

Mahmood Alam Assistant Professor, Department of Mechanical Engineering Faculty of Engineering, Integral University, Lucknow (+91-8417835632, mahmood@iul.ac.in) <u>Google Scholar Citation |Orcid ID, Scopus, |Web of Science, |Research gate, |LinkedIn</u>

### PROFILE

**Mahmood Alam** has been a dedicated faculty member at Integral University for 16 years. His research expertise focuses on microfluidics and the thermal management of electronic devices, with a specialization in developing advanced microchannel heatsink technology. He is also experienced in the computational analysis of micromixers. Mahmood has authored 12 articles in peer-reviewed journals and conferences. Currently pursuing his doctoral studies at the Indian Institute of Technology (ISM) Dhanbad, he holds a master's degree in mechanical engineering from Integral University, Lucknow, and a bachelor's degree in mechanical engineering from Dr. APJ Abdul Kalam Technical University, Lucknow.

### **RESEARCH INTEREST:**

- Computational Fluid Dynamics (CFD), ANSYS-Fluent
- Thermal Analysis of microchannel heatsink
- Thermal management of electronic components
- Heat transfer

### SUMMARY OF RESEARCH ACCOMPLISHMENT:

- Number of publications : 12
- Citations: 19

# COURSE TAUGHT:

- Refrigeration and air conditioning
- Applied Thermodynamics
- Heating, ventilation and air conditioning
- Basic Mechanical Engineering
- Strength of Material

## ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILTY

- Departmental Placement Coordinator
- Departmental NAAC criteria-II Coordinator

### STUDENTS SUPERVISION

- M-Tech: 10
- B-Tech: 15 groups

# PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

- Performance analysis of microchannel heat sink with ribbed pinfins" International Journal of Heat (WoS, I.F:2.6)
- Parametric study on the influence of varying angled inlet channels on mixing performance in simple T micromixers and vortex T micromixers across a wide range of Reynolds numbers" Microfluidics and Nanofluidics, 2024. (WoS, I.F:2.4)

### PAPER PUBLISHED IN INTERNATIONAL CONFERENCES

• Finite Element Modeling for buckling analysis of Sandwich beams for various boundary conditions using Zigzag Theory and MATLAB: International conference on Emerging Trends in Mechanical Engineering ICETME 2011 At Thapar University Patiala, Punjab India.

### PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

- Review on Study of Mechanical Behavior of Different Vegetable Oil and Fly Ash Reinforced μ PVC Plastics, IJIRST –International Journal for Innovative Research in Science & Technology| Volume 3 | Issue 10 | March 2017 ISSN (online): 2349-6010.
- Study And Empirical Modeling Relating Welding Parameters And Tensile Strength of Hot Air Welded PVC Plastic, IJISET - International Journal of Innovative Science, Engineering &

Technology, Vol. 2 Issue 2, February 2015. www.ijiset.com ISSN 2348 - 7968.

- An Extensive Literature Review Showing Relation Between Process Parameter And Mechanical Properties of Welded Hard PVC by Hot Air Technique, International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395 -0056 Volume: 03 Issue: 02 | Feb-2016 www.irjet.net p-ISSN: 2395-0072
- The Effect of Process Parameter on Metal Matrix Composite (Al+4%Cu+5%Sic) By Stir Casting, International Journal of Engineering Trends and Applications (IJETA) – Volume 2 Issue 1, Jan-Feb 2015
- Effect Of Fly Ash Particle and Vegetable Oil on The Mechanical Properties of Fly Ash-Vegetable Oil Reinforced Hard Pvc Plastic: International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395 -0056 Volume: 03 Issue: 04 | Apr-2016 www.irjet.net p-ISSN: 2395-0072
- Welding of Plastics through Hot Gas Technique: A Review, GRD Journals- Global Research and Development Journal for Engineering | Volume 1 | Issue 6 | May 2016 ISSN: 2455-5703
- Comparative Weld-Able Plastics, IJSRD International Journal for Scientific Research & Development | Vol. 4, Issue 02, 2016 | ISSN (online): 2321-0613.
- Empirical Modeling Relating Weld Current, Mass Flow Rate of Hot Air and Welding Speed to Stiffness of Hot Air Welded PVC Plastic, International Journal of Engineering Trends and Applications (IJETA) – Volume 2 Issue 1, Jan-Feb 2015.
- Effect Of Process Parameters on Mechanical Properties of Hot Air Welded Pvc Plastics, International Journal of Exploring Emerging Trends in Engineering (IJEETE) Vol. 03, Issue 02, Mar-Apr, 2016 Pg. 107 – 111
- State-Of-The-Art In Rigid P.V.C. Plastic Welding by Hot Air Technique: International Journal of Technical Research and Applications e-ISSN: 2320-8163, www.ijtra.com Volume 1, Issue 1 (May-June 2013) pp 20-23.
- Wave Disk Engine and its Feasibility Study through Numerical Simulation, Applied Mechanics and Materials Vols. 592-594 (2014) pp 2319-2323 © (2014) Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMM.592-594.2319