SOUMYA GHOSH



Personal Details: -

Date of Birth : 11th Oct, 1985

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Brief Overview: -

☑ Now working at SWAMI VIVEKANANDA UNIVERSITY as an Asst. Professor (Coordinator) in Mechanical Dept. from 1st September onwards.

- ☑ Working at ADAMAS UNIVERSITY as an Asst. Professor in Mechanical Dept. from 13th July 2018 to 31st August, 2021
- ☑ Working at DIATM Durgapur (B.Tech College) as an Assistant Professor in Mechanical Dept. From 13th February 2012 to 12th July 2018
- ☑ Working at CSIR-CMERI Durgapur as a Project Asst. From 26th December 2010 to 7th February 2012
- ☑ Started part time PhD in NIT Durgapur in the topic of "Experimental studies on thermal performance Enhancement of Solar Air Heater with novel Hybrid Tape using different geometrical shapes in circular & Non circular pipes" (Registration Process is Completed on 27/09/2022)
- ☑ Completed M.Tech (Design & Production) From National Institute of Technology (Durgapur) in the year of 2016.
- ☑ *Completed* B.Tech. In Mechanical Engineering from West Bengal University of Technology in 2010.

Educational qualifications: -

School name	Examination	Board	Year of passing
Bharati High	Madhyami	West Bengal board ofsecondary education.	2001(Marks-
School	k(10 th)		60.75%)

COLLEGE NAME	EXAMINATOIN PASSED	BOARD	YEAR OF PASSING	(%) OF MARKS
NIT (Durgapur)	M.Tech (Design & Production).	NIT	201 6	CGPA= 7.80
Seacom Engineering	B.Tech(Mechanical)	WBUT	201 0	DGPA=8.28(Degree Grade Point Avg.)
B.P.C. Institute of Technology	Diploma	WBSCTE	200 7	74.3%

Innovative Project done during B. Tech & MTech courses:-

- ➤ In Cutting Tool Modification & Cutting Force Analysis (B.Tech).
- Scope for using underutilized Hydraulic sources a Re-emphasis on role of Hydram(M.Tech)
- Few of the students completed their project model under the guidance of me which ispresented in the Young Entrepreneur Summit Pune-2019
- Fabricate the Abrasive Jet Machining Set Up under the guidance of me in our Central Workshop Under the University Level Cast Tone Project Category (University FundedProject).
- ➤ "Commercialized Implementation of Hydraulic Ram Pump System"-Students Project Presentation in 5th International Level IEEE Project Competition-2021 Under the guidanceof me.

Conference Paper Presentation: -

- ➤ Soumya Ghosh, "Scope for using underutilized hydraulic sources a Re-emphasis on the role of Hydram" present a paper in National Conference name "Enabling Sustainable Development in Mechanical Engineering in the context of Make in India" organized by DIATM, on 3-5April 2017.
- Soumya Ghosh, "Renewable Energy (Hydraulic Ram pump) used in poor and remote communication in hilly region" present a paper in National Conference name "Enabling Sustainable Development in Mechanical Engineering impact of environment" organized by DIATM, on 2-4 March 2018.
- Conference Proceedings "CFD Study on Structural Parameters of Airwing beased on NACA 2412 Profile using Different Composite Material" International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181.

