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Educational Qualification

- ❖ Pursuing Doctorate of Philosophy from Centre for Energy Studies at Indian Institute of Technology, Delhi since January 2016 in the field of Renewable Energy Technology, Specialization in Concentrating Solar Power.
- ❖ M. Tech (Energy Studies) from Indian Institute of Technology, Delhi in 2013.
- ❖ B.E. (Mechanical Engineering) from Engineering College, Kota (Now, University College of Engineering, Kota) affiliated to University of Rajasthan, Jaipur in 2002.
- ❖ Diploma (Mechanical Engineering) from Govt. Polytechnic College, Jodhpur affiliated to Board of Technical Education Rajasthan, Jodhpur in 1998.

Teaching Experience

- ❖ Assistant Professor: Department of Mechanical Engineering, Govt. Engineering College, Ajmer, since 2007.

Research Area

- ❖ Optical and thermal performance of Solar Energy Technologies, Techno-economics of Renewable Energy Systems – Concentrating Solar Power Technologies.

Publications in International Journals/Conferences:

- ❖ Misra R. and Aseri T. K., (2012), Thermal performance enhancement of box-type solar cooker: a new approach, Int. J. of Sustainable Energy, Vol. 31 (2), 107–118.
- ❖ Misra R., Aseri T. K., Jamuwa D. K. and Bansal V., (2012), Assessment of CO₂ emission reduction and identification of CDM potential in a township, Energy Efficiency, Vol. 5 (4), 471-481.
- ❖ Misra R., Bansal V., Agrawal G. D., Mathur J. and Aseri T. K., (2012), CFD analysis based parametric study of derating factor for Earth Air Tunnel Heat Exchanger, Applied Energy, 103, 266–277.

- ❖ Misra R., Bansal V., Agrawal G. D., Mathur J. and Aseri T., (2012), Thermal performance investigation of hybrid earth air tunnel heat exchanger, *Energy and Buildings*, Vol. 49, 531–535.
- ❖ Misra R., Bansal V., Agrawal G. D., Mathur J. and Aseri T., (2013), Transient analysis based determination of derating factor for earth air tunnel heat exchanger in winter, *Energy and Buildings*, 58, 76-85.
- ❖ Misra R., Bansal V., Agrawal G. D., Mathur J. and Aseri T., (2013), Transient analysis based determination of derating factor for earth air tunnel heat exchanger in summer, *Energy and Buildings*, 58, 103–110.
- ❖ Misra R., Bansal V., Agrawal G. D., Mathur J. and Aseri T., (2013), Evaluating Thermal Performance and Energy Conservation Potential of Hybrid Earth Air Tunnel Heat Exchanger in Hot and Dry Climate—In Situ Measurement, *ASME- J. Thermal Science Engineering Application* 5(3), 031006.
- ❖ Misra R., Bansal V. and Aseri T. K., (2015), CFD Analysis of Thermal Influence Zone of Earth Air Tunnel Heat Exchanger Under Transient Conditions, 14th International Conference of the International Building Performance Simulation Association (IBPSA), Hyderabad during 6-8 Dec, 2015.

Paper presented in International conference/workshop

- ❖ Evaluation of Optical Efficiency of an All-Glass ETC using Ray Tracing Technique, International Conference on New and Renewable Energy Resources for Sustainable Future (ICONRER-2017), Organized by Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur (India) on Feb 04, 2017.
- ❖ An outline to simulate C.I. Engine: A CFD approach, International Conference on New and Renewable Energy Resources for Sustainable Future (ICONRER-2017), Organized by Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur (India) on Feb 04, 2017.

Publication in Book/Book-Chapter

- ❖ Sharma C., Sharma A.K., Aseri T.K., Mullick S.C. and Kandpal T.C. (2015). Solar Thermal Power Generation, *Advances in Solar Energy Science and Engineering*, Vol. 1, 89-153, Today & Tomorrow's Printers and Publishers, New Delhi, India.

Research Projects Undertaken

- ❖ Worked as a Co-Principal Investigator (CoPI) on a research project funded by All India Council of Technical Education (AICTE), New Delhi, Government of India, under Research Promotional Scheme (RPS).

Project Title: Performance and Exhaust Emission Analysis of CI Engine with Dual Injection of Diesel and Alcohol.

Project Fund Received: INR 12.0 Lacs.

Project Duration: April 2012 to April 2014 (2 Years).

Professional Affiliation

- ❖ Certified “Energy Manager” as well as “Energy Auditor” by the Bureau of Energy Efficiency (BEE), Ministry of Power, Government of India.
- ❖ Life Member of Solar Energy Society of India (SESI)

Research and Technical skills

- Thermal Engineering,
- Computational Fluid Dynamics,
- Energy Conservation,
- Energy Modeling,
- Energy Efficiency,
- Exergy Analysis,
- Optical analysis of Solar Radiation,
- Solar Thermal, Solar Thermal Power,
- Concentrated Solar Power,
- Energy Engineering,
- Techno-Economics of Renewable Energy Technologies.

Computer/Simulation knowledge

Engineering related

- AutoCAD
- Pro/Engineer or Creo
- CNC Softwares
- MatLAB
- Think Design
- CATIA

Research oriented

- System Advisor Model (SAM)
- Greenius
- RETScreen Expert
- PVSyst
- Cycle Tempo
- Engineering Equation Solver (EES)
- ANSYS – Fluent
- MiniTab
- HomerPro
- Thermoflow

Course Taken (B. Tech level)

- ❖ Renewable Energy Technologies, Heat Transfer,
- ❖ Computer Aided Design, Computer Integrated Manufacturing, Computer Numerical Controls, Mechatronics.

Recent B. Tech Project(s) Undertaken (in last 5 year):

2016-17

- ❖ Thermodynamic Evaluation of Tri-Generation (SCO₂-Brayton, Rankine, Organic Rankine) Combined Cycle Thermal Power Plant,
Anita Bai Meena (14EEAME200), Hari Prakash (14EEAME201), Khushal Singh Hada (13EEAME036), Kirti Singh Bundel (13EEAME037), Manohar Maurya (13EEAME04), Preeti Chauhan (13EEAME056), Usha Devi (13EEAME075)

2015-16

- ❖ Design and Assessment of Air Cooled Condenser for Steam Power Plant,
Charu (12ME11) and Meghna Gupta (12ME34)
- ❖ Energy, Exergy and Performance Evaluation of Coal Thermal Power Plants,
Devendra Chouhan (12ME14)
- ❖ Energy and Exergy Analysis of CO₂ based Thermal Power Plants,
Manju Nehra (12ME30)

2014-15

- ❖ Energy, Exergy and Exergoeconomics of Coal Thermal Power Plants,
Raina Nagar (11ME48), Utesh Kanwar Rathore (12ME94D)
- ❖ Energy and Exergy Analysis of Solar Energy Applications,
Saurabh Subham (11ME66), Vandana Bai Meena (11ME73).
- ❖ Assessment of Convective Heat Transfer Coefficient for Inclined Tubes,
Deepika Mathuria (11ME12).

2013-14

- ❖ To Study and Assessment of Convective Heat Transfer Coefficient: A Numerical Simulation Approach,
Kavita Nitharwal (10ME33) and Rakesh Jatav (10ME59)
- ❖ Techno - Economic Evaluation of Solar Power Generation System: PV,
Dishanee Sharma (10ME302) and Ruchi Meena (10ME67)
- ❖ Exergy Analysis of Coal Thermal Power Plant,
Ruby Agarwal (10ME66)

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