imparting Knowledge in different management areas and promote young minds for entrepreneurship development for the betterment of society.

Vision: To attain global presence by implementing leadership, innovative ideas, and responsible corporate behaviour through flexible, skill-based management education driven by high-impact research areas.

Objectives:

- To impart professional education in modern management science to enable the students and researchers to appreciate the inter-relationship between the diverse and complex tasks of the modern business environment.
- To develop capacities among students and business executives for an improved understanding of various modern management-related issues.
- To conduct high-quality skill-based research that addresses domestic as well as modern business intelligence.
- To escalate demand-driven research, development, and innovation in the various field of Management and encourage innovation-start up- entrepreneurship towards self-reliance.

- To develop holistic managers who internalize a synthesis of conventional and modern management – thinking and who can comfortably adapt to changing business requirements. Various management programs provide students with various routes to the industry, matching its requirements with their skills and predispositions.
- To provide the students with an opportunity to expertise themselves in the major functional areas: Finance, Marketing, Human Resources, Business Analytics, Management Information Systems, and Operations Management.
- To promote young minds for the development of entrepreneurship (to create entrepreneurs) as next-generation leaders with human values and social responsibilities.

Department of Hospital Management

The Department of Hospital Management at Swami Vivekananda University is emerging as a potential center of excellence in the healthcare industry. With a focus on providing high-quality education and practical training to its students, the department has established a strong reputation for producing skilled professionals who are well-equipped to thrive in the dynamic healthcare sector. One of the key strengths of the Department of Hospital Management is its team of highly qualified faculty members who bring a wealth of experience from both the industry and academia. These experts enrich the learning experience of students by incorporating real-world examples and case studies into their teaching methods, ensuring that students are well-prepared to tackle the challenges of the healthcare industry.

The department has established five active Memorandums of Understanding (MoUs) with leading healthcare institutions such as IDBG Hospital, Peerless Hospital, Apollo Hospital, CAMRI Hospital, and Antara Hospital. These partnerships provide students with valuable opportunities for hands-on training, industry exposure, and networking with professionals in the field. Students at the Department of Hospital Management have the opportunity to gain practical experience through internships in reputed hospitals. This hands-on training helps them develop essential skills and knowledge, preparing them for successful careers in the healthcare industry. The department boasts a robust placement cell that works tirelessly to connect undergraduate and postgraduate students with job opportunities in reputed hospitals and diagnostic chains. The strong industry connections and reputation of the department ensure that students have access to a wide range of career opportunities upon graduation. Students at the Department of Hospital Management are exposed to the guidelines and procedures of National Accreditation Board for Hospitals & Healthcare Providers (NABH) and National Accreditation Board for Testing and Calibration Laboratories (NABL). This exposure equips students with a thorough understanding of quality standards in healthcare delivery, enhancing their professional capabilities. Department of Hospital Management at Swami Vivekananda University is committed to nurturing the next generation of healthcare leaders. With its focus on academic excellence, practical training, industry partnerships, and career opportunities, the department is shaping the future of the healthcare industry by producing competent and skilled professionals who are poised to make a meaningful impact in the field.

Mission and Vision

Mission: The Mission of the hospital management department at Swami Vivekananda University is to educate and equip aspiring hospital management professionals with the

necessary knowledge, skills, and values to excel in the ever-evolving hospital & healthcare industry.

Vision: To become a globally recognized center of excellence in hospital management education, producing competent and compassionate professionals who lead the transformation of healthcare delivery. By fostering a culture of continuous learning and embracing technology, we aim to create professionals who positively impact hospital administration, healthcare outcomes, patient experiences, and societal well-being.

Objectives of Hospital Management Department

Hospital Management is a rapidly evolving field that requires a unique blend of business acumen and healthcare knowledge. The students studying in the Hospital Management Department at Swami Vivekananda University focus on developing the necessary skills to effectively manage hospital & healthcare facilities.

1. Enhancing Leadership Skills
2. Implementing Quality Improvement
3. Managing Healthcare Operations

FACULTY DETAILS

| Name of the Teacher | Specialization |
|-----------------------------|--|
| Ms. Soumi Chakraborty | Organizational psychology, Diversity & Inclusion, Consumer Behaviour, Welfare of Marginalized Communities |
| Dr. Anirban Hazra | Microeconomics, econometrics, development economics |
| Dr. MD. Niyaz Ahmed | E Waste Management, Trade Analytics |
| Dr. Sanjay Bhattacharya | Economics of Education, Social Sector, Econometrics |
| Prof. (Dr.) Kallal Banerjee | International Business, Unorganized Sector, E Waste Management, Trade Analytics |
| Mr. Neelanjana Mitra | Bank Merger, Acquisitions & Reforms, Retail Banking, Digital & Cashless Banking, Job Satisfaction, Consumer Behaviour, Social Impact of COVID - 19 |
| Mr. Sourav Chatterjee | Consumer Purchasing Behaviour |
| Mr. Soumen Nath | Digital Marketing, Product Innovation, Healthcare Marketing |
| Dr. Koushik Sinha | Consumer Purchasing Behaviour |
| Dr. Tridib kumar Chatterjee | Hospital and Healthcare System |
| Shafique Ahmed | Financial Market Connectivity |
| Tanmoy Mazumder | Marketing Communication, Consumer Behaviour, Service Marketing, Human Psychology |
| Sucharita Debnath | Trade Analytics |

| | |
|----------------------------------|---|
| Mantosh Sharma | E Waste Management |
| Shivani Hazra | Behavioural Finance, Marketing Management, Strategic Planning, Financial Management |
| Ananda Mohan Paul | International Business, Unorganized Sector, E Waste Management, Trade Analytics |
| Bhaskar Karmakar | Financial Inclusion, Women Empowerment, Urbanisation, Sustainable Development |
| Moumita Saha | Microfinance, Entrepreneurship, Financial inclusion |
| Gargi Ghosh | Hospitality Management & Operations, Service Quality & Customer Experience, Cultural and Diversity Management, Crisis Management in Hospitality, Job Satisfaction |
| ARPITA DAS | Behavioural Finance, Marketing Management, Strategic Planning, Financial Management |
| Anshuman Das | Social Sector, Econometrics |
| MS. KASTURI GHOSH | Digital Marketing, Product Innovation, Healthcare Marketing |
| Dr. Tushar Kanti Dey | Marketing Research, Brand Management, Retail Management, Marketing Communication, Consumer Behaviour, Service Marketing, Human Psychology |
| BIKRAM PRASAD | Microfinance, Entrepreneurship, Financial inclusion |
| Moupiya Bose | Employee Well-Being & Organizational Growth, Cashless Systems, Societal Perception |
| Moumita Aich Som | Microfinance, Entrepreneurship, Financial inclusion |
| Dr Shantanu Chakraborty | Digital Marketing, Product Innovation, Healthcare Marketing |
| Jeet Goswami | Financial Inclusion, Poverty, Women Empowerment |
| AYANANGSHU MANDAL | E Waste Management |
| Dr. Mainak Chakraborty | Consumer Purchasing Behaviour |
| MS. Shilpa Saha | Economics of Education, Social Sector, Econometrics |
| Moumita Acharya | Agro-MSME, Women Entrepreneurship |
| Souvik Majumdar | Entrepreneurship, Artificial Intelligence, Data Analytics |
| Chandrika Banerjee | Hospital and Healthcare System |
| DR. Sanjukta Mallick Chakraborty | International Business, Unorganized Sector, E Waste Management, Trade Analytics |

PUBLICATIONS

Journals

| Name of the Faculty | Title of the Paper | Name of the Journal | Index Type (Scopus/WOS/UGC CARE/Peer Reviewed etc.) | DOI / ISSN |
|---------------------|---|---|---|---|
| Dr Kallal Banerjee | Unveiling cultural diversity in Indian Literature: A comparative Analysis | International Journal of Cultural Studies and Social Science | UGC CARE Vol XX No XXIII | 2347-4777 |
| Dr Kallal Banerjee | Chat-GPT & Its impact on writing skill development: A case study on students of private colleges in north 24 parganas | International Journal of Multidisciplinary Trends | Peer Reviewed | https://doi.org/10.22271/multi.2024.v6.i4b.415 |
| Dr Kallal Banerjee | A study on adaptation of youth preference in green cosmetic industry | International Journal of Research in Marketing Management and Sales | Peer Reviewed | https://doi.org/10.33545/26633329.2024.v6.i1b.163 |
| Dr Kallal Banerjee | Women in small and medium enterprises: Embracing social media for women | International Journal of Financial Management and Economics | Peer Reviewed | https://doi.org/10.33545/26179210.2024.v7.i1.284 |
| Dr Kallal Banerjee | Change | International Journal of Research in Management | Peer Reviewed | https://doi.org/10.33545/26648792.2024.v6.i1d.159 |

