About the candidate (Sunil)

Sunil, is currently working as Lecturer in Mechanical Engineering Department at Government Polytechnic, Chhapar, Charkhi Dadri, Haryana. He graduated with B.Tech. (Hons) in Mechanical Engineering from Ch. Devi Lal State Institute of Engineering & Technology, Panniwala Mota, Sirsa in 2008 and post-graduated in Thermal Engineering (with specialization in Computational Fluid Dynamics and Heat Transfer) from NIT Hamirpur (H.P.) in 2012. He



also worked as Assistant Professor in Mechanical Engineering Department at BRCMCET Bahal, Haryana for more than 7 years. During his teaching, he has supervised more than 10 M.Tech. Dissertations at BRCMCET, Bahal. He is reviewer of various international journals like Energy, JTAC, Solar Energy, International Journal of Hydrogen Energy etc. He is associate member of Institute of Engineers. During his doctoral research he has published various research papers in internationals journals of repute and many technical papers in international conferences. His research area includes solar thermal technologies, solar drying, solar water distillation, and solar hybrid systems.

About the Supervisor (Dr. Manoj Kumar Soni)

Dr. Manoj Kumar Soni, is an Associate professor in the Mechanical Engineering department at BITS Pilani. He is B.E. in Mechanical Engineering, M.E. in Thermal Power Engineering, Ph.D. in the area of Energy Efficiency. He has total 25+ years of teaching and research experience. He rendered his services as a faculty in VNIT Nagpur (NIT, Nagpur) for seven years (1995-2002). He joined BITS Pilani in 2002. He is also the coordinator of the Centre for Papawahla Energy and Environment Davalanment (CREED) at PITS



Renewable Energy and Environment Development (CREED) at BITS, Pilani.

His research interest includes solar thermal, thermal engineering, renewable energy, and energy efficiency. He has 50+ publications in high-impact factor international journals and international conferences and one patent in his name. He has delivered keynote addresses at various national conferences and workshops. He has conducted faculty development workshops also.

As a research team member, he has visited PT Indo Bharat Rayon, Indonesia, an Aditya Birla Group unit in 2011, and in 2015 he was awarded a Summer Scholarship under the university immersion scheme of BITS Pilani, and he visited the University of South Florida, Tampa and Columbia University, New York.

He is the recipient of prestigious Dr. Shirin Gadhia Sustainability Award 2019 from Eco Center ICNEER, Vadodara. He also received Stifterverband Scholarship by Institut für Werkzeugmaschinen und Fertigungstechnik, Technische Universität, Braunschweig, Germany, 2019 for visiting TU Braunschweig for one week for his research work.

He has a special interest in spirituality, and he has mixed the philosophies of spirituality and thermodynamics. Based on it, he has delivered special lectures on *Thermodynamics- A philosophy of life* and *A date with entropy* at various institutes. The students, academicians, and industries very well appreciate his coveted lecture on Spiritual thermodynamics. He delivered his Spiritual Thermodynamics talk at the University of South Florida, Tampa, USA; University of Baleric Island, Spain; and Universidade do Algarve, Campus da Penha, Faro, Portugal. Out of his six Ph.D. students in the field of solar and solar thermal, three have successfully completed. He has guided over 50 M. Tech and first-degree

thesis. He has experimented with a lot of pedagogical innovations, like team-based and gamebased learnings in his various courses.

At BITS, he is actively involved in industrial collaborations in Work Integrated Programs Division as a coordinator of various collaborative programs: BS and B. Tech Power Eng. (Aditya Birla Group, NTPC, NDPL, THDC, ESSAR Power, Tata Power, JSW Energy), BS and B. Tech Process Eng. (Aditya Birla Group Cement Business UltraTech, Hindalco Industries, Birla Cellulosic, Indogulf Fertilizers, Vedanta Aluminium), BS Engg Design (L&T iES, Vadodara), MS Engineering Management (Mahindra & Mahindra), MS Embedded Systems (L&TiES), MS Pharmaceutical Operations & Management (Wockhardt), MS Manufacturing Management (Vedanta Aluminium), and MS Automotive Eng. Programs (Tata Technologies).

He is a Fellow of the Institute of Engineers, a Life Member of the International Solar Energy Society (Gold Member), Indian Society for Heat and Mass Transfer (ISHMT), and Energy and Fuels Users Association of India (ENFUSE). He is an associate member, Solar Cookers International, USA, and a Senior Member, Universal Association of Mechanical and Aeronautical Engineers (UAMAE).

His web page is http://universe.bits-pilani.ac.in/pilani/mssoni/profile