

Biography

Dr. Narayan Prasad Padhy, Director MNIT, Jaipur and Mentor Director-IIIT Kota, India, holds specialization in the area of Power System Engineering and AC-DC Smart Grid. He is on lien from IIT Roorkee from 16th February, 2022 for a period of five years. Prior to his joining as director, he was serving as Professor (HAG), Ravi Mohan Mangal Institute Chair Professor, and, joint faculty and founder Head of the Mehta Family School of Data Science and Artificial Intelligence, IIT Roorkee, India. He had served as Dean of Academic Affairs, Professor In-Charge Training and Placement, NEEPCO, and Institute Chair Professor at IIT Roorkee.



His journey of life is an exemplification of hard work, positive attitude, perseverance and sustained effort to achieve the goals of life. Born on 31st August, 1969 in Berhampur Odissa and Coming from a very humble family background, his initial years of schooling was in his village in Odia medium. He received his Degree in Electrical Engineering, Masters (Power Systems Engineering) with Distinction and Ph.D., (Power Systems Engineering, Guindy engineering college, Anna University, Chennai, India) in the year 1990, 1993 and 1997 respectively. Immediately after Ph.D., he joined the Department of Electrical Engineering, Birla Institute of Technology and Sciences (BITS), Pilani, India, as an Assistant Professor and worked till July 1998. Then he joined the Department of Electrical Engineering, University of Roorkee and now Indian Institute of Technology (IIT) Roorkee, India, as a Lecturer in 1998. Owing to his academic contributions and leadership attributes demonstrated in the various roles, he got fast promotions and has been working with over 13 years of experience as Professor.

His contribution to the area of Power system has been immense. Besides being author of four popular textbooks of Power Systems, and having delivered hundreds of talks in the area of Smart Grid on various national and international forums. Currently guiding 27 out of 43 research scholars in fulfilling their research objectives and introducing new concepts & techniques in the area and thereby enriching the discipline. Most of the scholars have settled down as faculties in various reputed universities across the world and/ or working as Post-Doc in USA. He has authored more than 200 papers and articles in 110 international journals including in those with very high impact factor, like IEEE Transactions/IET, 98 International Conferences and 1 IEEE Magazine with overall google scholar citation of 8121 (h-index=44, i-index 119). His single authored article on “Unit Commitment” in the IEEE Transactions on Power Systems has a high citation of 1294 which is considered to be very persuasive in this area. He has also peer-Reviewed many IEEE Transactions. And organized, chaired and co-chaired many International Conferences. His NPTEL online course on “Introduction to Smart Grid” has been very popular with over 45,000 Views. He also owns three patents in his name.

He has profound research experience in power systems and Smart Grid and has been associated with various projects of Government of India and state Governments. Completed 6 International/National Project and currently serving as Principal Investigator for 6 International Projects in the field of Smart Grid with the funding of more than 16.5 Cr INR. He also served as technical consultant to various consultancy projects like Design and Deployment of Smart Distribution and Lighting System for Noida (UP) and UPSIDA (UP) and providing technology support for execution of Saharanpur smart city.

He holds the position of four chair professors Ravi Mohan Mangal Institute, 1992, Institute and NEEPCO Chair Professor. Being Senior Member Power and Energy Society, IEEE (USA), actively Engaged in various IEEE Professional activities Chair for PES Network Charging Working Group, and Roorkee Subsection Chair. He held Fellowship of Indian National Academy of India (FNAE) and Fellowship of The Institution of Engineering and Technology, UK (FIET), Fellow Institution of Engineers, Fellow Institution of Electronics and Telecommunication Engineers, India. Empowerment and Technical Committee member in National Smart Grid Mission (NSGM) Ministry of Power (MoP) Government of India and Vice Chair CIGRE National Study Committee on C4: Power System Technical Performance.

Dr. Padhy also has a strong international footprint. He worked as Visiting Professor/fellow in Center for Urban Energy, Ryerson University, Toronto Canada, in the school of Electrical and Computer Engineering, Ryerson University, Toronto Canada and in the school of Electronics and Electrical, University of Bath, Bath, UK.