| | | | | |
|--------------------|---|---|---------------|---|
| Dr Kallal Banerjee | A comparative analysis on | International Journal of Research in Management | Peer Reviewed | https://doi.org/10.33545/26648792.2024.v6.i1.d.158 |
| Dr Kallal Banerjee | Impulsive purchasing patterns among women consumers: A study | International Journal of Research in Marketing Management and Sales | Peer Reviewed | https://doi.org/10.33545/26633329.2024.v6.i1.b.159 |
| Dr Kallal Banerjee | Green marketing and sustainable development in India: A comparative study | International Journal of Advanced Academic Studies | Peer Reviewed | https://doi.org/10.33545/27068919.2024.v6.i4a.1136 |
| Dr Kallal Banerjee | Importance of Argo-Chemical Companies in Indian Agri Sector: An Analysis | International Journal of Agriculture and Food Science | Peer Reviewed | https://doi.org/10.33545/2664844X.2024.v6.i1.b.169 |
| Dr Kallal Banerjee | A study on smartwatch users in Kolkata: Health | International Journal of Financial Management and Economics | Peer Reviewed | https://doi.org/10.33545/26179210.2024.v7.i1.270 |

| | | | | |
|--------------------|---|---|---------------|---|
| Dr Kallal Banerjee | Economic and Geopolitical influence of India through BRICS summit: A brief analysis | International Journal of Foreign Trade and International Business | Peer Reviewed | https://doi.org/10.33545/26633140.2024.v6.i1a.101 |
| Dr Kallal Banerjee | Sentiment analysis using different machine learning models: A study for the prediction of customer's review | International Journal of Research in Marketing Management and Sales | Peer Reviewed | https://doi.org/10.33545/26633329.2024.v6.i1a.150 |
| Dr Kallal Banerjee | Crisis Management in History: How Leaders Handled and Overcame Adversity in Different Time Periods | International Journal of Financial Management and Economics | PEER REVIEWED | https://doi.org/10.33545/26179210.2024.v7.i1a.268 |
| Jeet Goswami | Historical Performance Analysis of Top IT Companies in India | International Journal of Research in Finance and Management | Peer Reviewed | https://doi.org/10.33545/26175754.2024.v7.i1a.284 |
| Jeet Goswami | Impact of NPA on Profitability in Microfinance Industry of India: A | International Journal of Financial Management and Economics | Peer Reviewed | https://doi.org/10.33545/26179210.2024.v7.i1a.285 |

| | | | | |
|----------------------------|---|---|----------------|--|
| Dr. Sanjay Bhattacharya | An Enquiry on the Impact of FDI: Response of Indian Insurance Sectors | International Journal of Financial Management and Economics | Peer Reviewed | DOI: 10.33545/26179210.2024. v7.i1.269 |
| Dr Shantanu Chakraborty | Wealth to happiness: A study among retired non- Government employees of Kolkata | Foundry Journal | Scopus Indexed | DOI: https://foundryjournal.net/wp-content/uploads/2024/03/16.FJ23C305.pdf |
| Dr Shantanu Chakraborty | Integration of artificial intelligence in digital financial inclusion: A conceptual study | International Journal of Computing and Artificial Intelligence | Peer Reviewed | DOI: https://doi.org/10.33545/27068919.2024.v5.i1a.83 |
| Dr Shantanu Chakraborty | Critical appraisal of vendor selection mechanism: A review in power sector companies of West Bengal | International Journal of Advanced Academic Studies | Peer Reviewed | DOI: https://doi.org/10.33545/27068919.2024.v6.i4b.1151 |
| Moumita Acharya | Role of HEIs in promoting social | EPRA International Journal of Multidisciplinary Research (IJMR) | Peer Reviewed | 2455-3662 |

| | | | | |
|-------------|---|---|-----------------|---|
| Soumen Nath | Chat-GPT & Its impact on writing skill development: A case study on students of private colleges in north 24 parganas | International Journal of Multidisciplinary Trends | Peer Reviewed | https://doi.org/10.22271/multi.2024.v6.i4b.415 |
| Soumen Nath | Green marketing and sustainable development in India: A comparative study | International Journal of Advanced Academic Studies | Peer Reviewed | DOI: 10.33545/27068919.2024.v6.i4a.1136 |
| Soumen Nath | Unveiling Cultural Diversity in Indian Literature: A Comparative Analysis | In International Journal of Cultural Studies and Social Sciences | UGC Care Listed | https://doi.org/10.5281/zenodo.11122908 |
| Soumen Nath | Stress | International Journal of Research in Human Resource Management, | Peer Reviewed | https://doi.org/10.33545/26633213.2024.v6.i1b.178 |
| Soumen Nath | Impulsive purchasing patterns among women consumers: A study | International Journal of Research in Marketing Management and Sales | Peer Reviewed | https://doi.org/10.33545/26633329.2024.v6.i1b.159 |

| | | | | |
|-------------|--|---|---------------|---|
| Soumen Nath | A study on smart watch users in Kolkata: Health | International Journal of Financial Management & Foreign Trade, | Peer Reviewed | https://doi.org/10.33545/26179210.2024.v7.i1.270 |
| Soumen Nath | A marketing analysis on Indian automobile industry: A comparative study of Hyundai, Maruti Suzuki and Ford | International Journal of Research in Management | Peer Reviewed | DOI: 10.33545/26648792.2024.v6.i1b.136 |
| Soumen Nath | Economic and Geopolitical influence of India through BRICS summit: A brief analysis | International Journal of Foreign Trade & International Business | Peer Reviewed | https://doi.org/10.33545/26633140.2024.v6.i1a.101 |
| Soumen Nath | Data visualization approach for business strategy | International Journal of Research in Management | Peer Reviewed | DOI: 10.33545/26648792.2024.v6.i1b.138 |
| Soumen Nath | Comparative Study on Private Teachers' Social, Financial and Mental Problems During & Post Pandemic Scenario | SMS Journal of | Peer Reviewed | DOI: https://doi.org/10.21844/smsjei.v9i02.15307 |

| | | | | |
|----------------------------|--|---|----------------|--|
| Dr Kallal Banerjee | | IJICBM, Inderscience | WOS | 10.1504/IJICBM.2023.10059092 |
| Dr Kallal Banerjee | Assessing the | International Journal of Research in Human Resource Management | Peer Reviewed | https://doi. org/10.33545/26633213.2024. v6.i1a.169 |
| Dr Mohammad Niyaz Ahmad | Optimizing CSR: Addressing Regional Disparities | Journal of Electronics Information Technology Science And Management | Peer Reviewed | 0258-7982 |
| Dr Mohammad Niyaz Ahmad | Reshaping | METSZET Journal | Scopus Indexed | 2061-2710 |
| Dr. Anirban Hazra | Significance of theories and antecedents of consumer adoption in driving the femtech services: A | International Journal of Research in Management | Peer Reviewed | DOI: https://doi. org/10.33545/26648792.2024. v6.i1c.150 |

| | | | | |
|-------------------|---|--|---------------|---|
| Dr. Anirban Hazra | Competency For HR Professionals of The Software Industry In India Based on Situationalist Perspective – An Empirical Analysis | Education and Society | UGC Care | 2278-6864 |
| Dr. Anirban Hazra | Adoption of telemedicine system among patients and health care professionals: Prospects and constraints | International Journal of Research in Medical Science | Peer Reviewed | https://doi.org/10.33545/26648733.2024.v6.i1a.55 |
| Dr. Anirban Hazra | Exploring | International Journal of Research in Human Resource Management | Peer Reviewed | https://doi.org/10.33545/26643213.2024.v6.i1a.168 |
| Dr. Anirban Hazra | Economic analysis of household savings behaviour: Insights from India | International Journal of Research in Human Resource Management | Peer Reviewed | https://doi.org/10.33545/26179210.2024.v7.i1.271 |
| Dr. Anirban Hazra | Enhancing Healthcare Accessibility: A Study on the Affordability of Telemedicine in Rural India | Education and Society | UGC Care | 2278-6864 |

| | | | | |
|-------------------|---|---|---------------|--|
| Dr. Anirban Hazra | Ethical & Legal perspective of HR Analytics: Theoretical review | Research Review | Peer Reviewed | 2321-4708 |
| Dr. Anirban Hazra | A study on analysing customer attitudes towards online banking and its impact on bank customer relationship | International Journal of Advanced Academic Studies | Peer Reviewed | DOI: https://doi.org/10.33545/27068919.2024.v6.i4a.1150 |
| Dr. Anirban Hazra | Bitcoin in Indian Context: A Study on Challenges & Future Scopes | International Journal of Financial Management and Economics | Peer Reviewed | DOI: 10.33545/26179210.2024.v7.i1.286 |
| Dr. Anirban Hazra | Acceptance of Cash less banking in Post Covid Era in Indian perspective- A Review | International Journal of Applied Research | Peer Reviewed | DOI: 10.22271/allresearch.2024.v10.i4c.11686 |
| Dr. Anirban Hazra | Unlocking the Potential India's Informal Financial Sector: Implications, | International Journal of Research in Finance and Management | Peer Reviewed | DOI: 10.33545/26175754.2024.v7.i1c.307 |