- <u>List of Publication (Journal):</u> i) "Effects of a novel hybrid turbulator tape on the thermohydraulic performance and irreversibility of a solar air heater" February 2024 Case Studies in Thermal Engineering DOI: https://doi.org/10.1016/j.csite.2024.104132, published Date- March 2024.
- ii) "Heat Transfer Augmentation in a Mini-channel Using Magnetic Nanofluid and Magnetic Vortex" In book: Advances in Computational Heat and Mass Transfer, DOI: http://dx.doi.org/10.1007/978-3-031-66609-4 1, Published Date: September 2024
- iii) "Scope for using underutilized hydraulic sources a Re-emphasis on the role of Hydram" Soumya ghosh et.al. Int.Journal of Engineering Research and Application ISSN: 2248-9622, Vol.8, Issue7(part-I) July 2018, pp 42-47.DOI: 10.9790/9622-080701424742
- iv) "Performance Characteristics for a Pelton Wheel-Case Study" Int. journal of Engineering Research and Application ISSN: 2248-9622, Vol.11, Issue 1 (Series-II) July 2018, pp 12-16. DOI: 10.9790/9622-1101021216
- v) "CFD Study of Elbow Draft Tube to Increase the Pressure Energy at the Outlet of the Reaction Turbine Using Different Geometrical Configurations" Int. journal of Engineering Research & Application ISSN:2248-9622, Vol.11, Issue 6 (Series-IV) July 2021, pp. 23-30. DOI: 10.17577/IJERTCONV9IS11068
- vi) "A CFD study on the structural parameters of NACA 2412 airfoil-based air-wing using different composite materials "Elsevier, Material Today: Proceeding. DOI: https://doi.org/10.1016/j.matpr.2021.10.025
- vii) "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) DOI: https://doi.org/10.1080/10407790.2024.2329256 published date-28/03/2024.
- viii) "Experimental Analysis of Cutting Forces Under Different Machining Parameters and Carbide Inserts During Turning of Hardened AISI 4340 Steel" Soumya ghosh et.al. Journal of Polymer & Composites (Scopus) ISSN: 2321-2810, DOI (Journal): 10.37591/JoPC, Published Date: November 30, 2022
- ix) "Damage Localization in a Beam by Lifting Wavelet Scheme and Photographic based Experimentation" Journal of Mines, Metals & Fuels (Scopus) DOI: https://doi.org/10.18311/jmmf/2023/43926 Published Date-24/05/2024.
- x) "CoO Substituted Borate 1393B3 Glass Scaffold with Enhanced Metallurgical Performance" Journal of Mines, Metal & Fuels (Scopus) DOI: https://doi.org/10.18311/jmmf/2023/43176 Published Date-24/05/2024.
- <u>List of Publication (Book Chapter)</u>: i) "Introduction to enhanced heat transfer" Nova publication ISBN No. 978-1-68507-459-3-Hand book of Research on Heat transfer. Date-20/12/2021. DOI: http://dx.doi.org/10.52305/CVRY6117 (Book Chapter)
- ii) "Investigation of the influence of novel hybrid tape on thermohydraulic characteristics in a solar air heater: An Experimental Study" paper has been shortlisted for consideration for the special issue of the Journal: Heat Transfer Engineering, published by Taylor and Francis (SCI). This journal has an impact factor of 2.172. DOI: http://dx.doi.org/10.1007/978-981-19-6270-7 91 (Book Chapter)
- <u>List of Patent (INDIA):-</u> i) Title of the invention- Solar Powered Automated Rooftop shielding Mechanism. Date of Publication-29/07/2022, Name of the applicant-Sawmi Vivekananda University, Name of the Inventor-Soumya Ghosh. Application No.-202231038246A.
- ii) Title of the invention- Hydraulic Ram Pump System for water lifting in hilly region. Date of Publication-29/07/2022, Name of the applicant-Sawmi Vivekananda University, Name of the Inventor-Soumya Ghosh, Application No.- 202231035645A

- iii) Title of the invention- HUMOBOT-Multiple robot assistant in post pandemic, Name of the applicant-Swami Vivekananda University, Name of the Inventor-Soumya Ghosh. Application No202231038993 A ii. Title of the invention- Smart Solar Grass Cutter, Name of the applicant-Swami Vivekananda University, Name of the Inventor-Soumya Ghosh. Application No202231038992 A
- iv) Title of the invention Solar Powered Automatic Tobacco/ non tobacco products vending machine, Name of the applicant- Swami Vivekananda University, Name of the Inventor- Soumya Ghosh. Application No202431024111 A.
- v) Title of the Invention-Solar Air Heater, Name of the applicant- Swami Vivekananda University, Name of the inventor-Soumya Ghosh, Application no- 202431028487A.
- vi) Title of the Invention- Mini Hydraulic Jack: Compact Solution for Lifting & Support, , Name of the applicant- Swami Vivekananda University, Name of the inventor-Soumya Ghosh, Application no-202431060077A
- vii) Title of the Invention- Harnessing Hydro Energy on a small scale: Portable Mini Hydropower plant, , Name of the applicant- Swami Vivekananda University, Name of the inventor-Soumya Ghosh, Application no- 202431060513A
- viii) Title of the Invention- Safe Guard: Gas Leakage Detection & Protection System for home & Industries Name of the applicant- Swami Vivekananda University, Name of the inventor-Soumya Ghosh, Application no- 202431064477A

