

Research Papers Published: 214

- *International Journals*: 69 [SCI: 43 (Q1:15, Q2: 8, Q3: 10, Q4: 10); Scopus: 16; Others: 10]

1. Xinlei Huang, Goutam Saha, **Akshoy Ranjan Paul**, Adele Tahan, Suvash C. Saha, "BiPAP efficacy across the spectrum: From treating sleep apnea to chronic obstructive pulmonary disease", *Respiratory Physiology & Neurobiology* (Elsevier, SCI, IF=1.9), Volume 333, 104397, 16 Jan. 2025. <https://doi.org/10.1016/j.resp.2025.104397>
2. Ahmed A.Y. Al-Waaly, **Akshoy Ranjan Paul**, Goutam Saha, Suvash C. Saha, "Exploring Heat Transfer and Entropy Generation in a Dual Cavity System", *Heat Transfer* (Wiley, SCI, IF=2.8, Q2), pp. 1-14, Jan. 2025. <https://doi.org/10.1002/htj.23281>
3. Devesh Singh, **Akshoy Ranjan Paul**, Abdus Samad, Nawshad Haque, "Life Cycle Environmental Impact Assessment of a Wave Energy Harvester", *IMEchE Journal of Engineering for the Maritime Environment: Part-M* (Sage Q3, SCI, IF=1.8), pp. 1-13, Nov. 2024. <https://doi.org/10.1177/14750902241292500>
4. Devesh Singh, **Akshoy Ranjan Paul**, Abdus Samad, "Performance Estimation of a Two-Body Wave Energy Converter for the East Coast of India", *Environmental Progress & Sustainable Energy* (Wiley, SCI, IF=2.8), e14468, pp. 1-12, 2024. <https://doi.org/10.1002/ep.14468>
5. Ahmed A.Y. Al-Waaly, **Akshoy Ranjan Paul**, Goutam Saha, Suvash C. Saha, "Entropy Generation Analysis of Natural Convection Flow in Porous Diamond-shaped Cavity", *International Journal of Thermofluids* (Elsevier, Q1, Scopus, CiteScore=10.1), 23 (2024) 100801, pp. 1-12, on 11 August 2024. <https://doi.org/10.1016/j.ijft.2024.100801>
6. Ahmed Abdul-Rida Al-Waaly, Sadia Alam Tumpa, Preetom Nag, **Akshoy Ranjan Paul**, Goutam Saha and Suvash C. Saha, "Entropy Generation Associated with Natural Convection within a Triangular Porous Cavity Containing Equidistant Cold Domains", *Frontiers in Energy Research* (Frontiers, Q2, SCI, IF=3.4), in Section: Process and Energy Systems Engineering, vol. 12, pp. 1-12, 17 June 2024. doi: 10.3389/fenrg.2024.1422256
7. Ritesh Singh, Abhishek Gupta, **Akshoy Ranjan Paul**, Bireswar Paul and Suvash C. Saha, "Improving Heat Transfer in Parabolic Trough Solar Collectors by Magnetic Nanofluids", *Energy Engineering* (Tech Science, Q2, Scopus, CiteScore=0.9), 121(4), pp. 835-848, March 2024. <https://doi.org/10.32604/ee.2024.046849>
8. Digamber Singh, Bholu Kumar Anuj Jain, **Akshoy Ranjan Paul**, "Toxic Particles Deposition in the Human Respiratory Tract under Natural Inspiratory Flow", *International Journal of Mathematical, Engineering and Management Sciences* (ESCI, IF=1.6, Scopus, CiteScore=3.2), Vol. 8, No. 6, pp. 1225-1254, Oct. 2023. <https://doi.org/10.33889/IJMEMS.2023.8.6.069>
9. Abhishek Gupta, **Akshoy Ranjan Paul**, Suvash Saha, "Decarbonizing Atmosphere using Carbon Capture, Utilization, and Sequestration: Challenges, Opportunities, and Policy Implications in India", *Atmosphere* (MDPI, Q2, SCI, IF=3.1), 14, 1546, 1-17, Oct. 2023. <https://doi.org/10.3390/atmos14101546>
10. Aman R. Anand, Vivek K. Srivastav, Mohammad R. Al-Mousa, **Akshoy R. Paul**, Srinivasarao Thota, "Numerical Analysis of Friction Stir Welding on an Aluminium Butt Joint", *Information Science Letters* (Natural Sciences Publishing, Q2, Scopus, CiteScore=1.7), vol. 12, issue 9, article 34, pp. 2299-2311, Sept. 2023. E-ISSN: 2090-956X. <http://dx.doi.org/10.18576/isl/120933>
11. KrishnaKumar Rajnath Yadav, **Akshoy Ranjan Paul**, Anuj Jain and Firoz Alam, "Effects of Synthetic Jets on Swirl Inflow in a Variable Geometry Twin Air-Intake", *Flow, Turbulence and Combustion* (Springer, Q1, SCI, IF=2.566), vol. 111, pp. 1193–1225, Sept. 2023. <https://doi.org/10.1007/s10494-023-00481-8>

12. Suvanjan Bhattacharyya, Arpan K Sharma; Devendra K Vishwakarma; Karuna Saini; **Akshoy Ranjan Paul**, Zhongjie Huan, "Thermo-Hydraulic Performance of Magnetic Baffles for Cooling using Magnetic Nanofluid in a Mini Channel", *Sustainable Energy Technologies and Assessments* (Elsevier, Q1, SCI, IF=7.632), vol. 57, 103194, April 2023. <https://doi.org/10.1016/j.seta.2023.103194>
13. Yagya Dutta Dwivedi, Prasanta Kumar Mohanta, **Akshoy Ranjan Paul**, Xilang Tang, "3-D CFD analysis of bio-inspired corrugated wings for MAVs", *Materials Today: Proceedings* (Elsevier, Scopus, CiteScore: 2.3), Published online on 28th March 2023. <https://doi.org/10.1016/j.matpr.2023.03.213>
14. KrishnaKumar Rajnath Yadav, Anuj Jain and **Akshoy Ranjan Paul**, "Flow Characteristics and Separation Control in a Transitional Twin Air-Intake", *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering* (IMechE, Q2, SCI, IF=2.242), vol. 237, no. 3, pp. 516–526, 2023. <https://doi.org/10.1177/09544100221103652>
15. Abhishek Gupta, **Akshoy Ranjan Paul**, Nawshad Haque, "Life Cycle Assessment of a CCS in Saline Aquifers for Coal-Fired Power Generation: An Indian Scenario", *Greenhouse Gases: Science and Technology* (Wiley, Q3, SCI, IF=2.518), vol. 13, pp. 81–98, 2023. <https://doi.org/10.1002/ghg.2198>
16. Suvanjan Bhattacharyya, Arpan K Sharma, Devendra K Vishwakarma, Varun Goel, **A.R. Paul**, "Influence of Magnetic Baffle and Magnetic Nanofluid on Heat Transfer in a Wavy Minichannel", *Sustainable Energy Technologies and Assessments* (Elsevier, Q1, SCI, IF=7.632), vol. 53, 102954, 2023. <https://doi.org/10.1016/j.seta.2022.102954>
17. **Akshoy Ranjan Paul**, Anuj Jain, Suvash C Saha, "Exposure Assessment of Air Pollution in Lungs", *Atmosphere* (MDPI, Q3, SCI, IF=3.1), vol. 13, 1767, pp. 1-22. Oct. 2022. <https://doi.org/10.3390/atmos13111767>
18. Suvanjan Bhattacharyya, Arpan K. Sharma; Devendra K. Vishwakarma, **Akshoy Ranjan Paul**, "Thermo-hydraulic Characteristics of Magnetic Nanofluid in Opposing and Assisting Minichannel under the Influence of External Magnetic Field", *Physics of Fluids* (AIP, Q1, SCI, IF=4.98), vol. 34, 103609 (2022); published online on 19th Oct. 2022. <https://doi.org/10.1063/5.0104710>
19. Abhishek Gupta and **Akshoy Ranjan Paul**, "Influence of Relative Permeability, Capillary Pressure, and Well Orientation in the Geological Carbon Sequestration in a Saline Aquifer", *International Journal of Oil, Gas and Coal Technology* (Inderscience, Q4, SCI, IF=0.723), vol. 31, no. 3, pp.263-279, August 2022. <https://doi.org/10.1504/IJOGCT.2022.10045886>
20. Suvanjan Bhattacharyya, Arpan K Sharma, Devendra K Vishwakarma, **Akshoy Ranjan Paul**, "Thermo-Hydraulic Performance of Magnetic Baffles for Removal of Concentrated Heat Fluxes in a Heated Mini Channel", *Applied Thermal Engineering* (Elsevier, Q1, SCI, IF=6.465) available online on 23rd July 2022. <https://doi.org/10.1016/j.applthermaleng.2022.118992>
21. Ashutosh Kumar Jaiswal, Md. Hamid Siddique, **Akshoy Ranjan Paul**, Abdus Samad, "Surrogate based design optimization of a centrifugal pump impeller", *Engineering Optimization journal* (Taylor & Francis, Q2, SCI, IF=2.5), vol. 54, no. 8, pp. 1395-1412, pp. 1-18, 2022; <https://doi.org/10.1080/0305215X.2021.1932867>
22. Shalini Verma, **Akshoy Ranjan Paul**, Nawshad Haque, "Selected Environmental Impact Indicators Assessment of Wind Energy in India using a Life Cycle Assessment Methodology", *Energies journal* (MDPI, Q3, SCI, IF=3.252), vol. 15, 3944, pp. 1-16, 2022, published online on 26th May 2022. <https://doi.org/10.3390/en15113944>
23. Ritesh Singh, Abhishek Gupta, Devesh Singh, **Akshoy Ranjan Paul**, "Design and Assessment of an Electric Vehicle Charging Station using Hybrid Renewable Energy", *International Journal*