| | | | | |
|-------------------|---|--|---------------|--|
| Dr. Anirban Hazra | Analyzing Customer Attitudes towards Online Banking and Its Impact on Bank Customer Relationship Management | Asian Journal of Management and Commerce | Peer Reviewed | DOI: 10.22271/27084515.2024.v5.i1e.282 |
| Dr. Anirban Hazra | Exploring the current consumer market status of chemical fertilizer Vs biofertilizer industries in West Bengal, India: An on-site investigation | South Asian Journal of Agricultural Sciences | Peer Reviewed | DOI: 10.22271/27889289.2024.v4.i1b.124 |
| Neelanjan Mitra | Exploring | International Journal of Research in Human Resource Management | Peer Reviewed | DOI: 10.33545/26633213.2024.v6.i1a.168 |
| Neelanjan Mitra | Economic analysis of household savings behaviour: Insights from India | International Journal of Research in Human Resource Management | Peer Reviewed | DOI: 10.33545/26179210.2024.v7.i1.271 |
| Neelanjan Mitra | A study on analysing customer attitudes towards online banking and its impact on bank customer relationship | International Journal of Advanced Academic Studies | Peer Reviewed | DOI: https://doi.org/10.33545/27068919.2024.v6.i4a.1150 |

| | | | | |
|-----------------|---|---|---------------|--|
| Neelanjan Mitra | Bitcoin in Indian Context: A Study on Challenges & Future Scopes | International Journal of Financial Management and Economics | Peer Reviewed | DOI: 10.33545/26179210.2024.v7.i1.286 |
| Neelanjan Mitra | Acceptance of Cash less banking in Post Covid Era in Indian perspective– A Review | International Journal of Applied Research | Peer Reviewed | DOI: 10.22271/allresearch.2024.v10.i4c.11686 |
| Neelanjan Mitra | Unlocking the Potential India's Informal Financial Sector: Implications, | | Peer Reviewed | DOI: 10.33545/26175754.2024.v7.i1c.307 |
| Neelanjan Mitra | Analyzing Customer Attitudes towards Online Banking and Its Impact on Bank Customer Relationship Management | Asian Journal of Management and Commerce | Peer Reviewed | DOI: 10.22271/27084515.2024.v5.i1e.282 |
| Neelanjan Mitra | Exploring the current consumer market status of chemical fertilizer Vs biofertilizer industries in West Bengal, India: An on-site investigation | South Asian Journal of Agricultural Sciences | Peer Reviewed | DOI: 10.22271/27889289.2024.v4.i1b.124 |

| | | | | |
|-------------------|--|---|--------------------------|---|
| SOURAV CHATTERJEE | Unveiling cultural diversity in Indian Literature: A comparative Analysis | International Journal of Cultural Studies and Social Science | UGC CARE Vol XX No XXIII | https://doi.org/10.5281/zenodo.11122908 |
| SOURAV CHATTERJEE | A study on adaptatation of youth preference in green cosmetic industry | International Journal of Research in Marketing Management and Sales | PEER REVIEWED | https://doi.org/10.33545/26633329.2024.v6.i1b.163 |
| SOURAV CHATTERJEE | Change | International Journal of Research in Management | PEER REVIEWED | https://doi.org/10.33545/26648792.2024.v6.i1d.159 |
| SOURAV CHATTERJEE | Economic and Geopolitical influence of India through BRICS summit: A brief analysis | International Journal of Foreign Trade and International Business | PEER REVIEWED | https://doi.org/10.33545/26633140.2024.v6.i1a.101 |
| SOURAV CHATTERJEE | Crisis Management in History: How Leaders Handled and Overcame Adversity in Different Time Periods | International Journal of Financial Management and Economics | PEER REVIEWED | https://doi.org/10.33545/26179210.2024.v7.i1.268 |

| | | | | |
|--------------------|--|---|---------------|---|
| SOURAV CHATTERJEE | The Role of Social Media in Promoting Sustainable Green Cosmetics | International Journal of Research in Management | UGC CARE | https://doi.org/10.33545/26648792.2024.v6.i1b.133 |
| Dr Kallal Banerjee | Evaluation of the effectiveness of current employees' training and development programs adopted by the commercial banks, | International Journal of Research in Management | PEER REVIEWED | https://doi.org/10.33545/26648792.2024.v6.i1b.132 |
| Dr Kallal Banerjee | Data visualization approach for business strategy | International Journal of Research in Management | Peer Reviewed | DOI: 10.33545/26648792.2024.v6.i1b.138 |
| Dr Kallal Banerjee | Stress | International Journal of Research in Human Resource Management, | Peer Reviewed | https://doi.org/10.33545/26633213.2024.v6.i1b.178 |
| Dr Kallal Banerjee | Sentiment analysis using different machine learning models: A study for the prediction of customer's review, | International Journal of Research in Marketing Management and Sales | Peer Reviewed | https://doi.org/10.33545/26633329.2024.v6.i1a.150 |

| | | | | |
|--------------------|--|---|---------------|---|
| Dr Kallal Banerjee | Crisis Management in History: How Leaders Handled and Overcame Adversity in Different Time Periods | International Journal of Financial Management and Economics | PEER REVIEWED | https://doi.org/10.33545/26179210.2024.v7.i1.268 |
| Soumi Chakraborty | A marketing analysis on Indian automobile industry: A comparative study of Hyundai, Maruti Suzuki and Ford | International Journal of Research in Management | PEER REVIEWED | https://doi.org/10.33545/26648792.2024.v6.i1b.136 |
| Soumi Chakraborty | A study on smart watch users in Kolkata: Health | International Journal of Financial Management and Economics | PEER REVIEWED | https://doi.org/10.33545/26179210.2024.v7.i1.270 |

Conference Publication

| SI No | Name of the Faculty | Title of the Paper | Name of the Conference | ISBN / ISSN |
|-------|------------------------|--|---|---|
| 1 | Dr. Mainak Chakraborty | Using AI and Machine Learning to Predict Consumer Buying Behavior: Insights from Behavioral Economics in Case of Alcoholic Beverages | 3rd International Conference on Technological Advancements in Computational Sciences (ICTACS) | doi: 10.1109/IC-TACS59847.2023.10389959 |
| 2 | Dr. Mainak Chakraborty | Maslow's Hierarchy-Inspired AI-Driven Employee Satisfaction Improvement | 3rd International Conference on Technological Advancements in Computational Sciences (ICTACS) | doi: 10.1109/IC-TACS59847.2023.10390045 |
| 3 | Dr. Mainak Chakraborty | Forecasting the Geopolitical Impact among Russia and Ukraine on Commodity Export Prices: An AI-Based Analysis | 3rd International Conference on Technological Advancements in Computational Sciences (ICTACS) | doi: 10.1109/IC-TACS59847.2023.10390383 |

| | | | | |
|----|--------------------|---|---|-------------------|
| 4 | Dr Kallal Banerjee | A Study on Use of AI Enabled Technologies amidst Healthcare Sector in North 24 Parganas, West Bengal, India | Coherence 2024: International Management Conference on Application of Emerging Digital Technologies in Business Management Research & Practices | 978-81-19524-67-9 |
| 5 | Soumen Nath | A Study on Swasthya sathi Scheme in West Bengal: A Systematic Literature Review | National Conference on Development with Dignity | 978-81-19524-51-7 |
| 6 | Soumen Nath | A Study on Use of AI Enabled Technologies amidst Healthcare Sector in North 24 Parganas, West Bengal, India | Coherence 2024: International Management Conference on Application of Emerging Digital Technologies in Business Management Research & Practices | 978-81-19524-67-9 |
| 7 | Dr Kallal Banerjee | Extended Analytics in Research Methodology across Various verticals: A Review | International Conference on Multi-disciplinary research methodology & IPR 2023 | |
| 8 | Dr Kallal Banerjee | A Generic platform-independent Research Methodology Framework Converging in Product commercialization | International Conference on Multi-disciplinary research methodology & IPR 2024 | |
| 8 | Dr Kallal Banerjee | Assessment of Quality in IPD and OPD services in Health care Sector: An empirical investigation | 2023 IEEE R10 Humanitarian Technology Conference (HTC) | |
| 9 | Dr Kallal Banerjee | Intra-regional trade on organic cosmetics and current status of value Chain among BIMSTEC regions | International Conference of KSAS and AnSI, 28-29 February, 2024 | |
| 10 | Dr Kallal Banerjee | Importance and Implication of eWOM in Consumer Purchasing Behavior | World Conference on Economy, Business and Agricultural Development. (WCEBAD- 2024) | |
| 11 | Dr Kallal Banerjee | A study on adaptation of youth preference in the green cosmetic industry | World Conference on Economy, Business and Agricultural Development. (WCEBAD- 2024) | |

b. Book Chapter

| Name of the Faculty | Title of the Book | Name of the Publishers | ISBN/DOI |
|------------------------|--|------------------------------|-------------|
| Dr. Mainak Chakraborty | Perspective in Finance and Digital Transformations in Business by Taylor & Francis – Routledge Publication | Taylor & Francis (Routledge) | 9.78103E+12 |