Seminar & FDP Attended: -

- At "MECHANICS OF COMPOSITE AND FUCTIONALLY GRADED MATERIALS (MCFGM-2013)", NIT-DURGAPUR (5Days).
- > Two-week ISTE WORKSHOP on Engineering Thermodynamics conducted by IIT, Bombay
- > Two-week Faculty Development Program conducted by DIATM Rajbandh.
- ➤ "Enabling Sustainable Development in Mechanical Engineering in the context of Make In India" conducted by DIATM Rajbandh and also present a research paper of "Scope for using underutilized Hydraulic sources a Re-emphasis on role of Hydram".
- > Two Faculty Development Programs under QIP on 'Idea Conceptualization through Additive/Subtracting Manufacturing Methods' conducted by IIT, Roorkee.

Membership In Professional Bodies: - i) SAEINDIA Annual Membership.

ii) IAENG Lifetime Membership

Honours and Awards: -

- ➤ BEST TEACHER AWARD in 2017 in DIATM Durgapur
- ➤ BEST PAPER AWARD in 2021 in NCETER-2021-PAPER ID-21A TRACK-4 (MECHANICALAND ELECTRICAL INTEGRATION) in JIS University.

Research Exposure: -

Company	Service period	Job Description
CSIR-CMERI	26/12/2010 to 7/02/2012	Destructive testing, Inspection, Quality control & as well as project assistant in the project of FATIGUE ANALYSIS.

Teaching Exposure: -

College	Affiliate d Universit y	Job Description
Durgapur Institute o Advance Technology & Management	W.B.U.T	I am working at DIATM (B.Tech college) as an Asst. Professor. Already I teach the subject of Engineering Mechanics, Engineering Thermodynamics, Strength of Material, Fluid Mechanics, Fluid Machine, Machine Design, Machine Drawing, Mechanism, Dynamics of machine etc & this subject's related lab and I have been involved so many administrative works in Departmental, level as well like, > Departmental NACC Co-Ordinator > Time Table Co-Ordinator > Departmental events coordinator. > Member of Departmental Admission committee. > Mechanical Workshop Coordinator. etc.
ADAMAS UNIVERSITY	UGC	I am working at ADAMAS UNIVERSITY as an Asst. Professor. I teach the subject of Engineering Mechanics, Engineering Thermodynamics, Thermal Power Engineering, IC Engine, Fluid Mechanics & Hydraulic Machinery, Operation Research & Production Planning etc & this subject's related lab, And I have been involved so many administrative works in Departmental, School and University level as well like, > Departmental OBE Co-Ordinator > Time Table Co-Ordinator > AICTE, NACC accreditation Work. > I play the role of Faculty Volunteer in Adinova 2020. > I play the role of Convocation organizing committeefor 3rd Annual Convocation. > Annual Sports, 2019- Committee member. > Agomoni-2019-Organizing Committee. > Single Point of Contact in University Planning & Monitoring Committee.

Nodal Officer for supporting the UniversityAdmission Committee.
 University UGC 2F coordinator Departmental Placement coordinator University IIC Vice- President Member of Admission Committee AISHE Documents preparation and its submission PARAKH (AICTE) implementation Mentor in the University Robotics club. As a SPOC of SIH, 2024 Organized the University Smart India Hackathon, from 2022 to 2024 (Tecnovation, 2024) and two team is selected for grand final in SIH, 2024. Departmental Two team is selected for final round of SERB-INAE Hackathon, 2022 under the guidance of me. NSS Program coordinator Departmental Event Coordinator

	University UAMP Coor	rdinator
Place-Kolkata, West Benga	ij	
IndiaDate-26 th April,2020		