- of Energy for a Clean Environment (Begell House, Scopus, CiteScore=2.6), vol. 23, no. 6, pp. 31–47, July 2022. <https://doi.org/10.1615/InterJEnerCleanEnv.2022042580>
24. Suvash C Saha, Isabella Francis, Xinlei Huang, **Akshoy Ranjan Paul**, "Heat Transfer and Fluid Flow Analysis in a Realistic 16-Generation Lung", *Physics of Fluids* (AIP, Q1, SCI, IF=4.98), vol. 34, 061906, pp. 1-12, June 2022. <https://doi.org/10.1063/5.0093912>
 25. Shalini Verma, **Akshoy Ranjan Paul**, Nawshad Haque, "Assessment of Materials and Rare Earth Metals Demand for Sustainable Wind Energy Growth in India", *Minerals journal* (MDPI, Q2, SCI, IF=2.818), vol. 12, no. 647, pp. 1-15, 2022, published online on 20th May 2022. <https://doi.org/10.3390/min12050647>
 26. Shalini Verma, **Akshoy Ranjan Paul**, Anuj Jain, "Performance Investigation and Energy Production of a Novel Horizontal Axis Wind Turbine with Winglet", *International Journal of Energy Research* (Wiley, Q1, SCI, IF=4.672), vol. 48, issue 4, pp. 4947-4964. 25th March 2022. <http://doi.org/10.1002/er.7488>
 27. Deepak Kumar Singh, Anuj Jain and **Akshoy Ranjan Paul**, "Active Flow Control over a NACA23012 Airfoil using Hybrid Jets", *Defence Science Journal* (SCI, Q4, IF=0.667, DRDO), vol. 71, no. 1, pp. 721-729, Nov. 2021. <https://doi.org/10.14429/dsj.71.16468>
 28. **Akshoy Ranjan Paul**, Abdulaziz Aldiab, Somnath Chattopadhyaya, Altab Hossain, Zinat Tasneem, Nawshad Haque, Anupam Basu, Tashi Gyeltshen, Yangdon, Reza Jazar and Firoz Alam, "Impact of COVID-19 on Online Education in Developing Countries – An Overview", *International Journal of Engineering Education* (SCI, Q4, IF=0.971, Tempus), Vol. 37, No. 6, pp. 1–22, 2021.
 29. KrishnaKumar Rajnath Yadav, **Akshoy Ranjan Paul** and Anuj Jain, "Performance Evaluation of a Twin Air-Intake: Effects of Geometry, Reynolds Number and Jet Momentum Coefficient", *The European Physical Journal (EPJ) Plus* (SCI, Q2, IF=3.758, Springer), 136:988, pp. 1-21, Oct. 2021. <https://doi.org/10.1140/epjp/s13360-021-01959-y>
 30. Vivek Kumar Srivastav, Rakesh Kumar Shukla, **Akshoy Ranjan Paul**, Anuj Jain, "Computational study on the effect of human respiratory wall elasticity", *International Journal of Biomedical Engineering and Technology* (ESCI, IF=1.1, Scopus, CiteScore=1.9, Inderscience), vol. 37, no. 1, pp. 46-64, Sept. 2021. <https://dx.doi.org/10.1504/IJBET.2021.117514>
 31. Mohammad S. Islam, Puchanee Larpruenrudee, Suvash C. Saha, Oveis Pourmehran, **Akshoy Ranjan Paul**, Tevfik Gemci, Richard Collins, Gunther Paul, and Yuantong Gu, "How severe acute respiratory syndrome coronavirus-2 aerosol propagates through the age-specific upper airways", *Physics of Fluids* (AIP Publishing, Q1, SCI, IF=4.98), vol. 33, issue 8, 081911 (Aug. 2021);. <https://doi.org/10.1063/5.0061627>
 32. **Akshoy Ranjan Paul**, Firoz Khan, Anuj Jain, Suvash Chandra Saha, "Deposition of smoke particles in human airways with realistic waveform", Special issue on 'Heat Wave, Bush Fire and Air-Quality: Impacts on Respiratory Health' in *Atmosphere Journal* (MDPI, Q3, SCI, IF=3.1), July 2021, vol. 12, issue 7, 912, pp. 1-22. <https://doi.org/10.3390/atmos12070912>. Published online on 15th July 2021.
 33. Anurag Tiwari, Anuj Jain, **Akshoy R. Paul** and Suvash C. Saha, "Computational Evaluation of Drug Delivery in Human Respiratory Tract under Realistic Inhalation", *Physics of Fluids* (AIP, Q1, SCI, IF=4.98), vol. 33, issue 7, 083311 (July 2021); <https://doi.org/10.1063/5.0053980>
 34. Mohammad S. Islam, Puchanee Larpruenrudee, **Akshoy R. Paul**, Gunther Paul, Tevfik Gemci, Yuantong Gu and Suvash C. Saha. "SARS CoV2 Aerosol: How far it can travel to the lower airways?", *Physics of Fluids* (AIP, Q1, SCI, IF=4.98), vol. 33, issue 6, 061903 (June 2021); <https://doi.org/10.1063/5.0053351>
 35. Anurag Tiwari, Siddharth Sharma, Vivek Kumar Srivastav, Anuj Jain and **Akshoy Ranjan Paul**, "Computational Study of Atomization Models and Optimal Design of a Pressurized Inhaler",

Journal of Biomimetics, Biomaterials and Biomedical Engineering (ESCI, Scopus, CiteScore=1.4, Trans Tech), vol. 50, pp. 123-134, published online on 8th April 2021. <https://doi.org/10.4028/www.scientific.net/JBBBE.50.123>

36. **Akshoy Ranjan Paul**, Suvanjan Bhattacharyya, "Analysis and Design for a Hydraulic Pipeline Carrying Capsule Train", Journal of Pipeline Systems Engineering and Practice (SCI, Q3, IF=1.916, ASCE), vol. 12, no. 2, 04021003, pp. 1-12, May 2021, *available online on* 12 Jan. 2021. DOI: 10.1061/(ASCE)PS.1949-1204.0000536
37. Suvanjan Bhattacharyya, Hari Raghavendran B, **Akshoy Ranjan Paul**, "The effect of circular hole spring tape on the turbulent heat transfer and entropy analysis in a heat exchanger tube: An experimental study", Experimental Heat Transfer (SCI, Q2, IF=3.272, Taylor & Francis), vol. 36, no. 6, pp. 493-512, 2021. <https://doi.org/10.1080/08916152.2020.1787560>
38. Suvanjan Bhattacharyya, Kunal Dey, **Akshoy Ranjan Paul**, Ranjib Biswas, "A Novel CFD Analysis to Minimize the Spread of COVID-19 Virus in Hospital Isolation Room", Chaos, Solitons & Fractals (SCI, Q1, IF=9.922, Elsevier), vol. 139, Oct. 2020. 110294. DOI: 10.1016/j.chaos.2020.110294
39. **Akshoy Ranjan Paul**, Firoz Alam, Anuj Jain, Mohammad Sharafat Ali, "Boiler Safety in South Asia", Journal of The Institution of Engineers (India): Series-C (Scopus, CiteScore=1.8, Springer), vol. 101, no. 5, pp. 761-769. pp. 1-9, October 2020. DOI: <https://doi.org/10.1007/s40032-020-00597-0>
40. Shikhar Singh, Suvanjan Bhattacharyya, **A. R. Paul**, M. Sharifpur, Josua Petrus Meyer, "Augmentation of Heat Transfer in a Microtube and a Wavy Microchannel using Hybrid Nanofluid: A Numerical Investigation", Mathematical Methods in the Applied Sciences (SCI, Q1, IF=3.007, Wiley), Special issue paper, pp. 1-22, 13 October 2020. DOI: <https://doi.org/10.1002/mma.6849>
41. Rakesh kumar Shukla, Vivek Kumar Srivastav, **Akshoy Ranjan Paul**, Anuj Jain, "Fluid Structure Interaction Studies of Human Airways", Sādhanā Journal (SCI, Q4, IF=1.214, Springer), vol. 45, article number 229, Sept. 2020, pp. 1-6, DOI: <https://doi.org/10.1007/s12046-020-01460-9>
42. Ram Sumukh Shukla, Krishnakumar R. Yadav, **Akshoy R. Paul**, Anuj Jain, "Development of Air-Intakes in Combat Aircrafts: A Comprehensive Review", Seybold Report (Scopus), issue 8, July 2020, sl. no. 11.
43. Yadav Krishnakumar Rajnath, **Akshoy Ranjan Paul**, Nithin Hegde, Anuj Jain, "A Comparison of Circular and Slotted Synthetic Jets for Flow Control in a Twin Air-Intake", Defence Science Journal (SCI, Q4, IF=0.667, DRDO), vol. 70, issue 2, pp. 113-121, March 2020. <https://doi.org/10.14429/dsj.70.13053>
44. Yadav Krishnakumar Rajnath, **Akshoy Ranjan Paul**, Anuj Jain, "Effects of Flow Control in the presence of Asymmetric Inflows in Twin Air-Intake", Aircraft Engineering and Aerospace Technology (SCI, Q3, IF=1.478, Emerald), vol. 92, no. 3, pp. 460-471, March 2020. DOI: <https://doi.org/10.1108/AEAT-06-2019-0116>
45. Bholu Kumar, Vivek Kumar Srivastav, Anuj Jain, **Akshoy Ranjan Paul**, "Study of Numerical Schemes for the CFD Simulation of Human Airways", International Journal of Integrated Engineering (ESCI, Scopus, CiteScore=1.2, Penerbit UTHM), vol. 11, no. 8, pp. 32-40, April 2019.
46. Vivek Kumar Srivastav, Anuj Jain and **Akshoy Ranjan Paul**, "Computational Study of Drug Delivery in Tumorous Human Airways", International Journal of Computing Science and Mathematics (ESCI, Scopus, CiteScore=1.9, Inderscience), vol. 10, no. 5, pp. 459-475, 2019. DOI: 10.1504/IJCSM.2019.103676