| | | | |
|-------------------------|---|--|---|
| Dr. Mainak Chakraborty | Application of Data Analytics in Modern Business Decisions | Swami Vivekananda University | 978-93-5980-076-9 |
| Jeet Goswami | Application of Data Analytics in Modern Business Decisions | Swami Vivekananda University | 978-93-5980-076-10 |
| Dr. Sanjay Bhattacharya | Emerging Technologies in Digital Manufacturing and Smart Factories | IGI Global | ISBN13: 9798369309209, EISBN13: 9798369309216, DOI: 10.4018/979-8-3693-0920-9 |
| Dr Shantanu Chakraborty | Application of Data Analytics in Modern Business Decisions | Swami Vivekananda University | 978-93-5980-076-9 |
| Soumen Nath | A Study on Educated Married Women's Decision Making Autonomy | MITTAL PUBLICATIONS (New Delhi, India) | ISBN: 978-93-94569-36-2 |
| Soumen Nath | CSR Promotions on Social Media: Connecting With Consumers & Brand Image | Imprint Publication | ISBN 978-81-951473-4-2 |
| Soumen Nath | Application of Data Analytics in Modern Business Decisions | Swami Vivekananda University | 978-93-5980-076-9 |
| Dr Kallal Banerjee | Application of Data Analytics in Modern Business Decisions | Swami Vivekananda University | 978-93-5980-076-9 |
| Dr. Anirban Hazra | Data Privacy and Ethical Compliance: A Comprehensive Guide | Swami Vivekananda University | 978-93-5980-076-9 |
| Neelanjan Mitra | Application of Data Analytics in Modern Business Decisions | Swami Vivekananda University | 978-93-5980-076-9 |
| Sourav Chatterjee | Application of Data Analytics in Modern Business Decisions | Swami Vivekananda University | 978-93-5980-076-9 |

d. Books

| Name of the Faculty | Department | Title of the Book | Name of the Publishers | ISBN |
|---------------------|------------|---|----------------------------------|-------------------|
| Dr. Anirban Hazra | Management | Principles and Practices of Management | Blue Hill Publication, New Delhi | 978-93-5829-729-4 |
| Dr. Anirban Hazra | Management | Organizational/Industrial Psychology | Blue Hill Publication, New Delhi | 978-93-5829-095-0 |
| Neelanjana Mitra | Management | Principles and Practices of Management | Blue Hill Publication, New Delhi | 978-93-5829-729-4 |
| Dr Kallal Banerjee | Management | Marketing Management (Referencing to Hospital Industry) | Taurean Publication | BOC7RZ8NQP |

e. Others (if any)

| Name of the Inventor | Name of the Innovation | Status (Filed / Published / Granted) | Details of Application No | Date of Filed / Published / Granted (DD/MM/YYYY) |
|------------------------|---|--------------------------------------|---------------------------|--|
| Dr. Mainak Chakraborty | Computing Device for Supply Chain Optimization | Granted | 6341361 | 11-03-2024 |
| Soumen Nath | Computing device for supply chain optimization through advanced AI & machine learning | Granted | UK 6341361 | 11-04-2024 |
| Soumen Nath | Model to efficiently capture persistent surveillance of user activity and use profiling behaviour in complex networks | Application Approved | IND 202331055339A | 09-08-2023 |
| Soumen Nath | Block chain & IOTs Role in the Indian Banking Sector's Digital Transition | Application Approved | IND 20233104474A | 07-07-2023 |
| Soumen Nath | Analysis of Students Time Spending for Newspaper Reading to Attain Effective English Communication | Application Approved | IND 202331042374A | 30/6/23 |
| Soumen Nath | Technical writing with AI in BM platforms | Application Approved | IND 409213-002 | 6-3-24 |
| Soumen Nath | Wearable Sociometric Device | Granted | IND 409213-001 | 1-4-24 |
| Dr Kallal Banerjee | Computing device for supply chain optimization through advanced AI & machine learning | Granted | UK 6341361 | 11-04-2024 |

| | | | | |
|--------------------|--|----------------------|------------------|------------|
| Dr Kallal Banerjee | Innovative Wearable So- ciometric Device for Enhanced Analysis and Optimization of Workplace Team Dynamics | Granted | 409213-001 | |
| Dr Kallal Banerjee | A system for leveraging AI and data analytics for predic- tive modeling of consumer green purchasing behavior and method thereof | Application Approved | 202331042494 A | |
| Dr Kallal Banerjee | Examining the effects of prod- uct descriptions, reviews, and ratings on consumer purchase decision | Application Approved | 202341029247 A | |
| Dr Kallal Banerjee | An innovative time manage- ment system for increased productivity | Application Approved | 202321029331 A | |
| Dr. Anirban Hazra | Wearable Sociometric Device | Granted | IND 409213-001 | 02-05-2024 |
| Dr. Anirban Hazra | Blockchain & IOTs Role in the Indian Banking Sector's Digital Transition | Published | IND 20233104474A | 07-07-2023 |
| Dr. Anirban Hazra | Impact on investment pattern with special reference to small and medium capitalization companies | Published | 202241035872 A | 30/06/23 |
| Neelanjan Mitra | Wearable Sociometric Device | Granted | IND 409213-001 | 02-05-2024 |
| Neelanjan Mitra | Blockchain & IOTs Role in the Indian Banking Sector's Digital Transition | Published | IND 20233104474A | 07-07-2023 |
| Sourav Chatterjee | Computing device for supply chain optimization through ad- vanced AI & machine learning | Granted | UK 6341361 | 11-04-2024 |
| Sourav Chatterjee | Innovative Wearable So- ciometric Device for Enhanced Analysis and Optimization of Workplace Team Dynamics | Granted | 409213-001 | |
| Sourav Chatterjee | A system for leveraging AI and data analytics for predic- tive modeling of consumer green purchasing behavior and method thereof | Application Approved | 202331042494 A | |
| Sourav Chatterjee | Examining the effects of prod- uct descriptions, reviews, and ratings on consumer purchase decision | Application Approved | 202341029247 A | |

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

Departmental Activities

So far, 3 webinars, 4 seminars, 6 special lectures by industry experts, 2 workshops, and 4 faculty development programs have been organized.

1. International Conference on Innovation and Advancements in Management and Social Science (ICIAMS-2023) held on 28th - 30th September 2023.
2. 6 Industrial visit programs have been organized for UG and PG students for the Department of Business and Hospital Management.
3. International Conference on Transformations and Sustainable Growth for Business Development (ICTSGBD)-2024 organized on the last week of February-24.
4. SVU Management Fest – 2024 was held on 1st week of Feb'24 with the following events: Exploria Business Quiz, Mind Mappers Start up competition, Speak up to Start up Business Plan Competition, and Smart Hospital System Prototype Design competition.

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

And

COMPUTER SCIENCE

ABOUT DEPARTMENT:

Department of Computer Science & Engineering (CSE) is a vibrant hub of innovation and learning, dedicated to advancing the field of computer science through rigorous education, ground-breaking research, and strong industry collaboration. We pride ourselves on fostering a dynamic and inclusive environment where students, faculty, and researchers can thrive and contribute to the technological advancements shaping our world. Our mission is to educate the next generation of computer scientists and engineers, drive cutting-edge research, and engage in meaningful service to society. We aim to equip our students with the knowledge, skills, and ethical grounding needed to tackle complex challenges and lead in a rapidly evolving technological landscape. The CSE department offers a comprehensive range of undergraduate and graduate programs designed to provide a strong foundation in both theoretical and practical aspects of computer science and engineering. Our curricula are continually updated to reflect the latest advancements in the field and to meet the demands of the industry. We emphasize hands-on learning, critical thinking, and problem-solving skills, preparing our students for successful careers in academia, industry, and entrepreneurship. Research is at the core of our department's identity. Our faculty and students are engaged in pioneering research across various domains, including: Artificial Intelligence and Machine Learning, Cybersecurity and Privacy, Data Science and Big Data Analytics, Human-Computer Interaction, Software Engineering and Systems. Our research initiatives are supported by state-of-the-art facilities and collaborative partnerships with leading academic institutions, industry players, and government agencies. We strive to address real-world problems and contribute to the broader scientific community through high-impact publications, patents, and technology transfer. We believe in the power of collaboration and community engagement.

The CSE department actively participates in outreach programs, workshops, and conferences, fostering a culture of continuous learning and exchange of ideas. We encourage interdisciplinary research and partnerships that bridge the gap between academia and industry, driving innovation and societal progress. Diversity and inclusion are fundamental values of our department. We are committed to creating a welcoming and supportive environment for all students, faculty, and staff, regardless of their background. We believe that diverse perspectives enhance creativity and innovation, leading to better outcomes for our community and society as a whole. As we continue to grow and evolve, the Department of Computer Science & Engineering remains dedicated to pushing the boundaries of knowledge, shaping the future of technology, and making a positive impact on the world. We invite you to explore our programs, research, and initiatives, and join us in our journey towards excellence and innovation.

