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No. of Publication :24

**Journal Publication :**

| Type of Journal | DOI No. | Name of the Article | Name of the Author | ISSN No. |
|-----------------|---------|---------------------|--------------------|----------|
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|                 |         |                     |                    |          |

**Book Chapter Publication :**

| DOI No.   | Name of the Article  | Name of the Author | ISBN No.          | Year |
|---|--|--------------------|-------------------|------|
|   | Generation of electricity through speed breaker  | Abhishek Poddar    | 978-81-964878-1-2 | 2023 |
|   | Advanced materials analysis through x-ray Diffraction technique                                      | Abhishek Poddar    | 978-81-964878-0-5 | 2023 |
| <a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a> | Dynamic Revelations: Advanced Modal Analysis of a Cantilever Beam using ANSYS                        | Abhishek Poddar    | 978-93-6233-705-4 | 2023 |
| <a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a> | Chilling Innovations: Thermoelectric Refrigeration for Sustainable Cooling                           | Abhishek Poddar    | 978-93-6233-705-4 | 2023 |
| <a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a> | Comprehensive Review: Innovative Hydroelectric Solutions for Sustainable Power Generation            | Abhishek Poddar    | 978-93-6233-705-4 | 2023 |
| <a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a> | Understanding Skin Friction Dynamics: Numerical Simulation and Analysis of Skin Friction Coefficient | Abhishek Poddar    | 978-93-6233-705-4 | 2023 |

|   |   |                 |                   |      |
|---|---|-----------------|-------------------|------|
|   | Distribution in Cyclone Separators  |                 |                   |      |
| <a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a> | Cyclonic Velocity Dynamics: Advanced Numerical Simulation and Analysis of Velocity Distribution in Cyclone Separator                    | Abhishek Poddar | 978-93-6233-705-4 | 2023 |
| <a href="https://doi.org/10.62906/bs.book.211">https://doi.org/10.62906/bs.book.211</a> | Understanding Skin Friction Dynamics: Numerical Simulation and Analysis of Skin Friction Coefficient Distribution in Cyclone Separators | Abhishek Poddar | 978-93-6233-761-0 | 2023 |
| <a href="https://doi.org/10.62906/bs.book.211">https://doi.org/10.62906/bs.book.211</a> | Comprehensive Review: Innovative Hydroelectric Solutions for Sustainable Power Generation   | Abhishek Poddar | 978-93-6233-761-0 | 2023 |
| <a href="https://doi.org/10.62906/bs.book.211">https://doi.org/10.62906/bs.book.211</a> | Cyclonic Velocity Dynamics: Advanced Numerical Simulation and Analysis of Velocity Distribution in Cyclone Separators                   | Abhishek Poddar | 978-93-6233-761-0 | 2023 |

Other Publication Details (if any)

**Patent Publication:**

- i. “Autonomous Robo-Soccer Competition System”, Abhishek Poddar, Soumak Bose, Soumya Ghosh, Bikas Panja, Abhishek Dhar, Saurabh Adhikari, Subharnil Som, 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 202431060663A]
- ii. “Harnessing Hydro Energy on a Small Scale: Portable Mini Hydropower Plants”, Abhishek Poddar, Soumya Ghosh, Arijit Mukherjee, Suman Kumar Ghosh, Abhishek Dhar, Saurabh Adhikari, Subharnil Som, 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 202431060513A]

iii.

### **Conference Paper:**

- i) Abhishek Poddar, Arijit Mukherjee, Suman Kumar Ghosh, Soumya Ghosh, Samrat Biswas “Numerical analysis on Casson nanofluid over a surface with nonlinear thermal radiation and binary chemical reaction” International Conference on Integrative Science and Engineering (ICISE) 2023.
- ii) Abhishek Poddar, Suman Kumar Ghosh, Arijit Mukherjee, Samrat Biswas, Soumya Ghosh, “Effects of Ion-Slip and Hall Currents on MHD Nanofluid Flow with Thermal Diffusion Using Spectral Quasi-Linearization Method” International Conference on Integrative Science and Engineering (ICISE) 2023.
- iii) 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.
- iv) 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.
- v) 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.
- vi) 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.
- vii) 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.
- viii) 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.
- ix) 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.
- x) 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.

- xi) 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.
- xii) 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.
- xiii) 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.
- xiv) 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.
- xv) 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.
- xvi) Abhishek Poddar, Sayan Paul, Suman Kumar Ghosh, Arijit Mukherjee, Soumya Ghosh, Samrat Biswas “Dynamic Revelations: Advanced Modal Analysis of a Cantilever Beam Using ANSYS” International Conference on Integrative Science and Engineering (ICISE-2024) Swami Vivekananda University Barrackpore West Bengal India. June 20-21 2024.
- xvii) Abhishek Poddar, Arijit Mukherjee, Ranjan Kumar, Ravi Nigam, Md Ershad, Suman Kumar Ghosh “Chilling Innovations: Thermoelectric Refrigeration for Sustainable Cooling” International Conference on Integrative Science and Engineering (ICISE-2024) Swami Vivekananda University Barrackpore West Bengal India. June 20-21 2024.
- xviii) Abhishek Poddar, Sayan Paul, Suman Kumar Ghosh, Arijit Mukherjee, Soumya Ghosh, Samrat Biswas “Understanding Skin Friction Dynamics: Numerical Simulation and Analysis of Skin Friction Coefficient Distribution in Cyclone Separators” International Conference on Integrative Science and Engineering (ICISE-2024) Swami Vivekananda University Barrackpore West Bengal India. June 20-21 2024.
- xix) Abhishek Poddar, Sayan Paul, Suman Kumar Ghosh, Arijit Mukherjee, Soumya Ghosh, Samrat Biswas “Cyclonic Velocity Dynamics: Advanced Numerical Simulation and Analysis of Velocity Distribution in Cyclone Separators” International Conference on Integrative Science and Engineering (ICISE-2024) Swami Vivekananda University Barrackpore West Bengal India. June 20-21 2024.
- xx) Abhishek Poddar, Soumitra Roy, Suman Kumar Ghosh, Arijit Mukherjee, Soumya Ghosh, Anupam Mallick “Comprehensive review: Innovative Hydroelectric Solutions for Sustainable Power Generation” International Conference on Integrative Science and Engineering (ICISE-2024) Swami Vivekananda University Barrackpore West Bengal India. June 20-21 2024.