47. Firoz Alam, Harun Chowdhury, Anirban Basu, Rashid Sarkar, **Akshoy Ranjan Paul**, Somnath Chattopadhyaya, "Effect of South Asian Road trucks on energy efficiency and safety", *Journal of Mechanical Engineering*, vol. ME 49, no. 2, pp. 33-41, 2019.
48. Atiq Ur Rehman, **Akshoy Ranjan Paul**, Anuj Jain, "Performance Analysis and Cavitation Prediction of Centrifugal Pump using Various Working Fluids", *Recent Patents on Mechanical Engineering (Scopus, IF=0.8, Bentham)*, June 2019, vol. 12, issue 3, pp. 227-239, <https://doi.org/10.2174/2212797612666190619161711>.
49. Yadav KrishnaKumar Rajnath, **Akshoy Ranjan Paul**, Anuj Jain, "Flow Management in a Double-Offset Transitional Twin Air-Intake at Different Inflow Conditions", *Recent Patents on Mechanical Engineering (Scopus, IF=0.8, Bentham)*, April 2019, vol. 12, issue 2, pp. 168-179, <https://doi.org/10.2174/2212797612666190422145940>
50. Ashutosh Kumar Jaiswal, Atiq Ur Rehman, **Akshoy Ranjan Paul**, Anuj Jain, "Detection of Cavitation through Acoustic Generation in Centrifugal Pump Impeller", *Journal of Applied Fluid Mechanics (IUT, SCI, Q4, IF=1.152)*, vol. 12, No. 4, July 2019. <https://doi.org/10.29252/jafm.12.04.29501>
51. Vivek Kumar Srivastav, **Akshoy R. Paul**, Anuj Jain, "Capturing the Wall Turbulence in CFD Simulation of Human Respiratory Tract", *Mathematics and Computers in Simulation (Elsevier, SCI, Q1, IF=3.601)*, vol. 160, June 2019, pp. 23-38, <https://doi.org/10.1016/j.matcom.2018.11.019>
52. **Akshoy Ranjan Paul**, Anuj Jain, Firoz Alam, "Drag reduction of a passenger car using flow control techniques", *International Journal of Automotive Technology (Springer, SCI, Q4, IF=1.557)*, vol. 20, no. 2, pp. 397-410, 2019. <https://doi.org/10.1007/s12239-019-0039-2>
53. Digamber Singh, Anuj Jain, **Akshoy Ranjan Paul**, "Numerical Assessment of a 3D Human Upper Respiratory Tract Model: Effect of Anatomical Structure on Asymmetric Tidal Pulmonary Ventilation Characteristics", *International Journal of Biomedical Engineering and Technology (ESCI, IF=1.1, Scopus, CiteScore=1.9, Inderscience)*, vol. 38 no. 3, pp. 225-248, March 2022. <https://dx.doi.org/10.1504/IJBET.2022.121738>
54. **Akshoy Ranjan Paul** and Firoz Alam, "Compliance of Boiler Standards and Industrial Safety in Indian Subcontinent", *International Journal of Engineering Materials and Manufacture (2018) 3(4) 182-189*. <https://doi.org/10.26776/ijemm.03.04.2018.02>
55. Deepak Kumar Singh, Anuj Jain, **Akshoy Ranjan Paul**, "Computational study on convective heat transfer from a flat plate subjected to cross flow and normal synthetic jet", *International Journal of Scientific Development and Research*, Volume 1, Issue 4, pp. 183-190, April 2016.
56. Sagar Dasgupta, Anuj Jain, **A.R. Paul**, "Sinusoidal Delta Wing: Challenges and Opportunities", *Journal of Aeronautical and Automotive Engineering*, vol. 2, no. 1, pp. 6-10, 2015.
57. Amit Kumar Yadav, Syed Danish Abbas, Ramsumukh Shukla, Anuj Jain, **A.R. Paul**, "Advances in Aerodynamic Aspects of Serpentine Air-Intakes: A Review", *Journal of Aeronautical and Automotive Engineering*, vol. 2, no. 1, pp. 16-21, 2015.
58. Vivek K. Srivastav, Amit Kumar, Shashank K. Shukla, **Akshoy R. Paul**, Amba D. Bhatt, Anuj Jain, "Airflow and Aerosol-Drug Delivery in a CT Scan based Human Respiratory Tract with Tumor using CFD", *Journal of Applied Fluid Mechanics (IUT, SCI, Q4, IF=1.152)*, Vol. 7, No. 2, pp. 345-356, April 2014. <https://doi.org/10.36884/jafm.7.02.20282>
59. Vivek K. Srivastav, **Akshoy Ranjan Paul**, Anuj Jain, "Effects of Cartilaginous Rings on Airflow and Particle Transport through Simplified and Realistic Human Upper Respiratory Tracts", *Acta Mechanica Sinica (Springer, SCI, Q2, IF=2.91)*, vol. 29, no. 6, pp. 883-892, 2013. <https://doi.org/10.1007/s10409-013-0086-2>
60. **Akshoy Ranjan Paul**, Shrey Joshi, Aman Jindal, Shivam P. Maurya, Anuj Jain, "Experimental Studies of Active and Passive Flow Control Techniques Applied in a Twin Air-Intake", *The*

Scientific World Journal (Scopus, CiteScore=2.4, Hindawi), vol. 2013, Article ID 523759, 8 pages, 2013. <https://doi.org/10.1155/2013/523759>

61. **Akshoy Ranjan Paul**, Pritanshu Ranjan, Vivek Kumar Patel, Anuj Jain, "Comparative Studies on Flow Control in Rectangular S-Duct Diffuser using Submerged-Vortex Generators", Aerospace Science and Technology (Elsevier, SCI, Q1, IF=5.457), vol. 28, no. 1, pp. 332-343, July 2013. <https://doi.org/10.1016/j.ast.2012.11.014>
 62. D. K. Kalyan and **A.R. Paul**, "Computational study of flow around a simplified 2D Ahmed body", International J. of Engg., Science and Innovative Technology, vol. 2, no. 3, pp. 148-153, 2013.
 63. Vivek Kumar Srivastav, **Akshoy Ranjan Paul** and Anuj Jain, "Computational Fluid Dynamics Study of Airflow and Particle Transport in Third to Sixth Generation Human Respiratory Tract", International Journal of Emerging Multidisciplinary Fluid Sciences (Scopus, IF=0.152, Multi-Science), vol. 3, no. 4, pp. 227-234, 2011-12.
 64. **Akshoy Ranjan Paul**, Kalyan Kuppa, Mahendra S. Yadav, Ujjal Dutta, "Flow Improvement in Rectangular Air Intake by Submerged Vortex Generators", Journal of Applied Fluid Mechanics (IUT, SCI, Q4, IF=1.152), Vol. 4, No. 2, Issue 1, pp. 77-86, July 2011. <https://doi.org/10.36884/jafm.4.02.11919>
 65. **Akshoy Ranjan Paul**, Ravi Ranjan Upadhyay, Anuj Jain, "A Novel Calibration Algorithm for Five-hole Pressure Probe", International Journal of Engineering, Science and Technology (IJEST), Vol. 3, No. 2, pp. 89-95, July 2011.
 66. Dheeraj Sagar, **Akshoy Ranjan Paul**, Anuj Jain, "Computational Fluid Dynamics Investigation of Turbulent Separated Flows in Axisymmetric Diffusers", International Journal of Engineering, Science and Technology (IJEST), Vol. 3, No. 2, pp. 104-109, July 2011.
 67. Pritanshu Ranjan, **Akshoy Ranjan Paul**, Ajay Pratap Singh, "Computational Analysis of Frictional Drag over Transverse Grooved Flat Plates", International Journal of Engineering, Science and Technology (IJEST), Vol. 3, No. 2, pp. 110-116, July 2011.
 68. Ajay Pratap Singh, **Akshoy Ranjan Paul**, Pritanshu Ranjan, "Investigation of Reattachment Length for a Turbulent Flow over a Backward Facing Step for Different Step Angle", International Journal of Engineering, Science and Technology (IJEST), Vol. 3, No. 2, pp. 84-88, July 2011.
 69. **Akshoy Ranjan Paul**, Pritanshu Ranjan, Vivek Kumar Patel, Anuj Jain, "Flow Control in Rectangular S-Duct Diffuser using Submerged Vortex Generators", International Review of Aerospace Engineering (Scopus, CiteScore=3.3, Praise Worthy Prize), Vol. 4, No. 2, pp. 76-86, April 2011.
- **International Conferences:** 111
 1. Shalini Verma, Akshoy Ranjan Paul, Nawshad Haque, Warren Bruckard and Avash Kumar Saha, "End-of-Life Recycling of Lithium-Ion Batteries in India", *to be presented in* the TMS 2025 Annual Meeting & Exhibition, Las Vegas (USA) during 23-27 March 2025.
 2. Dhananjay Singh Yadav, Bireswar Paul, **Akshoy Ranjan Paul**, "Numerical Investigation of Energy Efficient Biogas Cook Stove Burner", *presented in* the 5th International Conference on Energy & Power (ICEP-2022) held at Bali (Indonesia) during 4-6 Dec. 2024, Submission ID: 198.
 3. Dwarkesh Parmar, **Akshoy Ranjan Paul**, and Firoz Alam, "Drag Reduction Technologies of Heavy Commercial Vehicles", *presented in* the 5th International Conference on Energy & Power (ICEP-2022) held at Bali (Indonesia) during 4-6 Dec. 2024, Submission ID: 197.
 4. Shalini Verma. **Akshoy Ranjan Paul**, Nawshad Haque, Warren Bruckard, "Sustainable Lithium Supply Chain for Energy Security: Australia-India Partnership", *presented in* the 5th International Conference on Energy & Power (ICEP-2022) held at Bali (Indonesia) during 4-6 Dec. 2024, Submission ID: 195.

5. Kazuo Matsuura, Akshoy Ranjan Paul, "A Computational Study on Unsteady Flows in a Twin Air Intake", *presented in the 5th International Conference on Energy & Power (ICEP-2022) held at Bali (Indonesia) during 4-6 Dec. 2024*, Submission ID: 169.
6. Prashant Kumar, **Akshoy Ranjan Paul**, Abdus Samad, "Spar for Floating Wave Energy Converters", *presented in the 9th International Conference on Ships and Offshore Structures (ICSOS-2024) held at IIT Madras during 8-12 September 2024*.
7. Ayushman Srivastava, Abhishek Kundu, **Akshoy Ranjan Paul**, "Comparative analysis of flow characteristics inside a closed-ended micro-shock tube using both pressure-based and density-based algorithms", *presented in the International Conference on Thermofluids and Manufacturing Science (ICTMS-2024), KIIT Bhubaneswar (India), 7-8 March 2024. Published in Journal of Physics: Conference Series 2818 (2024) 012001. DOI:10.1088/1742-6596/2818/1/012001*
8. Anil Kumar Maurya, Anuj Jain, **Akshoy Ranjan Paul**, "Effects of Tool Traverse and Rotational Speed on Material Flow and Temperature Distribution in Friction Stir Welding", *presented in the Fifth International Conference on Recent Advances in Materials and Manufacturing (ICRAMM-2023), Velalar College of Engineering, Erode, Tamil Nadu, 29-30 Dec. 2023*.
9. Abdus Samad, Prashant Kumar, Suman Kumar, Devesh Singh, Saket Kapse, Sohorab Hossain, TVS Kalyan Chakravarthi, **Akshoy Ranjan Paul**, Abhijit Chaudhuri, Surajit Chattopadhyay, Sunkara Sai Arun Kiran Karthik, "Open Sea Trial of a Wave-Energy Converter at Tuticorin Port – Challenges", *presented and published in the 15th European Wave and Tidal Energy Conference (EWTEC2023), 3-7 September 2023, Bilbao (Spain)*.
10. Dwarkesh Parmar, Devesh Singh, **Akshoy Ranjan Paul**, "Influence of Building Wake on Particulate Matter Dispersion using Discrete Phase Modelling", *presented in the 3rd International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT 2023), 27-28 June 2023, Purnima College of Engineering, Jaipur (Rajasthan), India, Paper ID-72. **Received Best Paper Award.***
11. Roopak Baliyan, Shalini Verma, **Akshoy Ranjan Paul**, "Cooling Tower Plume and Drift Concentration in presence of Urban Canyon", *presented in the 3rd International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT 2023), 27-28 June 2023, Purnima College of Engineering, Jaipur (Rajasthan), India, Paper ID-73. Published in the IOP Conf. Series: Earth and Environmental Science, 1279 (2023) 012028. <https://doi.org/10.1088/1755-1315/1279/1/012028>*
12. Adithya Ajay, Aditya Yadav, **Akshoy Ranjan Paul**, "Dispersion of Particulate Matters from Separated Plume Stacks using Discrete Phase Modelling", *presented in the 3rd International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT 2023), 27-28 June 2023, Purnima College of Engineering, Jaipur (Rajasthan), India, Paper ID-74. Published in the IOP Conf. Series: Earth and Environmental Science, 1279 (2023) 012024. <https://doi.org/10.1088/1755-1315/1279/1/012024>*
13. Biri Singh, Devesh Singh, **Akshoy Ranjan Paul**, "Pollutant Dispersion in Atmospheric Boundary Layer Emitted by Thermal Power Plant" *presented in the 3rd International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT 2023), 27-28 June 2023, Purnima College of Engineering, Jaipur (Rajasthan), India, Paper ID-75. Published in the IOP Conf. Series: Earth and Environmental Science, 1279 (2023) 012025. <https://doi.org/10.1088/1755-1315/1279/1/012025>*
14. Chandrakala, Anupma Gupta, **Akshoy Rajan Paul**, "DPM Modelling of Airflow and Cooking Particle Distribution in Kitchen" *presented in the 3rd International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT 2023), 27-28 June 2023, Purnima College of Engineering, Jaipur (Rajasthan), India, Paper ID-77.*