Courses Offered:

- Diploma in Computer Science
- B Tech in Computer Science and Engineering
- MTech in Computer Science and Engineering

- Bachelor of Computer Application
- Master of Computer Application
- B.Tech in in Data Science
- Master of Science in Data Science
- B.SC(H) In Advanced Networking and Cyber Security
- Ph.D. in Computer Science and Engineering
- Ph.D. in Computer Science

EXTERNAL MEMBERS ON THE BOARD OF STUDIES

| SL. | NAME | DESIGNATION |
|-----|-------------------------|---|
| 1. | Prof. Amlan Chakraborti | Professor and Director, A.K. Choudhury School of Information Technology, University of Calcutta |
| 2. | Dr. Soumya Sen | Assistant Professor (Stage-II), A.K. Choudhury School of IT, University of Calcutta |
| 3. | Dr. Souvik Pal | Associate Professor, Sister Nivedita University |
| 4. | Dr. Sunirmal Khatua | Assistant Professor, Department of Computer Science & Engineering. University of Calcutta. |

FACULTY DETAILS

| Name of the Teacher | Specialization |
|-------------------------|---|
| MR. ARINDAM DAS | Machine Learning, Natural Language Processing |
| DR. AMITAVA KAR | Machine Learning |
| MS. PARAMITA SARKAR | Data science |
| MS. JAYEETA GHOSH | AI, ML |
| MS. PRIYANJNA MITRA | Generative AI |
| MR. PRADIP SAHOO | Machine Learning, AI, Generative AI, Android Development, IOS Development, NLP, Virtual Reality(VR) and Augmented Reality(AR), Blockchain |
| MR. SUBHODIP MUKHERJEE | Cloud Computing |
| DR. RANJAN KUMAR MONDAL | Cloud Computing, Internet of Things |

| | |
|-------------------------------|---|
| MR. MIMO PATRA | Cloud Computing |
| MR. ANIKET DEY | Machine Learning, AI, Generative AI, Android Development, IOS Development, NLP, Virtual Reality(VR) and Augmented Reality(AR), Blockchain |
| MS. SUMANA CHAKRABORTY | IMAGE PROCESSING, AI, ML |
| MR. APURBA SAHA | Cloud Computing |
| MR. SOURAV SAHA | Machine Learning, Image Processing, Artificial Intelligence |
| MR. SITI KANTHA CHATTOPADHYAY | Computer Vision & Image Processing |
| MR. SOURAV MALAKAR | Machine Learning, Deep Learning, Multimodal Large Language Models |
| MR. SAMIK BASU | Time Series Analysis, Data Visualization, High-Performance Data Processing, Scalable Machine Learning |
| Dr. SANJAY NAG | Medical Image Analysis, Digital Pathology, Health Informatics, Computer Vision & Image Processing |
| MR. SUBRATA NANDI | Cypher Text Encryption |
| MR. SOHAM MUKHERJEE | Generative AI |
| MS. SHARDHA ROYCHOWDHURY | Machine Learning, Deep Learning, Multimodal Large Language Models |
| Dr. Subir Gupta | Generative AI |
| MR. DEBAYAN BHATTACHARYYA | AI, ML |
| MR. BIPRADAS PANDIT | Cloud Computing |
| MR. KASHINATH DUTTA | Machine Learning, Deep Learning, Multimodal Large Language Models |
| MR. SAYAN CHAKRABORTY | AI and Machine Learning |
| Dr. CHAYAN PAUL | Machine Learning, Natural Language Processing |
| MR. JAYANTA CHOWDHURY | Machine Learning, Cloud Computing |
| MS. LIPIKA MUKHERJEE PAL | Machine learning |
| MS. DIPAM MISHRA | Machine Learning, Natural Language Processing |
| MS. BIJAYA BANERJEE | Data Science, IOT, supply chain, sustainable development |

| | |
|----------------------------|---|
| MS. SUPARNA BANDYOPADHYAY | Neural network, Machine learning (Tool: DL, nonlinear data forecasting, probability models) |
| MS. DIYOTIMA GHOSH | Time Series Analysis, Data Visualization, High-Performance Data Processing, Scalable Machine Learning |
| MS. PAYAL BOSE | Imaging System, Medical Imaging, Pattern Recognition, Computer Vision, Affective Computing, Computational Intelligence |
| MR. NISITH RANJAN ADHIKARI | Cloud Computing |
| MS. ARIMITRA BASU | Computer Vision & Image Processing |
| DR. SOMSUBHRA GUPTA | Machine Intelligence |
| MR. MANISH KUMAR DUBEY | Time Series Analysis, Data Visualization, High-Performance Data Processing, Scalable Machine Learning |
| MS. SUKRITI SANTRA | IoT Technology, Sensor Network |
| Dr. Rana Majumdar | Data science |
| Dr. Santanu Roy | Explainable AI (XAI), Natural Language Processing (NLP) |
| Dr. Anindya Bose | Generative AI |
| Mr. Saikat Banerjee | AI, ML |
| Mr. Subhashis Adhikari | Machine Learning, Deep Learning, Multimodal Large Language Models |
| Mr. Ranjit Senko | Computer Vision & Image Processing |
| Ms. Tanusree Gupta | AI, ML |
| Ms. Rakhi Chakraborty | Machine Learning, AI, Generative AI, Android Development, IOS Development, NLP, Virtual Reality(VR) and Augmented Reality(AR), Blockchain |
| Ms. Dipannita Basu | Data Science |
| Ms. Saswati Rakshit | Machine Learning, Deep Learning, Multimodal Large Language Models |
| Mrs. Swarnali Daw | Cloud Computing |
| MS. PARAMITA KUNDU MAJI | Machine Learning, AI, Generative AI, Android Development, IOS Development, NLP, Virtual Reality(VR) and Augmented Reality(AR), Blockchain |
| Dr. Sahana Das | Machine Intelligence |

| | |
|-------------------------|---|
| Ms. Chandrima Sinha Roy | Machine Learning, Natural Language Processing |
| Mr. Abhisek Roy | Machine Learning |
| Ms. DIPANNYTA NANDI | Web Techonology |
| Dr. Santanu Modak | Machine Learning, AI, Generative AI, Android Development, IOS Development, NLP, Virtual Reality(VR) and Augmented Reality(AR), Blockchain |

PUBLICATIONS

1. Banerjee Majumdar, S. Majumdar, S. Gupta, D. Singh, "A Heart Disease Prediction Model using Merged XGBoost-SVM Classifier and Particle Swarm Optimization", Proceedings of the 5th Int. Conf. on Mobile Computing and Sustainable Informatics (ICMCSI) 2024, ISBN: 979-8-3503-9523-5/24, pp. 241-248, 2024. Available at IEEE Xplore (SCOPUS)
2. A Roy, S Gupta, "New-normal Object-Oriented Dynamic Learning Environment (NOODLE) to address Digital Divide", ICIS 2022, published as Research Article, AIP proceedings (both Scopus and WoS), ISSN:1551-7616, ISBN: 978-0-7354- 4751-6, Vol: 2878, 020013-1–020013-6, 2023. (<https://doi.org/10.1063/5.0171355>) (Ibn -Zohr Univ., Agadir, MOROCCO)
3. A Datta, S Gupta, "Ubiquitous Devices Safety using Cyber Security", ICIS 2022, published as Research Article, AIP proceedings (both Scopus and WoS), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020014-1–020014-5, 2023. (<https://doi.org/10.1063/5.0171358>) (Ibn -Zohr Univ., Agadir, MOROCCO)
3. A Banerjee Majumder, S Gupta, D. Singh, S. Majumder, "A COVID-19 Prediction Model using Bagging under the framework of Machine Learning", ICIS 2022, published as Research Article, AIP proceedings (both Scopus and WoS), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020021-1–020021-6, 2023. (<https://doi.org/10.1063/5.0171279>) (Ibn -Zohr Univ., Agadir, MOROCCO)
4. A. Chakraborty, AK Shaw, M. Chakraborty, S.Gupta, "Exploring Genetic Algorithm to optimize hyper parameter for training of Artificial Neural Network", ICIS 2022, published as Research Article, AIP proceedings (both Scopus and WoS), ISSN:1551- 7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020022-1–020022-6, 2023. (<https://doi.org/10.1063/5.0170980>) (Ibn -Zohr Univ., Agadir, MOROCCO)
5. P. Das, S. Gupta, B. Neogi, "Music Therapy for hearing impaired: Measuring impact of vibration on deaf and dumb using Digital Signal Processing and Machine Intelligence ", ICIS 2022, published as Research Article, AIP proceedings (both Scopus and WoS), ISSN:1551-7616, ISBN: 978-0-7354- 4751-6, Vol: 2878,020023-1–020023-6,2023. (<https://doi.org/10.1063/5.0171157>) (Ibn -Zohr Univ., Agadir, MOROCCO)
6. S. Saha, A. Dhar, S. Gupta, "Mining Math-Bio rule in recognizing pattern using Machine Intelligence", ", ICIS 2022, published as Research Article, AIP proceedings (both Scopus and WoS), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020025-1–020025-6, 2023.

