

Name of the Faculty : Samrat Biswas

Designation : Assistant Professor

Department : Mechanical Engineering

No. of Publication : 50

Journal Publication :

Type of Journal	DOI No.	Name of the Article	Name of the Author	ISSN No.	Year
SCOPUS	https://doi.org/10.18311/jmmf/2023/36038	Comparative Study of Wear Behaviour of Heat Treated 304 Austenitic and 410 Martensitic Stainless Steel	Arijit Mukherjee, Santosh Kumar, Syan Paul, Soumak Bose, Suman Kumar Ghosh, Samrat Biswas	0022-2755	2023
SCOPUS	10.18311/jmmf/2023/35861	Analysis of Vortex Dominated Flow over Double Delta Wing.	Animesh Roy, Samrat Biswas, Prabir Kumar De and Bireswar Majumdar	0022-2755	2023

Book Chapter Publication :

DOI No.	Name of the Article	Name of the Author	ISBN No.	Year
	Sea water desalination and hydrogen generation	Samrat Biswas	978-81-964878-1-2	2023
	Understanding wind turbines: harnessing the power Of the wind (part 1)	Samrat Biswas	978-81-964878-0-5	2023
	Machine learning and artificial intelligence	Samrat Biswas	978-81-964878-8-1	2023

	In mechanical engineering			
https://doi.org/10.62906/bs.book.209	Revolutionizing Mobility: Advanced Hydroelectric and Electric Vehicle Technologies for Sustainable Development	Samrat Biswas	978-93-6233-705-4	2023
https://doi.org/10.62906/bs.book.209	Process Optimization and Material Characterization in WAAM	Samrat Biswas	978-93-6233-705-4	2023
https://doi.org/10.62906/bs.book.209	Helical Flow Dynamics: Numerical Simulation and Analysis of Helicity Distribution in Cyclone Separators	Samrat Biswas	978-93-6233-705-4	2023
https://doi.org/10.62906/bs.book.209	Advanced Modal Analysis of NACA 0012 Airfoil Wings: Unveiling Higher-Order Deformation Modes using ANSYS Workbench	Samrat Biswas	978-93-6233-705-4	2023
https://doi.org/10.62906/bs.book.209	Thermal Pathways: Investigating Temperature Distribution Along the Topmost Portion of a 2D Steady-State Heat Conduction Domain	Samrat Biswas	978-93-6233-705-4	2023
https://doi.org/10.62906/bs.book.209	Stress Exploration: Unveiling Minimum Combined	Samrat Biswas	978-93-6233-705-4	2023

	Stress in a Cantilever Beam using ANSYS			
https://doi.org/10.62906/bs.book.209	Bending Perspectives: Analyzing Total Deformation in a Cantilever Beam using ANSYS	Samrat Biswas	978-93-6233-705-4	2023
https://doi.org/10.62906/bs.book.209	Influence of Crack Location on the Natural Frequencies of Composite Beams	Samrat Biswas	978-93-6233-705-4	2023
https://doi.org/10.62906/bs.book.209	Dynamic Revelations: Advanced Modal Analysis of a Cantilever Beam using ANSYS	Samrat Biswas	978-93-6233-705-4	2023
https://doi.org/10.62906/bs.book.209	Understanding Skin Friction Dynamics: Numerical Simulation and Analysis of Skin Friction Coefficient Distribution in Cyclone Separators	Samrat Biswas	978-93-6233-705-4	2024
https://doi.org/10.62906/bs.book.209	Cyclonic Velocity Dynamics: Advanced Numerical Simulation and Analysis of Velocity Distribution in Cyclone Separator	Samrat Biswas	978-93-6233-705-4	2024
https://doi.org/10.62906/bs.book.209	Advances and Applications of Wire Arc Additive Manufacturing (WAAM) & Process	Samrat Biswas	978-93-6233-705-4	2024

	Optimization and Material Characterization in WAAM			
https://doi.org/10.62906/bs.book.209	Modal Analysis and Directional Bending Moment of a Cantilever Beam using ANSYS	Samrat Biswas	978-93-6233-705-4	2024
https://doi.org/10.62906/bs.book.209	Vibrational Insights: Modal Analysis of a Cantilever Beam using ANSYS	Samrat Biswas	978-93-6233-705-4	2024
https://doi.org/10.62906/bs.book.211	Revolutionizing Mobility: Advanced Hydroelectric and Electric Vehicle Technologies for Sustainable Development	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Process Optimization and Material Characterization in WAAM	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Helical Flow Dynamics: Numerical Simulation and Analysis of Helicity Distribution in Cyclone Separators	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Advanced Modal Analysis of NACA 0012 Airfoil Wings: Unveiling Higher-Order Deformation Modes Using ANSYS Workbench	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Stress Exploration:	Samrat Biswas	978-93-6233-761-0	2024

	Unveiling Minimum Combined Stress in a Cantilever Beam Using ANSYS			
https://doi.org/10.62906/bs.book.211	Bending Perspectives: Analyzing Total Deformation in a Cantilever Beam Using ANSYS	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Influence of Crack Location on the Natural Frequencies of Composite Beams	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Dynamic Revelations: Advanced Modal Analysis of a Cantilever Beam Using ANSYS	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Understanding Skin Friction Dynamics: Numerical Simulation and Analysis of Skin Friction Coefficient Distribution in Cyclone Separators	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Cyclonic Velocity Dynamics: Advanced Numerical Simulation and Analysis of Velocity Distribution in Cyclone Separators	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Advances and Applications of Wire Arc Additive	Samrat Biswas	978-93-6233-761-0	2024

