

Faculty Profile

DR. NARENDRA SINGH
DIRECTOR GENERAL & CHAIRMAN



EDUCATION

Post Doctoral: Dept. of Fuel & Energy, University of Leeds, UK;
Research Solar Energy Utilization: Oct. 1994-June, 1995.
Ph.D From Indian Institute of Technology (IIT), Delhi
M.Tech From Indian Institute of Technology, Delhi
Energy Studies -1st Division
Specialization: Solar Energy – 1988.

WORK & RESEARCH EXPERIENCE:

S.No.	Designation	Place of Work	Years
1.	Senior Research Scholar	Centre of Energy Studies, IIT Delhi	1983-1986
2.	Senior Scientific Officer-II	Department of Non-conventional Energy Sources, Govt. of India	1988-1998
3.	Deputy Director	All India Council for Technical Education	1998-2001
4.	Senior Scientist (Equivalent to Director)	Ministry of New & Renewable Energy, Govt. of India	2001-2008
5.	Director	World College of Technology and Management (WCTM), Gurgaon	2009- till date

PROFESSIONAL EXPERIENCE:

- Associated with installation, commissioning and testing of India's first 50 kW solar thermal plants at Solar Energy Centre.
- Involved in techno-economic feasibility and technology assessment studies for India's first 30MW solar thermal power plant.
- Coordination, monitoring and evaluation of sponsored R&D Projects to Institutions, Universities etc. in the field of solar energy.
- Thermodynamic analysis of heat cycles for solar thermal power generation, and techno-economic evaluation of parabolic trough based solar thermal power system for typical Indian conditions

SPECIAL TRAINING:

Awarded UNDP fellowship for training in Solar Energy in USA & Australia. Highlights of the training are as follows:

Solar Heat Engines	:	Prof. S.Kaneff Research School of Physical Sciences Australian National University, Canberra
Technology Transfer	:	Prof. W.W.S. Charters Dean Faculty of Engineering Dept. of Mechanical Engineering, University of Melbourne, Melbourne,
Solar Architecture	:	Australia Florida Solar Energy Centre Cape Canaveral Florida
Solar Photovoltaics Technology/Design/Sizing	:	South-West Experiment Station Las Cruces, USA

Besides the above, visited & interested with leading scientists & experts/academicians
Worked in solar energy in following Universities/Institutions in USA & Australia.

- University of California, Berkeley, USA
- University of Miami, Miami, USA
- California Energy Commission, USA
- University of Sydney, Sydney, Australia
- University of Queensland, Brisbane, Australia

FELLOWSHIPS:

- UNDP-GEF Fellowship to Germany/Austria on Technology Transfer in Biomethanation Technologies.
- UNDP fellowship for training in technology transfer in the field of Solar Energy in USA & Australia
- Research fellowship of the University Grants Commission, India
- M.Tech fellowship at IIT, Delhi

RESEARCH PUBLICATIONS:

- Optimum Operating Temperature and Efficiency of Solar Thermal Power Generation, N.Singh and S.C. Kaushik, Journal of Heat Recovery System & CHP, Vol 14, No.6, p 633-638, 1994.
- Techno-economic Evaluation of Solar Thermal Power Generation : A Case Study for Indian Condition, N.Singh and S.C. Kaushik, International Journal of Solar Energy, Vol 18, p 1-5, 1995
- Thermal Modeling and Energy Conservation Studies of Rankine cycle System with Regenerative Heat Exchanger, S.C. Kaushik, A. Dubey and N. Singh, Journal of Heat Recovery System & CHP, Vol. 14, No.1
- Thermodynamic Analysis of a Brayton Cycle for Solar Thermal Power Generation, N. Singh and S.C. Kaushik (in communication).
- Design, Testing and Performance of 50 kW Solar Thermal Power Plant, N.Singh et al., national Solar Energy Convention, Udaipur (India), p. 355-359, 1989.
- Effect of Solar Collector Design Parameters on The Operation of Sterling Power System
- N.Singh, B.M. Gibbs and S.C. Kaushik, p 195-200, Vol21 Int. Journal of Energy Research, 1977
- A New Socio-economic Approach for Corporative Evaluation of Electricity Generation Projects, S. Mohan, G.D. Sootha, Narendra Singh, World Energy Council, 15th Congress (Madrid, Spain) Discussion2, Energy and the Economy, pp 258-266.
- Role of Renewable Energy Technologies in Indian Energy Scenario, Ved Mitra, Ashvini Kumar, Narendra Singh, National Workshop on Energy Conservation, New Delhi, 8-9 Sept. 1995, Orgn. By Rajiv Gandhi Foundation & The Institution of Engineers (India)

- Technology Assessment and Economic Evaluation of Solar Thermal Power Systems: A State of Art Report, N.Singh and S.C. Kaushik, Nov.1993
- Optimization of Back-up Capacity in Fossil Fuel-Solar Thermal Hybrid Power Plants, S.Mohan, N.Singh and G.D. Sootha, Seminar on Solar Power System, Alustha (USSR), April 25-26, 1991
- Transient Analysis for Trouble Shooting in 50 kW Solar Thermal Power Plant, Gwalpahari, N.Singh et at., National Solar Energy Convention, Udaipur (India), Vol.5, No.1, p44-45, 1994
- Design Consideration in MW Scale Solar Thermal Power Plants, S.Mohan, N. Singh, R.S. Sharma, Urja Bharati (Special Issue on Solar Energy), Vol.5, No.1, p.44-45, 1994
- Case Study of Vernacular Architecture in Composite Zone: Experimentation and Thermal Modeling, N.Singh, p481-486, National Solar Convention, India, 1990