(<https://doi.org/10.1063/5.0171360>) (Ibn -Zohr Univ., Agadir, MOROCCO)

7. B. Sutradhar, S. Rakshit, S.Gupta, "Multimodal identification of face mask as a precautionary measure using Digital Image Processing", ", ICIS 2022, published as Research Article, AIP proceedings (both Scopus and WoS), ISSN:1551-7616, ISBN: 978- 0-7354-4751-6, Vol: 2878, 020026-1–020026-5, 2023. (<https://doi.org/10.1063/5.0171365>) (Ibn -Zohr Univ., Agadir, MOROCCO)

Scopus / non-Scopus presented (In press)

1. M.K. Srivastav, S. Gupta, S. Som, "Exploring Influence Score Determinants in Social Network Analysis and Clustering via K-Means Algorithm", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

2. Datta, S. Gupta, S. Som, "Addressing Security Challenges of Payments System in hand held devices", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

3. D. Barik, S. Gupta, S. Som, "Evaluation of Autism Screening Tools for Toddlers: A Comparative Approach", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

4. D. Dasgupta, S. Daw, S. Chakraborty, A. Chakraborty, S. Gupta, "Detection of Speech Emotion under the framework of Machine Learning", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

5. S. Dutta Ghoshal, S. Saha, S. Mukherjee, S. Gupta, "Smart accommodation through exploratory analysis of Geolocational data with fire and smell sensor", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

6. M. Chowdhury, S. Ghosh, S. Gupta, "Enhancing Queue Management and Customer Satisfaction in University Canteens through Fuzzy Logic-based E-Canteen Automation", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

7. S. Biswas, A Banerjee, S. Gupta, "Heart Disease Prediction from Symptom Analysis Using Machine Learning: An Overview", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

8. S. Gayan, Sk. Afsar Ali, D. Das, W.K. Mallick, S. Gupta, "Pseudo Code Processor with Hybrid Programming extension", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

9. R. Pal Das, P. Das, S. Karmakar, S. Saha, S. RoyChowdhury, S. Gupta, "Human gesture incorporated Intelligent System Assistant", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

10. N. Roy, S. Debnath, A. Chowdhury, S. Mal, S. Gupta, "Multi-factor authentication System incorporating Fingerprint, Face and Voice tokens", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)

11. K. Ghosh, A. Deb, R.K. Mandal, S. Gupta, "ATbot: Data Science driven Intelligent System for improved Trading Strategies", In Proc of International Conference on Innovation and Advancements in Management and Social Science (ICIAMS) 2023, August, 2023. (In press)
12. Paul, A. Roy, Md. R. Khan, M. Mondal, S. Gupta, "Predictive Analytics driven time oriented prioritized Task Assistant under the framework of Machine Intelligence", In Proc of International Conference on Innovation and Advancements in Management and Social Science (ICIAMS) 2023, August, 2023. (In press)
13. A. Roy, N. Dey, J. Chakraborty, A.K. Prasad, P. Chakraborty, S. Gupta, "Auto-Sales: A Machine Learning and Data Mining driven Business Analytics System", In Proc of International Conference on Innovation and Advancements in Management and Social Science (ICIAMS) 2023, August, 2023. (In press)
14. M. Ghosh, S. Gupta, "INTERACTIVE GUARDIAN KIOSK SYSTEM FOR INFORMATION DISSEMINATION", In Proc of International Conference on Women Empowerment & Inclusivity: Emerging Trends (ICWEI) 2023, August, 2023. (In press)
15. P. Parui, P. Ghosh, S. Majumder, P. Mahato, R.K. Das, S. Gupta, "12-Pedia: Artificial Intelligence driven System for imparting knowledge online", In Proc of International Conference on Women Empowerment & Inclusivity: Emerging Trends (ICWEI) 2023, August, 2023. (In press)
16. Das, A. Sarkar, R. Shil, S. Gupta, "Found Code: Web resource provider and On-line educator of Programming Languages", In Proc of International Conference on Women Empowerment & Inclusivity: Emerging Trends (ICWEI) 2023, August, 2023. (In press)
17. Bhattacharjee, N. Prakash, M. Chowdhury, M. Maity, S. Gupta, "Nutritional Research Methodology Analytics", presented at Int. Conf on Multidisciplinary Research Methodology and IPR(ICMRM) 2023, Pid: 43, 2023
18. P. Roy, S. Gupta, T. Chatterjee, K. Banerjee, S. Gupta, "Extended Analytics in Research Methodology across various verticals: A review", presented at Int. Conf on Multidisciplinary Research Methodology and IPR(ICMRM) 2023, Pid: 44, 2023
19. P. Roy, S. Gupta, T. Chatterjee, K. Banerjee, S. Gupta, "A Generic Platform-independent research Methodology Framework Converging to Product Commercialization ", presented at Int. Conf on Multidisciplinary Research Methodology and IPR(ICMRM) 2023, Pid: 45, 2023
20. M. Mukherjee, S. Gupta, "Illustrative Accreditation Research Methodology", presented at Int. Conf on Multidisciplinary Research Methodology and IPR(ICMRM) 2023, Pid: 46, 2023
21. Satyabrata Podder , Arka Dasgupta and Sumana Chakraborty "Recent Trends of Applications of AI Tools for Surface Irregularities Detection in NDT", Organizer: All India Conference on Intelligent Systems & Security Challenges in Industry 5.0 -"ISSCI-2023"
22. Nandi Subrata, Satyabrata Roy, Srinivasan Krishnaswamy, and Pinaki Mitra. "IEMS3: An Image Encryption Scheme Using Modified SNOW 3G Algorithm." In International Conference on Network Security and Blockchain Technology, pp. 161-172. Singapore: Springer Nature

Singapore, 2023.

23. Payal Bose, Shawni Dutta, Vishal Goyal, Samir K. Bandyopadhyay (2023). A Graphical-Based Video Steganography for Information Security. In: Kaiser, M.S., Xie, J., Rathore, V.S. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2021). Lecture Notes in Networks and Systems, vol 401. Springer, Singapore. https://doi.org/10.1007/978-981-19-0098-3_52
24. Shawni Dutta, Payal Bose, Samir Kumar Bandyopadhyay, Midhun chakkaravarthy Janarthanan (2023). A Novel SARS- COV-2 Variant Omicron Disseminating Evaluation. In: Reddy, A.B., Nagini, S., Balas, V.E., Raju, K.S. (eds) Proceedings of Third International Conference on Advances in Computer Engineering and Communication Systems. Lecture Notes in Networks and Systems, vol 612. Springer, Singapore. https://doi.org/10.1007/978-981-19-9228-5_5
25. Shawni Dutta, Payal Bose, Samir Kumar Bandyopadhyay, Midhun chakkaravarthy Janarthanan (2023). An Intelligent Approach for Investigating Water Quality Using Machine Learning Models. In: Noor, A., Saroha, K., Pricop, E., Sen, A., Trivedi, G. (eds) Proceedings of Third Emerging Trends and Technologies on Intelligent Systems. ETTIS 2023. Lecture Notes in Networks and Systems, vol 730. Springer, Singapore. https://doi.org/10.1007/978-981-99-3963-3_5
26. P. Nag, S. Maji, P. Roy Choudhury, S. Chatterjee, S. Bose, Recent Advancement and Future Perspective of 6G Communication, In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)
27. A.Roy, I.Paul, S. Bose, A Smart Farming Production Approach Using Drones and IoT after pandemic situations, In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)
28. A. Dutta, S. Bose, Study and Development of Online Recommendation System for Healthcare Support, In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)
29. J. Paul, S. Bose, Study and development of a Machine Learning- Based Intelligent Food Recommendation System, In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)
30. A. Bose, R. Pal Das, S. Bose, Visualization of Figural Representation and Emotion Recognition Using Deep Learning, In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023. (In press)
31. S. Bose, Disease Prediction System using Machine Learning, In Proc of International Conference on Engineering Design and Computing (ICEDC)-2024, February 2024.
32. S. Bose, A. Mondal, Cognitive Transfer Learning: Leveraging Human-Like Learning Strategies for Machine Intelligence, In Proc of International Conference on Engineering Design and Computing (ICEDC)-2024, February 2024.
33. S. Bose, R. Mondal, Ephemeral Learning Machines: Adaptable Models for Rapidly Changing Data Environments, In Proc of International Conference on Engineering Design and

Computing (ICEDC)-2024,February 2024.

34. S. Bose, M.Mandal, Meta-Reasoning Agents: Self-Aware Systems for Autonomous Decision-Making, In Proc of International Conference on Engineering Design and Computing (ICEDC)- 2024,February 2024.

35. S.Bose, A.Chatterjee, Fashion Trend forecasting with machine learning: predicting consumer preferences for personalized recommendation Proc of International Conference on Engineering Design and Computing (ICEDC)-2024,February 2024.

36. S.Bose, S.Saha, Graph neural network for culinary pairing enhancing flavor harmony in food recommendation, In Proc of International Conference on Engineering Design and Computing (ICEDC)-2024,February 2024.

