

Dr. Sumon Saha



Dr. Sumon Saha is a professor in the Department of Mechanical Engineering at Bangladesh University of Engineering and Technology (BUET), where he established himself as a prominent academic and researcher in thermo-fluid dynamics, heat transfer, and applied mechanics. He earned his Ph.D. in Engineering from the University of Melbourne, Australia 2014, supported by prestigious awards such as the International Postgraduate Research Scholarship (IPRS) and the Melbourne International Research Scholarship (MIRS). His doctoral research focused on the numerical analysis of turbulent heat transfer in internal flows, significantly contributing to understanding complex thermal-fluidic phenomena.

Dr. Saha completed his B.Sc. and M.Sc. in Mechanical Engineering from BUET in 2004 and 2007, respectively. His postgraduate work included the post-buckling analysis of thermally loaded slender structures, while his undergraduate thesis involved finite element analysis of conduction heat transfer problems. He is the founder and principal investigator of the Computational Fluid Dynamics and Heat Transfer (CFDHT) Research Group at BUET, which leads cutting-edge research in computational modeling of thermal and fluid systems.

With over **220** international journals and conference proceedings publications, **Dr. Saha's** research spans topics such as magnetohydrodynamic (MHD) convection, entropy generation, nanofluids, conjugate heat transfer, and turbulent flow structures. His works appear in leading journals including *Applied Thermal Engineering*, *International Journal of Heat and Mass Transfer*, *Journal of Fluid Mechanics*, and *Physics of Fluids*. Most of his high-quality research publications involve numerical simulation using finite element method-based commercial simulation software "COMSOL Multiphysics". He has also authored or co-authored three engineering books and serves as the editor of several international journals, in addition to regularly reviewing for several prestigious journals and conferences.

Dr. Saha is an active member of several professional bodies, including IACSIT (Senior Member), the Bangladesh Solar Energy Society (Life Member), and the American Society of Thermal and Fluids Engineers (ASTFE). He has contributed to national and international scientific committees, editorial boards, and industry-academic collaborations through BUET's Bureau of Research, Testing, and Consultancy (BRTC).

His research contributions have been recognized through various grants, including funding from the Victorian Life Sciences Computation Initiative (VLSCI), BUET's Committee for Advanced Studies and Research (CASR), and the Basic Research Grant program. Recognizing his academic leadership, he has received multiple awards and honors for excellence in publication, research supervision, and educational service.

As an educator and mentor, **Dr. Saha** has guided numerous postgraduate students, many of whom now hold key positions in academia and industry. His participation in international conferences, workshops, and collaborative research initiatives further demonstrates his commitment to advancing thermal sciences and computational engineering. **Dr. Saha** is vital in shaping research and innovation in mechanical engineering in Bangladesh and beyond.