15. Satyendra Dayalu, Shalini Verma, **Akshoy Ranjan Paul**, and Nawshad Haque, "Analysis of Environmental Impact of Vertical Axis Wind Turbine using Circular Economy Approach", presented in the Symposium on Energy Technologies and CO₂ Management at the 2023 TMS Annual Meeting & Exhibition, San Diego, California (USA) during 19–23 March 2023.
16. Firoz Alam, Khondkar Saleque, Saifuddin Ahsan, Quamrul Alam, Akshoy Ranjan Paul, Somnath Chattopadhyaya, Harun Chowdhury, and Nawshad Haque, "Economic Development in Bangladesh and Northeast India: The Role of Natural Gas and LPG" *presented* at the 4th International Conference on Energy & Power (ICEP-2022) held at Dhaka (Bangladesh) during 12-14 Dec. 2022.
17. Abhishek Gupta, Ritesh Singh and **Akshoy Ranjan Paul**, "Heat Transfer Enhancement in a Parabolic Trough Solar Collector using Magnetic Nanofluids" *presented* at the 4th International Conference on Energy & Power (ICEP-2022) held at Dhaka (Bangladesh) during 12-14 Dec. 2022.
18. Devesh Singh, Upendra Singh, and **Akshoy Ranjan Paul**, "Heat Transfer Augmentation of a Cylinder using Metalfoam" *presented* at the 4th International Conference on Energy & Power (ICEP-2022) held at Dhaka (Bangladesh) during 12-14 Dec. 2022.
19. Sanjeev Kumar Arya, Abhishek Gupta, **Akshoy Ranjan Paul** and Nawshad Haque, "Water Footprint Assessment of Coal-Fired Thermal Power Plants in India" *presented* at the 4th International Conference on Energy & Power (ICEP-2022) held at Dhaka (Bangladesh) during 12-14 Dec. 2022.
20. Shalini Verma, Devanur Sairam Bharadwaj and **Akshoy Ranjan Paul**, "Computational Analysis of Aerodynamic Performance of a Split Winglet" *presented* at the 4th International Conference on Energy & Power (ICEP-2022) held at Dhaka (Bangladesh) during 12-14 Dec. 2022.
21. Anil Kumar Maurya, Shakti Kumar, **Akshoy Ranjan Paul**, Somnath Chattopadhyaya, Suvanjan Bhattacharyya and Anuj Jain, "Computational Investigation of Mechanical Properties for Friction Stirred Welded joint" *presented* at the 4th International Conference on Energy & Power (ICEP-2022) held at Dhaka (Bangladesh) during 12-14 Dec. 2022.
22. Suvanjan Bhattacharyya, Devendra K Vishwakarma, Kunal Dey, **A. R. Paul** and Varun Goel, "Computational Fluid Dynamics in Sports: A Review", *presented* in the 2nd International Conference on Sports Engineering (ICSE 2021), Paper ID-52, Organized by BITS Pilani at Jodhpur, Rajasthan (India) during 3-5 March 2022.
23. Anurag Tiwari, **Akshoy Ranjan Paul**, Anuj Jain, "Challenges in Drug Delivery through Intranasal Route: A CFD Perspective", *presented* in Biosangam-2022, 10-12 March 2022, MNNIT Allahabad (India) and published in Advances in Biological Sciences Research, Atlantis Press.
24. Abhishek Gupta and **Akshoy Ranjan Paul**, "Optimization of Source-sink Matching for Carbon Capture and Storage (CCS) ready Ultra-mega Indian Power Plants" presented in the 3rd International Conference on Energy and Power (ICEP2021) held at Chiang Mai University (Thailand) during 18-20 November 2021, Paper ID-123.
25. Shalini Verma, Aditya Joshi and **Akshoy Ranjan Paul**, "Design and Multi-Objective Optimization of a Horizontal Axis Wind Turbine", presented in the 3rd International Conference on Energy and Power (ICEP2021) held at Chiang Mai University (Thailand) during 18-20 November 2021, Paper ID-124.
26. Firoz Alam, Somnath Chattopadhyaya, Harun Chowdhury, Saifuddin Ahsan, Zinat Tasneem, Altab Hossain, Nawshad Haque, Reza Jazar, Saleh Mobin, **Akshoy Ranjan Paul** and Emdadul Hoque, "Collective Energy Security, Economic Prosperity and Mitigation of Climate Change in South Asia", presented in the 3rd International Conference on Energy and Power (ICEP2021)

held at Chiang Mai University (Thailand) during 18-20 November 2021.
<https://doi.org/10.1063/5.0117098>

27. Shalini Verma, Mansi, **Akshoy Ranjan Paul**, "Power Augmentation in H-Type Darrieus Wind Turbine using Wind Lens", 16th Asian International Conference on Fluid Machinery (AICFM16), Yokohama (Japan), 13-15 September 2021. Published in Journal of Physics: Conference Series 2217 (2022) 012040. DOI:10.1088/1742-6596/2217/1/012040
28. Prashant Kumar, Devesh Singh, **Akshoy Ranjan Paul**, Abdus Samad, "Design of a Point Absorber Wave Energy Converter for Indian Coast", 16th Asian International Conference on Fluid Machinery (AICFM16), Yokohama (Japan), 13-15 September 2021. Journal of Physics: Conference Series 2217 (2022) 012076. DOI:10.1088/1742-6596/2217/1/012076
29. Arvind Kumar, Abhishek Gupta, Shalini Verma, **Akshoy Ranjan Paul**, Anuj Jain, Nawshad Haque, "Life cycle assessment based environmental footprint of a battery recycling process", presented at the 3rd International Conference on Intelligent Manufacturing & Energy Sustainability (ICIMES-2021), Hyderabad (India).18-19 June 2021, Paper ID-20.
30. Suvanjan Bhattacharyya, Devendra Kumar Vishwakarma, Sanghati Roy, Kunal Dey, Ali Cemal Benim, and **Akshoy Ranjan Paul**, "Computational Investigation on Heat Transfer Augmentation of a Circular Tube with Novel Hybrid Ribs", 13th International Conference on Computational Heat Mass and Momentum Transfer (ICCHMT-2021), Paris (France), 18-21 May 2021, Paper ID-83. E3S Web of Conferences 321, 04012 (2021). <https://doi.org/10.1051/e3sconf/202132104012>
31. Arvind Kumar, Kunal Dey, Suvanjan Bhattacharyya, **Akshoy Ranjan Paul** and Ali Cemal Benim, "Augmented Thermal Performance in a Non-Uniform Heat Flux Circular Tube with Twisted Tape Insert using Hybrid Nanofluid", 13th International Conference on Computational Heat Mass and Momentum Transfer (ICCHMT-2021), Paris (France), 18-21 May 2021, Paper ID-74. E3S Web of Conferences 321, 04009 (2021). <https://doi.org/10.1051/e3sconf/202132104009>
32. Shalini Verma, **Akshoy Ranjan Paul**, Anuj Jain and Firoz Alam, "Numerical Investigation of Stall Characteristics for Winglet Blade of a Horizontal Axis Wind Turbine", 13th International Conference on Computational Heat Mass and Momentum Transfer (ICCHMT-2021), Paris (France), 18-21 May 2021, Paper ID-64. E3S Web of Conferences 321, 03004 (2021). <https://doi.org/10.1051/e3sconf/202132103004>
33. Devesh Singh, Anoop Singh, **Akshoy Ranjan Paul** and Abdus Samad, "Design and Simulation of Point Absorber Wave Energy Converter", 13th International Conference on Computational Heat Mass and Momentum Transfer (ICCHMT-2021), Paris (France), 18-21 May 2021, Paper ID-63. E3S Web of Conferences 321, 03003 (2021). <https://doi.org/10.1051/e3sconf/202132103003>
34. Prashant Kumar, Shalini Verma, Abhishek Gupta, **Akshoy Ranjan Paul**, Anuj Jain and Nawshad Haque, "Life Cycle Analysis for the production of urea through syngas", International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT-2021), Poornima College of Engineering, Jaipur, India, 05-06 March 2021. *Published in* the IOP Conf. Series: Earth and Environmental Science 795 (2021) 012031. DOI:10.1088/1755-1315/795/1/012031
35. Sandeep Kumar Rajput, Shalini Verma, Abhishek Gupta, **Akshoy Ranjan Paul**, Anuj Jain and Nawshad Haque, "Environmental impact assessment of coal gasification in hydrogen production", International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT-2021), Poornima College of Engineering, Jaipur, India, 05-06 March 2021. *Published in* the IOP Conf. Series: Earth and Environmental Science 795 (2021) 012029. DOI:10.1088/1755-1315/795/1/012029
36. Vivek Singh, Shalini Verma, Abhishek Gupta, **Akshoy Ranjan Paul**, Anuj Jain and Nawshad Haque, "Environmental Carbon Footprint Assessment of a LHB Railway Coach", International

- Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT-2021), Poornima College of Engineering, Jaipur, India, 05-06 March 2021. *Published in* the IOP Conf. Series: Earth and Environmental Science 795 (2021) 012030. DOI:10.1088/1755-1315/795/1/012030
37. Aditya Joshi, Abhishek Gupta, Shalini Verma, **Akshoy Ranjan Paul**, Anuj Jain and Nawshad Haque, "Life cycle based greenhouse gas footprint assessment of a smartphone", International Conference on Sustainable Energy, Environment and Green Technologies (ICSEEGT-2021), Poornima College of Engineering, Jaipur, India, 05-06 March 2021. *Published in* the IOP Conf. Series: Earth and Environmental Science 795 (2021) 012028. DOI:10.1088/1755-1315/795/1/012028
 38. Digamber Singh, Anuj Jain, **A.R. Paul**, "Air Quality Index Effect on Particles Deposition in Human Airways under Natural Breath", 3rd International Conference on Advances in Mechanical Engineering and its Interdisciplinary Areas (ICAMEI-2021), College of Engg. & Management, Kolaghat (West Bengal), 5-7 Jan. 2021.
 39. Firoz Alam, Md Sharifuzzaman, Zinat Tasneem, Altab Hossain, Somnath Chattopadhyaya, **Akshoy Ranjan Paul**, "Energy Security, Nuclear Power Generation and Human Resource Development", International Conference on Mechanical, Industrial and Energy Engineering (ICMIEE- 2020), 19-21 Dec. 2020, Khulna (Bangladesh), Paper ID: ICMIEE20-KN06.
 40. Abhishek Gupta, **Akshoy Ranjan Paul**, Ramesh K. Agarwal, "Effects of Well Orientation and Length for Geological Carbon Sequestration in a Saline Aquifer", Proceedings of International Conference on Energy and Sustainable Development (ICESD-2020), 14-15 February 2020, Jadavpur University and The Institution of Engineers (India), Kolkata, Paper ID: 141, pp. 473-476, ISBN: 978-83660-56-8.
 41. Shalini Verma, **Akshoy Ranjan Paul**, Firoz Alam, "Investigation of aeroelasticity in HAWT blade with wingle", Proceedings of International Conference on Energy and Sustainable Development (ICESD-2020), 14-15 February 2020, Jadavpur University and The Institution of Engineers (India), Kolkata, Paper ID: 142, pp. 477-480, ISBN: 978-83660-56-8.
 42. Mohamed Zaid, Harun Chowdhury, Bavin Loganathan, Mohamed Waleed, Firoz Alam, Ibrahim Sultan and **Akshoy Ranjan Paul**, "CFD analysis of a vertical axis wind turbine", Proceedings of International Conference on Energy and Sustainable Development (ICESD-2020), 14-15 February 2020, Jadavpur University and The Institution of Engineers (India), Kolkata, Paper ID: 143, pp. 481-484, ISBN: 978-83660-56-8.
 43. Anshab Khan, Abhishek Kundu and **Akshoy Ranjan Paul**, "Numerical simulation of interaction of blast wave generated from cannon with wall at different pressure ratio", Abstract Proceedings of International Conference on Thermofluids-2020, KIIT Bhubaneswar, Jan. 2020, Paper ID: 11.
 44. Jublee John Mili, Tanmoy Mondal and **Akshoy Ranjan Paul**, "Fluid Flow and Heat Transfer Characteristics for an Impinging Jet with Various Angles of Inclination of Impingement Surface", Abstract Proceedings of International Conference on Thermofluids-2020, KIIT Bhubaneswar, Jan. 2020, Paper ID: 10.
 45. Vineet Kumar Tiwari, Tanmoy Mondal, **Akshoy Ranjan Paul**, "Numerical simulation on impact of a liquid droplet on a deep liquid pool for low impact velocities", Abstract Proceedings of International Conference on Thermofluids-2020, KIIT Bhubaneswar, Jan. 2020, Paper ID: 58.
 46. **Akshoy Ranjan Paul**, Firoz Alam, Nawshad Haque, Somnath Chattopadhyaya, Kalyan Adhikari, "Utilization of Renewable Energy in Irrigation System of Indian Ganges Basin", Abstract Proceedings of International Conference on Water, Energy, and Environmental Sustainability 2020 (WEES 2020), 13-15 January 2020, NIT Durgapur (India), Paper ID: EN-55, p. 86.
 47. Firoz Alam, Khondkar Saleque, Saifuddin Ahsan, Quamrul Alam, **Akshoy Ranjan Paul**, Somnath Chattopadhyaya and Nawshad Haque, "The Use of Natural Gas and LPG in Bangladesh

- and Northeast Indian Economic Development", Abstract Proceedings of International Conference on Water, Energy, and Environmental Sustainability 2020 (WEES 2020), 13-15 January 2020, NIT Durgapur (India), Paper ID: IL-01, p. 1.
48. Firoz Alam, Saifuddin Ahsan, Kalyan Adhikari, Quamrul Alam, **Akshoy Ranjan Paul**, Somnath Chattopadhyaya, Rashid Sarkar and Nawshad Haque, "Hydropower and Ecology in the Central Himalayan Region", Abstract Proceedings of International Conference on Water, Energy, and Environmental Sustainability 2020 (WEES 2020), 13-15 January 2020, NIT Durgapur (India), Paper ID: IL-05, p. 5.
 49. Suvanjan Bhattacharyya, Md. Anisur Rahman, Aakash Jhunjhunwala, Ranjib Biswas, **Akshoy Ranjan Paul**, "Transport phenomenon over array of diamond cylinders with varying inlet turbulent intensity", 25th National and 3rd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2019), 28-31 December 2019, IIT Roorkee (India), Paper ID-462.
 50. Firoz Alam, Harun Chowdhury, Anirban Basu, Saifuddin Ahsan, Shaheen Shah, Rashid Sarkar, **Akshoy Ranjan Paul**, and Somnath Chattopadhyaya, "Aerodynamics and safety for road trucks in Bangladesh", Proceedings of the 13th International Conference on Mechanical Engineering (ICME2019), 18-20 Dec. 2019. ISBN: 978-0-7354-4068-5. Published in AIP Conference Proceedings, vol. 2324, issue 1, 020002 (25 Feb. 2021); <https://doi.org/10.1063/5.0037681>
 51. Patibandla B.L.V. Ramana, **Akshoy Ranjan Paul**, Anuj Jain, Kazuo Matsuura, "Computational Study on Dynamic Stall and Flow Control in a Pitching Airfoil", Proceedings of the 16th Asian Congress of Fluid Mechanics (16ACFM), 13-17 December 2019, JNCASR, Bangalore (India), Paper ID: 16ACFM-5a.
 52. Vivek Kumar Srivastav, Anuj Jain, **Akshoy Ranjan Paul**, "Computational Studies of Aerosolized Drug Deposition in Human Respiratory Tract", Proceedings of the 16th Asian Congress of Fluid Mechanics (16ACFM), 13-17 December 2019, JNCASR, Bangalore (India), Paper ID: 16ACFM-5b.
 53. Bavin Loganathan, Harun Chowdhury, Hamed Allehibi, Firoz Alam and **Akshoy Ranjan Paul**, "A Micro Multi-blade Vertical Axis Wind Turbine for Built-up Areas", Proceedings of the 16th Asian Congress of Fluid Mechanics (16ACFM), 13-17 December 2019, JNCASR, Bangalore (India), Paper ID: 16ACFM-083.
 54. Firoz Alam, Rashid Sarkar, **Akshoy Ranjan Paul**, and Abdulaziz Aldiab, "Nuclear Power Plants and Human Resources Development in South Asia", Abstract Proceedings of 7th International Conference on Advances in Energy Research, 10-12 December 2019, IIT Bombay, Mumbai (India), Paper ID-352.
 55. Ashish Mishra, **Akshoy R. Paul**, Anuj Jain, Firoz Alam, "Design and analysis of synthetic jet for microchannel cooling", Abstract Proceedings of 16th United Kingdom Heat Transfer Conference (UKHTC-2019), 8-10 September 2019, University of Nottingham (U.K.), Paper ID-162.
 56. Harun Chowdhury, Firoz Alam, Mitchell Rose, Jordan Gale, **Akshoy Ranjan Paul**, "An Experimental Study on Vent Locations in Road Racing Bicycle Helmet to Optimise Thermal Comfort and Aerodynamic Efficiency", Abstract Proceedings of 16th United Kingdom Heat Transfer Conference (UKHTC-2019), 8-10 September 2019, University of Nottingham (U.K.), Paper ID-179.
 57. Digamber Singh, Anuj Jain, **Akshoy Ranjan Paul**, "Numerical Study on Particle Deposition in Healthy Human Airways and Airways with Glomous Tumour", Proceedings of 1st International Conference on Biomedical Engineering Science and Technology: Roadway from Laboratory to Market (ICBEST 2018), 20-21 Dec. 2018, NIT Raipur Chhattisgarh (India).
 58. Abhishek Gupta, **Akshoy Ranjan Paul**, "Carbon capture and sequestration potential in India: A comprehensive review", Abstract Proceedings of Second International Conference on Power and Energy (ICEP2018), 13-15 Dec. 2018, Sydney (Australia), Paper ID-2, p. 16, ISBN: 978-1-