37. S.Bose, N.kumari, Eco aware Machine learning: Minimizing Environmental Footprints in Model training, In Proc of International Conference on Engineering Design and Computing (ICEDC)- 2024,February 2024.

38. S. Bose, S. Pramanick, QUANTUM-INSPIRED NEURAL NETWORKS: A HYBRID APPROACH TO ENHANCE COMPUTATIONAL EFFICIENCY, In Proc of International Conference on Engineering Design and Computing (ICEDC)-2024,February 2024.

39. S.Bose, P.Gorai, Neuromyotonic Fusion: Integrating Symbolic Reasoning with Deep Learning Architectures, In Proc of International Conference on Engineering Design and Computing (ICEDC)-2024,February 2024.

40. S.Bose,S.Midya, Dynamic Object Recognition in Visual Search: A Real Time Machine Learning Framework,In Proc of International Conference on Engineering Design and Computing (ICEDC)- 2024,February 2024.

41. S. Bose,S. Acharjya, Leaf Disease Detection using Machine Learning: A Review and Comparative Analysis, In Proc of International Conference on Engineering Design and Computing (ICEDC)- 2024,February 2024.

42. S.Bose, S.Marick, Disease Prediction System using Machine Learning, In Proc of International Conference on Engineering Design and Computing (ICEDC)-2024,February 2024.

43. S. Bose, S. Ghosh, Face recognition-grounded attendance monitoring system for educational institution, In Proc of International Conference on Engineering Design and Computing (ICEDC)-2024,February 2024.

Books :

1. M.K. Srivastav, S. Gupta, V.M. Priyadarshini, S. Som, B. Acharya, V.C.Gerogiannis, A.Kanavos , J. Karamitsos, "Utilizing Degree Centrality Measures for Product Advertisement in Social Network", Lecture Notes in Business Information Processing, Springer DOI: 10.1007/978-3-031-56481_9_6, Vol. 502, pp. 77-91, 2024 (SCOPUS indexed)

2. Dr. Ranjan Kumar Mondal, “Mobile Cloud Computing”, Emerging Trends in Cloud Computing Analytics, Scalability, and Service Models, IGI Global 01/2024, DOI: 10.4018/979-8-3693-0900-1.ch009

3. Sukriti Santra, “Building a Predictive Sustainability Framework”, Book Title: Sustainable and Predictive Analytics Model, Chapter 6, pp. 143-156, January 2023, [ISBN Number: 978-93-5967-752-1]

4. Sangita Bose, Department of Computer Science, Swami Vivekananda University, “Sustainable and Predictive Analytics Model”, , Chapter 12, pp. 143-156, January 2023, [ISBN Number: 978- 93-5967-752-1]

Journal

1. Banerjee Majumder, S. Gupta, D. Singh, B. Acharya , V.C.Gerogiannis, A.Kanavos , P. Pintelas, “Heart Disease Prediction Using Concatenated Hybrid Ensemble Classifiers", Algorithms 2023, ISSN: 1999-4893, Volume 16, No. 538. Pp. 1-19, 2023 IF 2.3 (ESCI, SCOPUS) (<https://doi.org/10.3390/a16120538>)

2. Annwsha Banerjee Majumder, Somsubhra Gupta, Dharmpal Singh, Sourav Majumder An Ensemble Model for Predicting Cardiovascular Disease utilizing Nature Inspired Optimization, Bagdad Science Journal Baghdad Science Journal ISSN-2411- 7986 (Accepted) (ESCI, SCOPUS)

3. Annwsha Banerjee, Somsubhra Gupta and Dharmpal Singh Performance Analysis of Different Feature Selection Methodologies in Classification of COVID-19 with Detail Feature Analysis Indian Journal of Natural Sciences Vol-15 Issue-84 pp 74634-74641 (Web of Science)

4. Annwsha Banerjee Majumder, Somsubhra Gupta, Sourav Majumder , Dharmpal Singh Intelligent healthcare for cardiac patients utilizing neural networks, k-means clustering, and ad hoc routing, Science Engineering and Health Studies ISSN-2630 – 0087 (Accepted) (SCOPUS)

[PAGE-181]

5. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumder, “An Advanced Model to Predict Heart Disease applying Random Forest Classifier and Whale Optimization Algorithm”, Indian Journal of Science and Technology (IJST), ISSN: 0974-6846, Vol. 16, No. 43, pp. 3679-3690, 2023. (<https://doi.org/10.17485/IJST/v16i41.1756>) (Web of Science)

6. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumder, “ An optimized Model for Heart Disease Prediction with Customized Ensemble Voting Classifier and Nature Inspired Optimization ", Indian Journal of Science and Technology (IJST), ISSN: 0974-6846, Vol. 16 No. 34 pp. 2719-2729, 2023. (<https://doi.org/10.17485/IJST/v16i34.1004>) (Web of Science)

7. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumder, “Genetic Algorithm Inspired Intelligent COVID-19 Prediction Model using Data Mining”, Indian Journal of Natural Sciences (IJONS), ISSN: 0976 -0997, Vol: 14, Issue: 79, pp, 58969 -58978, 2023. (Web of Science)

8. N. Chaudhuri, S. Gupta, S. Banik, S. Das, R. Singh, “Approximate measure of class response

through Content Based Video Retrieval using Digital Image Processing under the framework of Machine Intelligence”, Indian Journal of Natural Sciences (IJONS), ISSN: 0976 -0997, Vol 14, Issue: 81, pp. 65915-65921, Dec 2023. (Web of Science)

9. Banerjee Majumdar, S. Gupta, D. Singh “AN EXPLAINABLE HYBRID INTELLIGENT SYSTEM FOR PREDICTION OF CARDIOVASCULAR DISEASE”, Journal of Mines, Metals and Fuels (JMMF), ISSN: 0022- 2755, Vol: 71, Issue: 5, pp, 687-694, 2023. (SCOPUS)

10. M.K. Srivastav, S Gupta, “An approach for exploring practical phenomena in Social Network Analysis”, Journal of Mines, Metals and Fuels (JMMF), ISSN: 0022-2755, , Vol: 71, Issue: 5, pp 583-587, 2023 (SCOPUS)

11. S. Bhowmik, A. Mandal, A. Bose, S. Singha Roy, A. Vishwakarma, S. Gupta, “Machine Learning driven healthcare through online Gym under the framework of Artificial Life", Educational Administration: Theory and Practice, ISSN 2148-2403, Vol: 30, No.3, pp. 2215-2225, 2024 (SCOPUS)

12. M. Chowdhury, S. Ghosh, S. Gupta, ”Intelligent System with Food and Nutrition criterion”, Educational Administration: Theory and Practice, ISSN 2148-2403, Vol: 30, No.3, pp. 2244-2253, 2024 (SCOPUS)

13. S. Gupta, P. Das, B. Neogi, A. Roy, M. Sur, M. Maity, T. Majumder, “Technology Enhanced Learning driven music inspired LEARN with NOODLE model for inclusive education”, Journal of Engineering Education Transformation (JEET), ISSN 2349-2473, Vol. No: 37, pp. 156-164, 2024. (SCOPUS)

14. Avijit Gayen, Sukriti Santra, Ayush Dey and Angshuman Jana, “A Network Model to Study the Underlying Characteristics of Phishing Sites,” in IEEE Networking Letters, doi: 10.1109/LNET.2023.3347724.

15. Shawni Dutta, Payal Bose, Samir Kumar Bandyopadhyay (2023). “Forecasting Health Insurance Premium Using Machine Learning Approaches". Asia-Pacific Journal of Science and Technology. DOI: <https://doi.org/10.14456/apst.2023.96>

Patent

1. Published patent entitled “Interactive Technology driven Low- cost Virtual learning Devices NOODLE for equity to address digital divide”, (Appl. No. 202331012519A) published on 10th March 2023. (Joint) [SVU]

2. Published patent entitled “MUSIC THERAPY DEVICE FOR DEAF AND DUMB”, (Appl. No. 202331085483 A) published on 19th January 2024.(Joint) [SVU]

3. Published patent entitled “Robotic vehicle using ATMEGA328 microcontroller, ultrasonic sensor and Bluetooth for wireless control and data feedback, obstacle avoidance and autonomous manoeuvres with precise area scanning”, (Appl. No. 202431006559 A) published on 9th February 2024.(Joint) [SVU]

4. Published patent entitled "Model to efficiently capture persistent surveillance of user activity and user profile behaviors in complex network”, published 202331055339A 08-09-2023

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

1. International Conference on Integrative Science and Engineering (ICISE) 2023, Track -I- Next generation Computing, 28th -30th September
2. International Conference on Engineering Design and Computing (ICEDC)-2024, 22nd -24th February 2024

DEPARTMENT OF ENGLISH

ABOUT DEPARTMENT:

The department of English in the Pune University campus is striving for enrichment of the language and providing in depth aesthetic knowledge and an eagerness to appreciate the language in its ingenuity to the students who come here to avail themselves of the course. Papers like English Language Teaching (ELT), writing and Editing for Media, Creative Writing, Contemporary Critical Theory, Film Studies, Script Writing for Films, and Life Writing, taught in the UG & PG program make the Department distinct. The aim of the Department is to promote intellectual and critical thinking among students, and inculcating professionalism with humanitarian attitude, through teaching and training of English literature, language, and genre studies. The department's objective is to provide an environment for holistic development of the students.