	Manufacturing (WAAM) & Process Optimization and Material Characterization in WAAM			
https://doi.org/10.62906/bs.book.211	Process Optimization and Material Characterization in WAAM	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Modal Analysis and Directional Bending Moment of a Cantilever Beam Using ANSYS	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Vibrational Insights: Modal Analysis of a Cantilever Beam Using ANSYS	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Production of Biodiesel Using Chicken Waste Fats	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Modal Analysis of a NACA 0012 Airfoil Wing Using ANSYS Workbench	Samrat Biswas	978-93-6233-761-0	2024
https://doi.org/10.62906/bs.book.211	Influence of Fiber Orientation on the Vibration Characteristics of Composite Beams with Cracks	Samrat Biswas	978-93-6233-761-0	2024

Other Publication Details (if any)

Patent

- i. “Solar-Powered Beard Trimmer”, Ranjan Kumar, Samrat Biswas, Abhishek Dhar, Saurabh Adhikari, Saikat Majumdar, 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 202331018706A]

- ii. “Solar Powered Water Pump”, Ranjan Kumar, Samrat Biswas, Abhishek Dhar, Saurabh Adhikari, Saikat Majumdar, 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 202331018705A]
- iii. “Sensor-based desalinization and hydroponic technologies to improve agricultural productivity of resource-scarce saline areas”, Md Ershad, Ranjan Kumar, Saurabh Adhikari, Abhishek Dhar, Saikat Majumdar, Soumya Ghosh, Samrat Biswas, 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 202331022652A]
- iv. Fabrication and Design of the Solar Powered 360-degree rotating vehicle, Md Ershad, Ranjan Kumar, Saurabh Adhikari, Abhishek Dhar, Saikat Majumdar, Soumya Ghosh, Samrat Biswas, 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 202331022706A]
- v. “Solar Powered Outdoor Stand Ceiling Fan” Sayan Paul, Samrat Biswas, Arijit Mukherjee, Suman Kumar Ghosh, Abhishek Dhar, Saurabh Adhikari, Subhranil 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 202331054340A]
- vi. “Mini Belt Grinder”, Suman Kumar Ghosh, Ranajn Kumar, Samrat Biswas, Soumak Bose, Abhishek Dhar, Saurabh Adhikari, Subhranil 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 202331054863A]
- vii. “Portable Air Conditioning Innovation: Harnessing Thermal Peltier Technology”, Samrat Biswas, Sayan Paul, Soumya Ghosh, Suman Kumar Ghosh, Abhishek Dhar, Saurabh Adhikari, Subhranil 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 202431060584A]
- viii. “Rainwater Detector System: Enhancing Water Management and Conservation”, Arijit Mukherjee, Sayan Paul, Soumya Ghosh, Samrat Biswas, Abhishek Dhar, Saurabh Adhikari, 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 202431060628A]
- ix. “River Cleaning Boat: Innovating Waterway Maintenance for Environmental Conservation”, Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Abhishek Dhar, Saurabh Adhikari, 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 202431060629A]
- x. “Safe Guard: Gas Leakage Detection and Protection System for Home and Industries”, Sayan Paul, Soumya Ghosh, Suman Kumar Ghosh, Samrat Biswas, Abhishek Dhar, Saurabh Adhikari, 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 202431064477A]
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Conference Paper

- i. S. Biswas, T. K. Barman, P. Sahoo, "Surface Roughness Modeling in Turning of Brass Using Response Surface Methodology," Recent Trends in Manufacturing Technology (RTMT- 09), pg. 1-6, 2009.
- ii. S. Biswas, T. K. Barman, P. Sahoo, "Analysis of Surface Roughness Modeling in Mild Steel Turning Using Response Surface Methodology," Emerging Trends in Mechanical Engineering (ETME- 09), MS03, pg. 1-6, 2009.
- iii. Arijit Mukherjee, Santosh Kumar, Syan Paul, Soumak Bose, Suman Kumar Ghosh, Samrat Biswas "Comparative Study of Wear Behaviour of Heat Treated 304 Austenitic and 410 Martensitic Stainless Steel" International Conference on Engineering Design and Computing (ICEDC-2023) (Accepted)
- iv. Samrat Biswas, Sayan Paul, Soumya Ghosh, Suman Kumar Ghosh, Arijit Mukherjee, Bireswar Majumdar, "Investigation of Transverse Velocity Component over Swept-Back Wing in Subsonic Flow." International Conference on Engineering Design and Computing (ICEDC-2023) (Accepted)
- v. 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.
- vi. Dr. Samrat Biswas "Investigative Exploration into the Evolution of Velocity Distribution around 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.
- vii. 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.
- viii. 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.
- ix. 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.
- x. 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.
- xi. 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

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xii. 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.

xiii. 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.

xiv. 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.

xv. 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.

xvi. 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.

xvii. 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.

xviii. 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.

xix. 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.

xx. 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.

- xxi. Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Soumak Bose “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.
- xxii. 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.
- xxiii. Samrat Biswas, Sayan Paul, Suman Kumar Ghosh, Soumya Ghosh, Arijit Mukherjee, Soumak Bose “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.
- xxiv. 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.
- xxv. 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.
- xxvi. 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.
- xxvii. 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.
- xxviii. 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.
- xxix. 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.
- xxx. 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

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xxxi. 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.

xxxii. 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.

xxxiii. 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.

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xxxv. 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.

xxxvi. 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.

xxxvii. 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.

xxxviii. 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.

xxxix. 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

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xlii. 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.

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xliv. 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.

xlvi. 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.

xlvi. 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.

xlvi. 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.

xlvi. Arijit Mukherjee, Samrat Biswas, Sayan Paul, Soumya Ghosh, Suman Kumar Ghosh, Soumak Bose “Modal Analysis and Directional Bending Moment 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.

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