- 921047-68-8. Published in Energy Procedia, vol. 160, pp. 848-855. <https://doi.org/10.1016/j.egypro.2019.02.148>
59. Firoz Alam, Rashid Sarkar, Quamrul Alam, Harun Chowdhury, **Akshoy Paul**, "A Review on the Regional Collaboration of Power Utilization in South Asia", Abstract Proceedings of Second International Conference on Power and Energy (ICEP2018), 13-15 Dec. 2018, Sydney (Australia), Paper ID-2, p. 28, ISBN: 978-1-921047-68-8. Published in Energy Procedia, Volume 160, Pages 11-17, Feb. 2019. <https://doi.org/10.1016/j.egypro.2019.02.112>
 60. Suvanjan Bhattacharyya, Kunal Dey, Rajdeep Hore, Arnab Banerjee, **Akshoy Ranjan Paul**, "Computational study on thermal energy around diamond shaped cylinder at varying inlet turbulent intensity", Abstract Proceedings of Second International Conference on Power and Energy (ICEP2018), 13-15 Dec. 2018, Sydney (Australia), Paper ID-53, p. 46, ISBN: 978-1-921047-68-8. Published in Energy Procedia, Volume 160, Pages 285-292, Feb. 2019. <https://doi.org/10.1016/j.egypro.2019.02.155>
 61. Suvanjan Bhattacharyya, Arnab Banerjee, Md. Anisur Rahman, Reeshika Saha, **Akshoy Ranjan Paul**, "Numerical analysis of heat transfer and flow dynamics in a pipe with square extruded bluff cylinder inserts", Abstract Proceedings of Second International Conference on Power and Energy (ICEP2018), 13-15 Dec. 2018, Sydney (Australia), Paper ID-54, p. 47, ISBN: 978-1-921047-68-8. Published in Energy Procedia, vol. 160, pp. 293-300, Feb. 2019. <https://doi.org/10.1016/j.egypro.2019.02.156>
 62. Shubham Deshmukh, Sourodeep Bhattacharya, Anuj Jain, **Akshoy Ranjan Paul**, "Wind turbine noise and its mitigation techniques: A Review", Abstract Proceedings of Second International Conference on Power and Energy (ICEP2018), 13-15 Dec. 2018, Sydney (Australia), Paper ID-118, p. 68, ISBN: 978-1-921047-68-8. Published in Energy Procedia, Volume 160, pp. 633-640, Feb. 2019. <https://doi.org/10.1016/j.egypro.2019.02.215>
 63. Akshay Tiwari, **Akshoy Ranjan Paul**, Anuj Jain, Heat Transfer of Alumina-Water Nanofluid in Microtube with Scaling Effects, Proceedings of 7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP-2018), 10-12 Dec. 2018, IIT Bombay (India). Paper ID: 364.
 64. Aviral Prakash, Amit Kumar, Vikas Bahuguna, Sunil Rizal, Shoaib Ahmed, Anurag Tiwari, **Akshoy Ranjan Paul**, Anuj Jain, "A Comparative Study of Drug Deposition Efficiency of Dry Powder Inhalers", Proceedings of 7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP-2018), 10-12 Dec. 2018, IIT Bombay (India). Paper ID: 794.
 65. Vishal Kumar, Vivek Kumar Srivastav, **Akshoy Ranjan Paul**, Anuj Jain, "Computational Fluid Dynamics Studies of Effect of Blockage Ratio on Drag", Book of Abstracts of International Conference on Applied and Computational Mathematics, 23-25 Nov. 2018, IIT Kharagpur, p. 52. In Book: Mathematical Modeling and Computational Tools. April 2020. DOI: 10.1007/978-981-15-3615-1_5
 66. Bipin Kumar, Shubham Kumar, Nithish Kumar, V.K. Srivastav, **A.R. Paul**, Anuj Jain, Computational Fluid Dynamics Studies of Two Dimensional Human Lung, Book of Abstracts of International Conference on Applied and Computational Mathematics, 23-25 Nov. 2018, IIT Kharagpur, p. 53.
 67. D. Singh, Anuj Jain, **A.R. Paul**, "Ambient Air Quality Index Effect on Deposition of Respirable Suspended Particulate Matter (PM_{2.5} and PM₁₀) in Human Upper Respiratory Tract under Asymmetric Spirometry Flow", Book of Abstracts of International Conference on Recent Advances in Materials and Manufacturing Technologies (ICRAMMT-2018), 19-20 Nov. 2018, MLRITM Hyderabad (Telangana), p. 87.
 68. **A.R. Paul** and F. Alam, "Compliance of Boiler Standards and Industrial Safety in Indian Subcontinent", Proceedings of First International Conference on Mechanical Engineering

- (INCOM2018), 4-6 Jan. 2018, Jadavpur University, Kolkata (India), Paper ID-258, pp. 687-691, ISBN: 978-93-83660-38-4.
69. Rakesh Kumar Shukla, Vivek Kumar Srivastav, **Akshoy Ranjan Paul** and Anuj Jain, "Analysis of Airflow through Compliant Human Airways using Fluid Structure Interaction", Proceedings of First International Conference on Mechanical Engineering (INCOM2018), 4-6 Jan. 2018, Jadavpur University, Kolkata (India), Paper ID-218, pp. 309-312, ISBN: 978-93-83660-38-4.
 70. Ashish Mishra, **Akshoy Ranjan Paul**, Anuj Jain, Effects of Actuation Frequency and Taper angle of Synthetic Jet for Micro-channel Cooling, Proceedings of the 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), 27-30 Dec. 2017, Hyderabad (India), Paper ID: IHMTTC2017-0739.
 71. Atiq Ur Rehman, Vinoth Kumar K., Anuj Jain, **Akshoy Ranjan Paul**, "Performance and Cavitation Prediction in an Industrial Centrifugal Pump for Different Working Fluids", Proceedings of First International Conference on Thermal and Fluid Engineering (ICTF-2017), 3-5 July 2017, Phuket (Thailand), pp. 36-42, ISBN No. 978-605-9546-05-8.
 72. Yadav KrishnaKumar Rajnath, Ravi Kumar Singh, Anuj Jain, **Akshoy Ranjan Paul**, "Effects of Inlet Swirl on the Performance of Twin Air-Intake Duct", Proceedings of First International Conference on Thermal and Fluid Engineering (ICTF-2017), 3-5 July 2017, Phuket (Thailand), pp. 1-7, ISBN No. 978-605-9546-05-8.
 73. Atiq Ur Rehman, **Akshoy Ranjan Paul**, Anuj Jain, "Effect of impeller volute interaction on performance of the centrifugal pump: a CFD approach", Proc. of Indian Conference on Applied Mechanics (INCAM-2017) at MNNIT Allahabad, July 5-7, 2017, ISBN: 978-93-80635-28-6.
 74. Yadav KrishnaKumar Rajnath, Anuj Jain, **Akshoy Ranjan Paul**, "Modelling and Simulation of Turbulent Flow Control in Twin Air-Intake Duct using Synthetic Jets", Proceedings of the International Conference on Computational Modelling and Simulation-2017, 17-19 May 2017, Colombo (Sri Lanka), ISBN No. 978-955-703-011-41.
 75. Sristi V.R.L.B. Srivani, Sushma C., **Akshoy Ranjan Paul** and Anuj Jain, "Computational Study on Pneumatic Capsule Pipeline (PCP)", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 575, ISBN No. 978-93- 5267-407-7.
 76. Swapnil Lokram Kombe, Pankaj Bharti, **Akshoy Ranjan Paul** and Anuj Jain, "Effects of Inter-Capsule Space and Geometric Parameters on Capsule Train in a Hydraulic Capsule Transport Pipeline", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 586, ISBN No. 978-93- 5267-407-7.
 77. Abhishek Gupta, Ajay Kumar Jaiswal, **Akshoy Ranjan Paul** and Anuj Jain, "Flow Separation Control Over NACA2412 Wing using Air Slots", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 587, ISBN No. 978-93- 5267-407-7.
 78. Anoop Singh, Ashish Mishra, **Akshoy Ranjan Paul** and Anuj Jain, "Effects of Orifice Shape and Frequency of a Synthetic Jet Actuator for Heat Transfer Enhancement of a Flat Plate", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 588, ISBN No. 978-93- 5267-407-7.
 79. Vivek Kumar Srivastav, Bholu Kumar, Anuj Jain and **Akshoy Ranjan Paul**, "A Computational Study on Airflow in Human Respiratory Tract at Normal and Heavy Breathing Conditions", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 589, ISBN No. 978-93- 5267-407-7.

80. Deepak Kumar Singh, Anuj Jain and **Akshoy Ranjan Paul**, "Active Flow Control on NACA23012 Airfoil using Combined Action of Synthetic Jet and Continuous Jet", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 590, ISBN No. 978-93- 5267-407-7.
81. Rakesh Kumar, Neeraj Shukla, **Akshoy Ranjan Paul** and Anuj Jain, "CFD Simulation of Cerebrospinal Fluid Flow In Human Ventricular System", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 591, ISBN No. 978-93- 5267-407-7.
82. Stuti Mishra, **Akshoy Ranjan Paul**, Anuj Jain and Rakesh Mishra, "Optimal Sizing of an Ovoid Duct Transporting Solid-Liquid Mixtures", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 611, ISBN No. 978-93- 5267-407-7.
83. Atiq Ur Rehman, Pankaj Yadav, **Akshoy Ranjan Paul** and Anuj Jain, "Effect of Number of Blades on Performance of a Centrifugal Pump", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 614, ISBN No. 978-93- 5267-407-7.
84. Ashish Kumar Mishra, Atiq Ur Rehman, **Akshoy Ranjan Paul** and Anuj Jain, "Performance Analysis of an Impeller of a Centrifugal Pump using OpenFOAM", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 615, ISBN No. 978-93- 5267-407-7.
85. Digamber Singh, Bholu Kumar, Anuj Jain and **Akshoy Ranjan Paul**, "Effects of Physical Structure of Nasal Cavity and Nasopharynx on Airflow Field in Human Upper Airways", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 616, ISBN No. 978-93- 5267-407-7.
86. Kamran Ashraf, Ajita Gupta, Miryala Karthik, **Akshoy Ranjan Paul** and Anuj Jain, "Control of Flow Separation around a Cylinder using DBD Plasma Jet Actuator", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 618, ISBN No. 978-93- 5267-407-7.
87. Ashish K. Mishra, Kaushal K. Mishra, Anuj Jain, **A. R. Paul** and B.B. Gulyani, "A Computational Study on Solar Desalination Unit", Proceedings of 6th International and 43rd National Conference on Fluid Mechanics and Fluid Power (FMFP-2016) 15-17 Dec. 2016, MNNIT Allahabad (India). Paper ID: 620, ISBN No. 978-93- 5267-407-7.
88. Vivek Kumar Srivastav, Bholu Kumar, Digamber Singh, Anuj Jain, **Akshoy Ranjan Paul**, "A Comparative Analysis of Smoke-Particles Deposition in Simplified and CT Scan Based Human Trachea under Inspiratory Flow", in the International Conference on Biomedical Engineering & Supportive Technologies (BEST 2016) at Bundelkhand Institute of Engineering & Technology, Jhansi, U.P. (India) during Sept. 2-3, 2016.
89. Atiq Ur Rehman, Shivam Srivastava, Anuj Jain, **Akshoy Ranjan Paul**, Rakesh Mishra, "Effect of Blade Trailing Edge Angle on the Performance of a Centrifugal Pump Impeller", Proceedings of COMADEM-2015, Dec. 1-4, 2015, Buenos Aires, Argentina. ISBN: 9789872395766.
90. Atiq Ur Rehman, Subhash Shinde, **Akshoy Ranjan Paul**, Anuj Jain, "Effects of Discharge on the Performance of an Industrial Centrifugal Pump", Proceedings of International Conference on Computing Techniques and Mechanical Engineering (ICCTME-2015), Oct. 1-3, 2015, Phuket (Thailand), paper ID: U1015114, pp. 23-30 , ISBN: 9789384422400.
91. Shilpee Roy, Anurag Kulshrestha, Anuj Jain, **Akshoy Ranjan Paul**, "Computational Analysis of Drag Reduction for a Hatchback Car", Proceedings of the International Conference on Advanced

