FACULTY C.V.



TANWEER ALAM

Assistant Professor

Indian Institute of Technology (Indian School of Mines) Dhanbad IIT (ISM) Dhanbad, Department of Mining Machinery Engineering

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Research Area

Heat Transfer Analysis, Heat Flux Measurement Techniques, Coatings used in I.C.

Engine, Clad Failure Analysis, Tool Bits Wear

Educational Qualification

Ph. D (Pursuing) in Mechanical Engineering from IIT (ISM) Dhanbad

M.Tech in Thermal Science, Aligarh Muslim University (A.M.U), Aligarh.

B. Tech. in Mechanical Engineering, Aligarh Muslim University (A.M.U),

Aligarh.

Professional Qualification

Assistant Professor, Indian School of Mines, Dhanbad since December 2011.

Lecturer, Maulana Azad College of Engineering and Technology (MACET),

Patna, Bihar.

Senior Engineer, R&D Section, Sanden Vikas Private India Limited, Faridabad,

Haryana.

Member of Professional Bodies Membership of The Institution of Engineers (India)

Membership of The American Society of Thermal and Fluids Engineer (ASTFE)

Membership of The American Institute of Aeronautics and Astronautics (AIAA)

Membership of The American Society of Mechanical Engineers (ASME) Student Membership of American Society of Testing Materials (ASTM)

Teaching

Engineering Mechanics, Engineering Graphics, Mechanical Engineering II, I.C. Engine, Pumps Fans & Compressors, Thermodynamics, Bulk Solid Handling

Equipment, Mineral Processing Equipment, Underground Mining Equipment

Publications

International Journal

Alam, T. and Kumar, R. (2018), Radiation based calibration of thin film gauge

for transient measurement, Measurement, vol. 128, pp. 352-361.

Alam, T. and Kumar, R. (2018), Heat flux measurement analysis from thin film

gauge in convective heat transfer mode, Transactions of the Institute of Measurement and Control, https://doi.org/10.1177/0142331217752041

Alam, T., Khan, M. K., Pathak, M., Ravi, K., Singh, R., and Gupta, S. K. (2011), *A review on the clad failure studies*, Nuclear Engineering and Design, vol. 241 (9),

pp. 3658-3677.

National Journal

Alam, T., and Kumar, B. (2018), Effect of coating thickness on SI engine

performance, Journal of Mines Metals and Fuels, vol. 46 (4), pp.256-262.

Conference Papers

IEEE Xplore Digital Library (online available) Alam, T., Kumar, B., Babu, M. N., Azam, S., and Kumar, R. (2016), Hole size and location optimization in pressure vessel, 2016 International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), 3-5 March 2016, Chennai, India, Published in IEEE, DOI: 10.1109/ICEEOT.2016.7754950.

Alam, T., Upadhyay, U., Azam, S., and Kumar, R. (2016), Heat pipe mass optimization for space applications, 2016 3rd International Conference on Recent Advances in Information Technology (RAIT), 3-5 March 2016, IIT(ISM) Dhanbad, India, Published in IEEE, DOI: 10.1109/RAIT.2016.7507907.

Goswami, R., Kumar, R., and Alam, T. (2016), Two dimensional transient heat flux analysis through platinum plate, 2016 International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), 3-5 March 2016, Chennai, India, Published in IEEE, DOI: 10.1109/ICEEOT.2016.7755179.

Kumar, B., and Alam, T. (2016), Excavator bucket tooth wear analysis, 2016 International Conference on Electrical, Electronics, and Optimization Techniques 3-5 (ICEEOT), March 2016, Chennai, India, Published in IEEE, DOI:10.1109/ICEEOT.2016.7755328.

Conference Proceedings

Babu, M. N., Alam, T., and Kumar, P. (2016), Coating Effect on Engine Piston Thermal Behaviour, Sixth International Congress on Computational Mechanics and Simulation (ICCMS-2016), 27th June-1st July 2016, IIT Bombay, Powai, Maharashtra, India.

Alam, T., Babu, M. N., and Kumar, P. (2016), Analysis of Internal Fixation Plate, Sixth International Congress on Computational Mechanics and Simulation (ICCMS-2016), 27th June-1st July 2016, IIT Bombay, Powai, Maharashtra, India.

Alam, T., Kumar, B., and Babu, M. N. (2016), Ceramic Coating Effect on I.C. Engine Performance, International Conference on Nanotechnology For Better Living (NBL 2016), IIT Kanpur and NIT Srinagar, India. DOI: 10.3850/978-981-09-7519-7nbl16-rps-250, Research Publishing, Singapore.

Alam, T., Upadhyay, U., Azam, S., and Kumar, R. (2015), Optimization of mass of a heat pipe for space applications using Ant Colony Optimization, 5th International Conference on Advances in Energy Research (ICAER-2015), December 2015, IIT Bombay, Powai, Maharashtra, India.

Singh, S. P., Alam, T. and Chattopadhyay, S., (2013), A Review on the Excavator Tool Bits Wear, Conference: 1st International and 16th National Conference on Machines and Mechanisms (iNaCoMM2013), IIT Roorkee, India.

Singh, K. K., and Alam, T. (2013), Analysis of the Cuttability of Coal for Continuous Miner, Conference: 1st International and 16th National Conference on Machines and Mechanisms (iNaCoMM2013), IIT Roorkee, India.

Alam, T. (2013), Experimental and Numerical Investigation of Heat and Mass Transfer During Cooling of Vegetables, International Conference on Advancements in Smart Technologies for Mechanical Engineering (STME-2013), DTU, Delhi, India.

National Conference

Sinha, S. K., **Alam, T**., and Ojha, U. (2018), *Stress Analysis of Jaw Plates in Jaw Crushers*, 3rd National Conference on Mining Equipment: New Technologies, Challenges & Applications (MENTCA - 2018), IIT (ISM) Dhanbad, India.

Kumar, B., **Alam, T.**, and Ojha, U. (2018), *Failure Analysis of Turbocharged Diesel Engine*, 3rd National Conference on Mining Equipment: New Technologies, Challenges & Applications (MENTCA - 2018), IIT (ISM) Dhanbad, India.

Babu, M. N., and **Alam, T.** (2013) *Analysis of stress variation in pressure vessel with the change in size and location of hole*, Indian Conference on Applied Mechanics (INCAM-2013), IIT Madras, India.

Alam, T., and Babu, M. N. (2013), *Simultaneous Heat and Mass Transfer Analysis during Air Blast Precooling of Fruits*, 3rd National Conference on Refrigeration and Air Conditioning (NCRAC-2013), IIT Madras, India.

Ansari, F. A., Hamid, M., Alam, T., Hassan, M. A. (2006), Experimental and Numerical Investigation of Heat and Mass Transfer during Cooling of Fruits, National Conference on Advances in Mechanical Engineering (ECKAME-2006), March 18- 19, 2006, Engineering College, Kota, Rajasthan, India.

Workshop/Short Term Course

Participated in the International Workshop on "Recent Trends in Flow Visualization" at IIT Roorkee, December 29-31, 2009.

Participated in National Symposium on "Ethics in Science and Technology" at Patna Women's College, Patna University on 22nd August, 2009.

Participated in the Summer School Course on "Harnessing Renewable Energy: State-of-the-art" sponsored by MHRD, Govt. of India/AICTE at NIT Patna during June 16-29, 2008.