Courses Offered :

- B.A.(H) in English
- M.A. in English
- Ph.D. in English

EXTERNAL MEMBERS ON THE BOARD OF STUDIES

| SL. | NAME | DESIGNATION |
|-----|-----------------------|------------------------------|
| 1. | Dr. Sohel Aziz | Aliah University |
| 2. | Dr. Monisha Sarkar | East Calcutta Girls' College |
| 3. | Dr. Shubh Brat Sarkar | Rishi Bankim Chandra College |

FACULTY DETAILS

| Name of the Teacher | Specialization |
|---------------------------|---|
| Dr. Rituparna Chakranorty | Postcolonial Studies, Gender Studies, Tagore Studies |
| Dr. Shubham Bhattacharjee | Modernism and Post Modernism |
| Mr. Agnideep Datta | Critical Prison Studies, Genocide Studies, South Asian Literature, Phenomenology |
| Dr. Hindol Chakraborty | Art and the Sublime Romantic Literature Memory Studies Literary Theory and Criticism Urdu Poetry |
| Mr. Anirban Banerjee | Folklore, Mythology, Indian English Literature |
| Ms. Natasha Chatterjee | Postcolonial studies, Feminist Literature, Indian English Literature |

| | |
|-----------------------------|---|
| Dr. Tirna Sadhu | Postcolonial Literature, Early Modern British Literature, Diaspora Studies, Dalit Studies, Partition Studies, Transgender Studies. |
| Dr. Shreyoshi Dhar | Psychoanalysis, Gender Studies, Victorian Literature |
| Mr. Debarshi Arathdar | Cognitive Literary Studies, Narratology, Philosophy of Mind, Contemporary Literary Theory, Interface between AI and Literature |
| Dr. Soumyarup Bhattacharjee | Gothic Literature, South and Southeast Asian Literature, Postcolonial Literature, Horror Literature and Cinema |
| Dr. Manish Prasad | Tagore Studies, 19th Century Bengali Literature |
| Dr. Moupikta Mukherjee | Folklore, Mythology, Indian English Literature |
| Dr. Shantanu Siuli | Sports Humanities, Myth and Criticism, Ecocriticism |
| Dr. Priyanka Dey | Critical Prison Studies, Genocide Studies, South Asian Literature, Phenomenology |
| Dr. Micah K Thambi | Postcolonial Literature, Early Modern British Literature, Diaspora Studies, Dalit Studies, Partition Studies, Transgender Studies. |
| Ms. Sonakshi Mukherjee | Cognitive Literary Studies, Narratology, Philosophy of Mind, Contemporary Literary Theory, Interface between AI and Literature |
| Mr. Debashis Roy | Gothic Literature, South and Southeast Asian Literature, Postcolonial Literature, Horror Literature and Cinema |
| Dr. Debasish Chattopadhyay | Postcolonial Studies, Gender Studies, Autobiographical Writing, Literary Theory and Criticism, Middle East Studies, Israeli Literature, Holocaust Studies, Diaspora Studies |

PUBLICATIONS

Journal Publication :

- Author – Rituparna Chakraborty , Name of the journal – Bangla Journal , Title of the paper – Women : Problems, Empowerment and Identity ,Vol no., Issue no. – 14th year, 22 nd Issue, ISSN – 1488- 0792
- Author – Rituparna Chakraborty ,Name of the journal – International journal of Advanced Academic Studies , Title of the paper – Crime and Punishment : Re-reading Agatha Christie’s novel Murder on the Orient Express , DOI [https:// doi. org/ 10.33545 / 27068919.2022v4.i2c.806](https://doi.org/10.33545/27068919.2022v4.i2c.806) , E- ISSN : 2706-8927 , P-ISSN -2706 – 8919

- Author - Souvik Tewari, Shraddha Vaishnav, Sunanda Biswas, Ranajit Kumar Khalua, Rituparna Chakraborty and Aparupa Chakraborty, Name of the journal - Uttar Pradesh Journal of Zoology , Title of the paper - Fish Liver Oil : Omega-3 Fatty acid and HumanHealth
- Author - Rituparna Chakraborty , Name of the journal- International Journal of Research in English , Title of the paper - Race, gender and religion : A postcolonial reading of Kipling's The Light that Failed and Kim
- Published a paper titled "A Journey through Homes: Relooking the looking glasses of Geographical Partition", Debashis Roy, Journal of Digital Arts & Humanities, Vol.3(1), 2022, ISSN: 2712- 8148 (https://doi.org/10.33847/2712-8148.3.1_2)

Edited Book :

- Associate editor in Modern Trends in Multidisciplinary Subjects, Volume I published by Redshine Publication, November 2022, ISBN: 978- 93-954546-62-3.
- **Paper presentation in Seminars/ Conference:-**
- XV National Conference on Women's Studies "Women in a Changing World : Restructured Inequalities, Countercurrents and Sites of Resistance" , Title of the paper – Speaking of the subaltern in Rabindranath Tagore's Dance Drama Chandalika and Nagraj Manjule's movie Fandry , Venue - University of Madras, Chennai
- Two Days' International Seminar on Negotiations between the Local and Global in Cultural Bengal : Community, Society and Politics , Title of the paper – Interrogating the politics of Colonialism and Nationalism : A Post-colonial reading of Tagore's novels Four Chapters and Gora , Venue – Acharya Brojendra Nath Seal College, Cooch Behar
- International Conference hosted by Shastri Indo-Canadian Institute, New Delhi and Department of English, School of Humanities, Pondicherry University on Convergence and Divergence : Indian writing in a global context – Canadian and Indian Perspective , Title of the paper – Problems of translating Nonsense : Situating Sukumar Ray in a Global Context , Venue – Pondicherry University
- International Conference on Comparing Comparative Literature organized by Department of Comparative Literature Jadavpur University , Title of the paper – My Experience of studying Comparative Literature , Venue – Jadavpur University
- International Seminar on Understanding Environment in the context of contemporary society, culture and education organized by Department of Education , University of Gour Banga in collaboration with by anjan barna Foundation , Title of the paper – Delineation of environment in selected novels and stories of Arthur Conan Doyle , Venue – University of Gour Banga
- National Seminar on Print, Culture and Society : Interdependence and Emerging Trend , Title of the paper - Delineation of women in select fictions of Arthur Conan Doyle , Venue - Swami Vivekananda University

ACTIVITIES (SEMINAR, CONFERENCE & WORKSHOP)

- International Conference on Literature, Media and Cultural Studies: Symbiosis and Emerging Trends , Date: 25, 26, and 27th May, 2023
- National Seminar on Print, Culture, and Society: Interdependence and Emerging Trends, Date: 29th and 30th April, 2022

Training & Placement

The Training and Placement Cell of Swami Vivekananda University, Barrackpore serves as a vital link between the academic world and the corporate sector, playing an instrumental role in shaping the professional future of students. The Cell is deeply committed to providing every student with the necessary skills, exposure, and confidence to excel in today's highly competitive job market. Its primary goal is to prepare students for successful careers by nurturing their technical competence, professional ethics, and overall personality.

The University is proud to announce an outstanding 89% placement rate during the academic session 2023–24, which stands as a testament to the dedication of both the students and the continuous efforts of the Training and Placement Cell. Several reputed national and multinational companies have participated in campus recruitment drives, offering diverse job opportunities across various domains.

One of the most distinctive features of the University's placement ecosystem is that skilled training facilities are provided to all students right from the very first day of their classes. This early exposure ensures that students are industry-ready well before the completion of their academic programs. Specialized training modules and certification programs are offered in Artificial Intelligence, Data Science, Full Stack Development, Bioinformatics, Electric Vehicles (EV), Solar Technology, 3D Design, and other cutting-edge fields aligned with global industry demands.

The Cell also organizes regular workshops, technical sessions, aptitude training, mock interviews, group discussions, and personality development programs to help students enhance their communication skills, problem-solving ability, and professional attitude. In addition, industrial visits and internship opportunities are facilitated in collaboration with leading companies to give students practical insight into workplace operations and corporate culture. The Training and Placement Cell maintains a robust network with corporate organizations, research institutions, and industry leaders, ensuring consistent engagement through seminars, guest lectures, and collaborative projects. The Cell's vision is to develop a dynamic environment where academic excellence meets real-world experience, empowering students to become competent professionals and responsible citizens.

With a focus on holistic development, skill enhancement, and lifelong learning, the Training and Placement Cell of Swami Vivekananda University continues to be a driving force in ensuring that its graduates are not only employable but also future-ready innovators and leaders in their chosen fields.

Some Glimpses of our Activities :