Computational Technologies and Creative Media (ICACTCM-2014), August 14-15, 2014, Pattaya (Thailand), Paper ID: E0814507, pp. 94-98, ISBN: 9788192965345. **Received Best Paper Award.**

92. **Akshoy Ranjan Paul**, Shrey Joshi, Aman Jindal, Shivam P. Maurya, Ajit Verma, "Large Eddy Simulation of Vortex Shedding with Triangular Cylinder ahead of a Square Cylinder", Proceedings of the 8th Asia-Pacific Conference on Wind Engineering (APCWE-VIII), Dec. 10-14, 2013, Chennai, Paper ID: 241, pp. 299-302, ISBN No. 9789810780128.
93. Atique Ur Rehman, Subhash Shinde, Vikash K. Singh, **Akshoy R. Paul**, Anuj Jain, Rakesh Mishra, "CFD based condition monitoring of centrifugal pumps", Proceedings of COMADEM 2013, 11-13 June 2013, Helsinki, Finland, ISBN 9789526798103.
94. **Akshoy Ranjan Paul**, Shrey Joshi, Aman Jindal, Shivam P Maurya, Prakhar K. Tiwari, Anuj Jain, "Effects of Upstream Rod's Shape on Drag of a Square Cylinder", Proceedings of the 3rd International Conference on Mechanical, Automotive and Materials Engineering (ICMAME'2013), 16-17 January 2013, Hong Kong (China), Paper ID: 113811, pp. 35-40, ISBN No. 9789382242239.
95. **Akshoy Ranjan Paul**, Shrey Joshi, Aman Jindal, Ajit Verma, Shivam P. Maurya, Anuj Jain, "Active Flow Control in Twin Air-Intake using Vortex Generators Jets", Proceedings of the 9th International Conference on Mechanical Engineering (ICME-2011), 18-20 December 2011, Dhaka, Bangladesh, Paper Code: ICME11-FL-024.
96. Vivek Kumar Srivastav, Anuj Jain, **Akshoy Ranjan Paul**, Shrey Joshi, "CFD Modelling of Airflow in Human Respiratory System", Proceedings of the 9th International Conference on Mechanical Engineering (ICME-2011), 18-20 December 2011, Dhaka, Bangladesh, Paper Code: ICME11-FL-09.
97. Vivek Kumar Patel, **Akshoy Ranjan Paul**, "Experimental studies on 'Fishtail' vortex generators", Proceedings of The 11th Asian International Conference on Fluid Machinery & 3rd Fluid Power Technology Exhibition, 21 - 23 November 2011, IIT Madras, Chennai, India, Paper code: AICFM_FM_012, ISBN No. 9788191057133.
98. **Akshoy Ranjan Paul**, Pritanshu Ranjan, Ravi Ranjan Upadhyay, Anuj Jain, "Passive Flow Control in Twin Air-Intakes", Proceedings of WASET International Conference on Mathematical and Computational Methods in Science and Engineering (ICMCMSE 2011), Paris, France, June 24-26, 2011, Yr. 7, Issue 77, Article No. 56, pp. 297-304, Print ISSN: 2010-376X (Scopus).
99. **Akshoy Ranjan Paul**, Pritanshu Ranjan, Ravi Ranjan Upadhyay, Anuj Jain, "Flow Control in Twin Air-Intakes using Vortex Generators", Recent Researches in Applied and Computational Mathematics, pp. 107-116, WSEAS Press, ISBN: 9781618040022, Proceedings of International Conference on Applied and Computational Mathematics (ICACM '11), Lanzarote, Canary Islands, Spain, May 27-29, 2011 (Scopus).
100. Anuj Jain, **Akshoy Ranjan Paul**, S.K. Aggarwal, B. Mohanty, B.P. Mani, "A New Correlation for Holdup in Gas-Solids Cyclone", Recent Researches in Applied and Computational Mathematics, pp. 117-126, WSEAS Press, ISBN: 9781618040022, Proceedings of International Conference on Applied and Computational Mathematics (ICACM '11), Lanzarote, Canary Islands, Spain, May 27-29, 2011 (Scopus).
101. **Akshoy Ranjan Paul**, Pritanshu Ranjan, Ravi Ranjan Upadhyay, Anuj Jain, "Passive Flow Control through Y-shaped Air Intake using Submerged Vortex Generators", Proceedings of 5th International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM-2010), IIT Kharagpur, India, Dec 27-29, 2010, Paper No. 148, pp. 373-375, ISBN: 9789380813035.
102. Pritanshu Ranjan, **Akshoy Ranjan Paul**, "Effects of Inflow Conditions and Turning Angles on the Performance of S-Duct Diffusers-A Computational Approach", Proceedings of 5th

- International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM-2010), IIT Kharagpur, India, Dec 27-29, 2010, Paper No. 149, pp. 376-378, ISBN: 9789380813035.
103. Ajay Pratap Singh, **Akshoy Ranjan Paul**, Ravi Ranjan Upadhyay, Anuj Jain, "Control of Turbulent Flow Separation over Humps in a Channel", Proceedings of 5th International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM-2010), IIT Kharagpur, India, Dec 27-29, 2010, Paper No. 301, pp. 740-742, ISBN: 9789380813035.
 104. Dheeraj Sagar, **Akshoy Ranjan Paul**, Ravi Ranjan Upadhyay, Anuj Jain, "Aerodynamic Effects of Rear Spoiler and Vortex Generators on Passenger Cars", , Proceedings of 5th International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM-2010), IIT Kharagpur, India, Dec 27-29, 2010, Paper No. 311, pp. 760-762, ISBN: 9789380813035.
 105. **Akshoy Ranjan Paul**, Ravi Ranjan Upadhyay, Anuj Jain, "Influence of Overlap in Second Bends and Turning Angle on the Flow Characteristics of Y-shaped Air Intakes" Proceedings of 13th Asian Congress of Fluid Mechanics (ACFM-2010), Dhaka, Bangladesh, Dec. 17-21, 2010, Paper No. 154, vol. I, pp. 150-153, ISBN: 9789843322142.
 106. **Akshoy Ranjan Paul**, Pritanshu Ranjan, Ravi Ranjan Upadhyay, Anuj Jain, "Fluid control in Y-shaped air intake using vortex generator", Proceedings of 4th International Conference on Fluid Mechanics and Fluid Power, I.I.T. Madras, India, Dec. 16-18, 2010, Paper No. FMFP-10-FP-5, ISBN: 9788191051719.
 107. **Akshoy Ranjan Paul**, Mahendra Singh Yadav, Kalyan Kuppa, Ujjal Datta, "Experimental studies on flow improvement through rectangular S-duct diffuser", 27th AIAA Applied Aerodynamics Conference, San Antonio, Texas, June 22-25, 2009, Paper No. AIAA-2009-3511, E-ISBN: 9781624101304 (Scopus).
 108. **Akshoy Ranjan Paul**, Kalyan Kuppa, Navanshu Tripathi, Tanmay Rajpathak, "Experimental and computational study of flow improvement through sigmoid air intake ducts using flow deflector", 26th AIAA Applied Aerodynamics Conference, Honolulu, Hawaii, August 18-21, 2008, Paper No. AIAA-2008-7513, E-ISBN: 978160086-9877 (Scopus). <https://doi.org/10.2514/6.2008-7513>
 109. **Akshoy Ranjan Paul**, K. Kalyan, Navanshu Tripathi, B. Majumdar, "Effects on twin-bladed deflector on flow through S-duct diffuser", Proc. of 4th International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM 2007), IIT Kharagpur, India, Dec. 27-29, 2007, Paper No. 218.
 110. **Akshoy Ranjan Paul**, Dr. B. Majumdar, "Studies on flow deflector installation at inlet of sigmoid ducts", Proc. of 2nd Int. Conf. on Fluid Mechanics & Fluid Power, Indian Institute of Technology Roorkee, India, Dec. 13-15, 2002, vol. I, pp. 209-216.
 111. **Akshoy Ranjan Paul**, Dr. B. Majumdar, "Some studies on flow regimes and wall pressure recovery of air-intake ducts", Proc. of Int. Conf. on Mechanical Engineering (ICME-2001), Department of Mechanical Engineering, Bangladesh University of Engineering & Technology, Dhaka, Bangladesh, Dec. 26-28, 2001, vol. 4, pp. 5-10.
- *National Conferences: 34.*
 1. Arpan K Sharma, Devendra K Vishwakarma, Subarna Mukherjee, Rahul Venkatesan, **A. R. Paul**, Suvanjan Bhattacharyya, "Computational investigation on flow dynamics and heat transfer of nanofluid in low Reynolds number under magnetic field" presented in the 48th National

Conference on Fluid Mechanics and Fluid Power (FMFP-2021) held at BITS Pilani, Pilani Campus (India) during 27-29 December 2021, Paper ID: FMFP2021-10-341.

