RANDIP KUMAR DAS

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Education

Ph. D. 1998, Mechanical Engineering, Indian Institute of Technology, Kharagpur.
Thesis Title : Experimental and Theoretical Studies of Ion-Exchanged X-Zeolite Catalysts for S I Engine Emission Control

M. Tech. 1993, Mechanical Engineering, Indian Institute of Technology, Kharagpur.
Specialization: Thermal Engineering
Thesis Title : Study on the Performance and Emission Characteristics of a SI Engine with CNG as Fuel.

B. E. 1991, Mechanical Engineering, Regional Engineering College (Presently, NIT), Durgapur, India.

Experience

1/2010 – till date: Professor, Department of Mechanical Engg., IIT (ISM), Dhanbad – 826 004, India.

1/2006 – 12/2009: Associate Professor (Mechanical), Department of Mechanical Engg. and Mining Machinery Engg., IIT (ISM), Dhanbad – 826 004, India.

1/2003 – 12/2005: Assistant Professor (Mechanical), Department of Mechanical Engg. and Mining Machinery Engg., IIT (ISM), Dhanbad – 826 004, India.

4/2000 – 12/2002: Lecturer (Mechanical), Department of Mechanical Engg. and Mining Machinery Engg., IIT (ISM), Dhanbad – 826 004, India.

12/98 – 4/2000: Assistant Professor, Department of Mechanical Engineering, Birla Institute of Technology, Mesra, Ranchi - 825 215, India.

11/97 – 11/98: Assistant Manager, R & D Centre, Mahindra & Mahindra Ltd., Automotive Sector, Nashik, India.

11/94 – 8/95: Graduate Engineer Trainee (GET) in Indian Oil Corporation Limited (Pipelines), VCPPL Project, 21B Shiv Marg, Bani Park, Jaipur, India.

Courses Taught

UG Level

- Engineering Thermodynamics,
- Thermal Engineering,
- Internal Combustion Engines,
- Heat and Mass Transfer,
- Refrigeration & Air-Conditioning,
- Fluid Mechanics
- Pollution Formation and Control,
- Engineering Mechanics
- Theory of Machines
- Engineering Drawing

PG Level

- Advanced Thermodynamics
- Advanced Steam Power Plants
- Refrigeration and Air Conditioning
- Combustion and Emission in I C Engines

Research Interest

- Refrigeration and air-conditioning systems.
- Emission control and alternative fuels in internal combustion engines
- Heat Transfer
- Thermodynamic analysis of Mechanical Systems

Ph.D Theses Supervised

Sl. No.	Year	Name of scholar	Title of thesis
1	2016	Mukul Kumar	Numerical and Experimental study of Absorption Refrigeration System utilizing Waste Heat of Engine Exhaust Gas
2	2017	Anirban Sur	Numerical and Experimental Analysis of Activated Carbon-Methanol Adsorption Refrigeration System
3	2017	Sunil Kumar Sharma	Performance and Emission analysis of Diesel Engine by using Jatropha Biodiesel and Tyre Pyrolysis Oil mixed with Nano Additives
4	2018	Ramesh Prasad Sah	Comparative study of performances of adsorption cooling system with silica gel/water and silica gel/methanol as adsorbent/adsorbate pairs
5	2022	Ratnesh Kumar Sharma	Mechanical and Erosion Behavior of Fe-Cr-Ti-Mo-C-Si Based Materials Coated by High-Velocity Oxy-Fuel (HVOF) Spraying for Hydro Turbine Components

6	2022	Ranjan Pratap Singh	Optimization of a Hybrid Air-Conditioning System Utilizing Desiccant Wheel and Evaporative Cooling
7	2023	Sachin Sharma	Design and optimization studies of solar air heater with blockage structure
8	2023	Sayyed Siraj Sayyed Rafik	Performance and emission analysis of a diesel engine with multiple biodiesel and diesel blends as fuel
9	2023	Sanjeev Kumar	Experimental investigation of thermo-hydraulic performance of solar air heater with and without artificial roughness
10	2024	Uma Shankar Prasad	Numerical and experimental studies of vapour compression refrigeration system with eco-friendly primary refrigerant and secondary nano refrigerant
11	2025	Nikunj Upadhyay	Experimental and Numerical Investigation of A Compression Ignition Engine Fueled by Diesel-Algae Biodiesel Blends with Different Additives