2. Devesh Singh, Prashant Kumar, **Akshoy Ranjan Paul**, and Abdus Samad, "Design of a Two-Body Point Absorber for Indian Coast" presented in the 48th National Conference on Fluid Mechanics and Fluid Power (FMFP-2021) held at BITS Pilani, Pilani Campus (India) during 27-29 December 2021, Paper ID: FMFP2021-10-262. **Received Best Paper Award.**
3. Shalini Verma, Sanjeevani Suresh Kamdi, and **Akshoy Ranjan Paul**, "CFD Analysis of Horizontal Axis Wind Turbine with blended winglet profile" presented in the 48th National Conference on Fluid Mechanics and Fluid Power (FMFP-2021) held at BITS Pilani, Pilani Campus (India) during 27-29 December 2021, Paper ID: FMFP2021-10-265. **Received Best Paper Award.**
4. Anurag Tiwari, Siddharth Sharma, Vivek Kumar Srivastav, Anuj Jain, **Akshoy Ranjan Paul**, "Computational Study on Pressurized Metered Dose Inhaler", Proceedings of the National Conference on Sustainable and Recent Innovation in Science & Engineering (SINRISE-2019), 28-29 Nov. 2019, Motihari (Bihar), Paper ID: S1953, ISBN: 978-93-5391-715-9.
5. Yadav Krishnakumar Rajnath, Suvanjan Bhattacharyya, **Akshoy Ranjan Paul**, "Active Flow Control in Twin Air Intake in presence of Inlet Swirl", Proceedings of the National Conference on Sustainable and Recent Innovation in Science & Engineering (SINRISE-2019), 28-29 Nov. 2019, Motihari (Bihar), Paper ID: S1954, ISBN: 978-93-5391-715-9.
6. Shalini Verma, **Akshoy Ranjan Paul**, "Effects of Turbulence and Winglet on Aerodynamic and Stall Characteristics of HAWT", Proceedings of the National Conference on Sustainable and Recent Innovation in Science & Engineering (SINRISE-2019), 28-29 Nov. 2019, Motihari (Bihar), Paper ID: S1951, ISBN: 978-93-5391-715-9.
7. Abhishek Gupta, **Akshoy Ranjan Paul**, "Effects of Relative Permeability and Capillary Pressure on CO₂-Plume Migration during CO₂ Injection in Saline Aquifers", Proceedings of the National Conference on Sustainable and Recent Innovation in Science & Engineering (SINRISE-2019), 28-29 Nov. 2019, Motihari (Bihar), Paper ID: S1952, ISBN: 978-93-5391-715-9.
8. Shikhar Kumar Singh, **Akshoy Ranjan Paul**, Suvanjan Bhattacharyya, Anuj Jain, "Heat Transfer in Microtube and Wavy Channel using Nanofluid and Hybrid Nanofluid", Proceedings of National Conference on Industrial Applications of Nanoscience & Nanotechnology, 15-16 Nov. 2019, MNNIT Allahabad (Uttar Pradesh).
9. R.K. Singh, R. Kumar, S. Ali, M. Alam, A. Kumar, V.K. Srivastav, **A.R. Paul**, "Use of Fly Ash for Brick Manufacturing", Proceedings of National Conference on Trends and Advances in Mechanical Engineering (TAME-2019), 15-16 Feb. 2019, Kalyani (West Bengal), Paper ID: 158.
10. Yadav KrishnaKumar Rajnath, **Akshoy Ranjan Paul**, Anuj Jain, "Flow Characteristics and Performance of a Double-Offset, Transitional Twin Air-Intake at Different Inflow Conditions", Proceedings of the 44th National Conference on Fluid Mechanics and Fluid Power (FMFP-2017), 14-16 Dec. 2017, Kollam (Kerala), Paper ID: 253.
11. Atiq Ur Rehman, **Akshoy Ranjan Paul**, Anuj Jain, "Performance Analysis of Centrifugal Pump using Various Working Fluids", Proceedings of the 44th National Conference on Fluid Mechanics and Fluid Power (FMFP-2017), 14-16 Dec. 2017, Kollam (Kerala), Paper ID: 260.
12. **Akshoy Ranjan Paul**, Anuj Jain, "An Overview of the Fluid Dynamics Study on Human Respiratory Tract", Proceedings of the 44th National Conference on Fluid Mechanics and Fluid Power (FMFP-2017), 14-16 Dec. 2017, Kollam (Kerala), Thematic paper.
13. **Akshoy Ranjan Paul**, Anuj Jain, "Energy and Environment for Sustainable Development", Proceedings of the 44th National Conference on Fluid Mechanics and Fluid Power (FMFP-2017), 14-16 Dec. 2017, Kollam (Kerala), Thematic paper.

14. Bholu Kumar, Sumit Malik, Vivek Kumar Srivastav, **Akshoy Ranjan Paul**, Anuj Jain, "Numerical Studies of Toxic-Particle Deposition in the Sixth Generation Human Respiratory Tract", Proc. in the National Conference on Emerging Trends in Physics of Fluids & Solids (NCETPFS-2015) at Jadavpur University during Feb. 24-25, 2015.
15. Shrey Joshi, Aman Jindal, Vikrant S. Yadav, Prakhar K. Tiwari, **Akshoy R. Paul**, Anuj Jain, "Calibration Methodology of Wall Shear Stress Sensor", Proceedings of 40th National Conference on Fluid Mechanics & Fluid Power (FMFP-2013), 12-14 December 2013, NIT Hamirpur, Himachal Pradesh, Paper code: 290, ISBN: 9789382880905.
16. Shashank Kumar Shukla, Vivek Kumar Srivastav, **Akshoy Ranjan Paul**, Anuj Jain, "Computational Study of Aerosol Drug Deposition on Tumorous Human Airway Model", Proceedings of 40th National Conference on Fluid Mechanics & Fluid Power (FMFP-2013), 12-14 December 2013, NIT Hamirpur, Himachal Pradesh, Paper code: 148, ISBN: 9789382880905.
17. Deepak Kumar Kalyan, Atiq Ur Rehman, **Akshoy Ranjan Paul**, Anuj Jain, "Computational Flow Analysis through a Double-Suction Impeller of a Centrifugal Pump", Proceedings of 40th National Conference on Fluid Mechanics & Fluid Power (FMFP-2013), 12-14 December 2013, NIT Hamirpur, Himachal Pradesh, Paper code: 141, , ISBN: 9789382880905.
18. Nithin Hegde, Prakhar Kant Tiwari, **Akshoy Ranjan Paul** and Anuj Jain, Investigation of Flow Control in Transition Air-Intake using Synthetic Jet Actuators, Proc. of Indian Conference on Applied Mechanics (INCAM-2013) at IIT Madras, July 4-6, 2013, paper code: FM_13, ISBN: 978935137.
19. Vivek K. Srivastav, Arvind K. Verma, Vikrant S. Yadav, **Akshoy R. Paul**, Anuj Jain, "Studies of Laminar Flow through a Bifurcated Human Respiratory Tract", Proc. of Indian Conference on Applied Mechanics (INCAM-2013) at IIT Madras, July 4-6, 2013, paper code: FM_1, ISBN: 978935137.
20. Subhash Shinde, **Akshoy Ranjan Paul**, Anuj Jain, "CFD Analysis of Viscous Flow over Delta-Rectangular Wing", Proc. of 2nd Students' Conference on Engineering and Systems (SCES 2013), MNNIT Allahabad, 12-14 April 2013, ISBN: 978-1-4673-5629-9 (Scopus). DOI: 10.1109/SCES.2013.6547537.
21. Vivek Kumar Srivastav, **Akshoy Ranjan Paul**, Anuj Jain, "CFD Simulation of Airflow and Particle Deposition in Third to Sixth Generation Human Respiratory Tract", Proceedings of 39th National Conference on Fluid Mechanics & Fluid Power (FMFP-2012), 13-15 December 2012, SVNIT Surat, Gujarat, Paper code: 245, ISBN: 9788192549408.
22. **Akshoy Ranjan Paul**, Ashish Mittal, Anuj Jain, "Slotted flow separation control over a NACA2412 airfoil", Proceedings of 39th National Conference on Fluid Mechanics & Fluid Power (FMFP-2012), 13-15 December 2012, SVNIT Surat, Gujarat, Paper code: 039, ISBN: 9788192549408.
23. **Akshoy Ranjan Paul**, Ramakant Pandey, Aman Jindal, Prakhar Kant Tiwari, Anuj Jain, "Studies of Drag on Square Cylinder with Upstream Rod in Staggered Arrangement", Proceedings of 6th National Conference on Wind Engineering (NCWE-2012), 14-15 December 2012, New Delhi, Paper ID: 1207, pp. 169-179, ISBN: 9788192554808.
24. **Akshoy R. Paul**, Pradip K. Niranjana, Shrey Joshi, Ajit Verma, Anuj Jain, "Computational Analysis of a Rear Spoiler on a Sedan Car", Proceedings of the 38th National Conference on Fluid Mechanics and Fluid Power, M.A.N.I.T. Bhopal, India, Dec. 13-15, 2011, Paper code: CFD-13.
25. **Akshoy R. Paul**, Shrey Joshi Aman Jindal, Shivam P. Maurya, Anuj Jain, "Comparison of Active and Passive Flow Controls: A Case Study in Bifurcated Air-Intake", Proceedings of the 38th National Conference on Fluid Mechanics and Fluid Power, M.A.N.I.T. Bhopal, India, Dec. 13-15, 2011, Paper code: FP-04.

26. Vivek Kumar Srivastav, Amit Kumar, Anuj Jain, **Akshoy Ranjan Paul**, , “CFD Modelling of Bifurcated Human Airways”, Proceedings of the 38th National Conference on Fluid Mechanics and Fluid Power, M.A.N.I.T. Bhopal, India, Dec. 13-15, 2011, Paper code: CFD-07.
27. Ravishankar L N , Anuj Jain, **Akshoy Ranjan Paul**, “CFD Analysis of Separation Efficiency in a Typical Cyclone Separator”, Proc. of Modeling and Simulation in Heat Transfer and Fluid Flow (MSHTFF), National Institute of Technology, Jamshedpur, July 9-10, 2010, Paper No. MSHTFF-14.
28. Manish Mangal, Pritanshu Ranjan, **Akshoy Ranjan Paul**, “Computational Analysis of Drag Reduction of a Cylinder using an Upstream Circular Rod”, Proc. of Modelling and Simulation in Heat Transfer and Fluid Flow (MSHTFF), National Institute of Technology, Jamshedpur, July 9-10, 2010, Paper No. MSHTFF-06.
29. **Akshoy Ranjan Paul**, Ravi Ranjan Upadhyay, Anuj Jain, “Studies on calibration algorithms of five-hole pressure probe”, Proc. of 5th National Conference on Applicable Mathematics in Wave Mechanics and Vibrations (5th WMVC-2010), Kakatiya University, Warangal, March 13-15, 2010, vol. I.
30. Pritanshu Ranjan, **Akshoy Ranjan Paul**, Ajay Pratap Singh, “Computational investigation of boundary layer flow over transverse grooved flat plates”, Proc. of 5th National Conference on Applicable Mathematics in Wave Mechanics and Vibrations (5th WMVC-2010), Kakatiya University, Warangal, March 13-15, 2010, vol. I.
31. Dheeraj Sagar, **Akshoy Ranjan Paul**, Pritanshu Ranjan, Anuj Jain, “Validation of turbulent separated flows in axisymmetric diffusers using CFD”, Proc. of 5th National Conference on Applicable Mathematics in Wave Mechanics and Vibrations (5th WMVC-2010), Kakatiya University, Warangal, March 13-15, 2010, vol. I.
32. Ajay Pratap Singh, Pritanshu Ranjan, **Akshoy Ranjan Paul**, “Investigation of flow characteristics over backward facing step for different inclination angle”, Proc. of 5th National Conference on Applicable Mathematics in Wave Mechanics and Vibrations (5th WMVC-2010), Kakatiya University, Warangal, March 13-15, 2010, vol. I.
33. Sanchayan Mukherjee, **Akshoy Ranjan Paul**, *et al.*, “A graphical case based solution for determination of optimum values of the guiding parameters in cooling towers”, Proc. National Seminar on Recent Advances in Mechanical Engineering, K.K. Wagh College of Engineering, Nasik, January 16-17, 2004.
34. **Akshoy Ranjan Paul**, Dr. Bireswar Majumdar, “Performance estimation for Francis turbine- A case study”, Proc. of 28th National Conf. on Fluid Mechanics & Fluid Power, Punjab Engineering College, Chandigarh, Dec. 13-15, 2001, vol. I, pp. 331-336.