Besides enriching the field of power systems by his immense academic contributions, Dr. Padhy has also demonstrated high degree of administrative competence, strategic planning ability and leadership qualities. His

associations with international projects and world-renowned universities enabled him to fetch the tie ups with the eminent institutions like Massachusetts Institute of Technology (Boston, USA), Texas A & M (USA), Washington State University Pullman, University of Bath (UK), Cardiff University (UK), Edinburgh University (UK), Durham University (UK), Technical University of Denmark (DTU), RicercaSul Sistema Energetico (RSE) Italy, IIT Kanpur, IIT Madras, IIT Delhi and with Industry Partners like TERI, BSES Delhi, Tata Power, ABB, Panasonic etc. He has been instrumental in formulation of MOUs with the WSU, Pullman (UI-ASSIST), DTU, Denmark (ID-EDGe Project), ABB (SDNMS). As chairman(IRC), he also developed Institutional Collaboration with REDOC-SPI Network-France, Swinburne University-Australia, Ghent University-Belgium, Michigan State University-USA, University of Alberta-Canada, Asian Institute of Technology-Thailand, SAMEER Mumbai and by Dept of Physics. Aggressively Involved in the Mission Innovation (MI) 2.0- Green powered future mission. MI Activities which includes 22 international counties and participated in the international discussion forums, smart grid conclaves and head the responsibilities of Mission Innovation Resource Center (MIRC) at IIT Roorkee.

With this capability for forge collaboration and develop strong academic and business linkages, he could leverage these association to successfully develop first smart distribution network management system (SDNMS) campus at IIT Roorkee and also to set-up AC-DC Hybrid Microgrid (ADMIRE) Lab which encompasses the cutting-edge technologies like power amplifier, RTDS, Opal-RT, Renewable Emulators, Grid Emulators, Hybrid Storage System, Programmable Loads, EV Chargers etc, in order to address research challenges with respect to the smart grid.

He also possesses wide administrative experience. Head of the Mehta Family School of Data Science and Artificial Intelligence From 2017-2021, he held the responsibilities of Dean, Academic affairs in IIT Roorkee and actively contributed for institute academic program committee, institute research committee, convocation committee and academic structure, revision committee, Institute Unfair means Committee as chairman for approximately 8000+ students belong to 20+departments and centres. Some of his transformative contributions as Dean of Academic affairs include Introduction of James Thomason Scholarship for UG, Introduction of Under Graduate Teaching Assistantship and digitization of Submission and Evaluation of Ph.D thesis. He also held various other administrative responsibilities including of Chief Warden, Warden and also held the office in charge of Power System Simulation Lab at IIT Roorkee. He also worked as Staff Advisor of Hobbies Club, Member of Institute's Building and Works Committee. Serving as INAE section V committee member and NSGM working committee member. As head of placement cell of IIT Roorkee, he also provided strategic direction and leadership to the placement office and to represent the office internationally, nationally and at all PAN Indian international meets, which resulted into record number of placements of class A National/International category student. He worked diligently for building the concept from ground zero and to establishment of the Mehta Family School of Data Science and Artificial Intelligence.

Awards and Honours:-

The contributions made by Dr. Padhy have been recognised nationally and internationally by various awards and honours. Some of them are as below:

- Elected as Fellow Indian from Indian National Academy of Engineers in the year 2013.
- Elected as Fellow Institution of Electronics and Telecommunication Engineers, India from Institute of Institution of Electronics and Telecommunication Engineers, India in the year 2020.
- Technical consultant to Noida Authority which has received Smart City Empowering India Award as a Honorary from Ministry of Housing and Urban Affairs, Government of India in the year 2020.
- Technical consultant to Noida Authority LED lighting project which has received SKOCH Silver AWARD as a Honorary from SKOCH group in the year 2020.
- Elected as Fellow Institution of Engineers from the Institution of Engineers India in the year 2019. f) Awarded for valuable contributions in Smart City and Smart Grid technologies in India which is Honorary from Tata Communications in the year 2019.
- Received Eminent Engineer Award from the Institution of Engineers (India) Uttarakhand State Centre, Dehradun in the year 2019.
- Elected for IEEE PES Chapter Outstanding Engineer Award from IEEE Power & Energy Society, USA in the year 2018.
- Felicitated for bringing laurels to the institute an honorary recognition from Indian Institute of Technology Roorkee in the year 2017.

- Elected as a Fellow Institution of Engineering and Technology from IET, United Kingdom in the year 2014.
- Elected for Alexander von Humboldt Experienced Research Fellow Award from Alexander von Humboldt Foundation, Germany in the year 2009.
- Elected as BOYSCAST Research Fellow Award for Young Scientist Elected from Department of Science and Technology, Govt. of India in the year 2005.
- Guided Mr Gururaj M V on the Ph.D thesis “Performance Investigation of A DFIG Interfaced With A Microgrid” which has received POSOCO award in the year 2021 from POSOCO.
- Guided Mr Pannala Sanjeev on the Ph.D thesis “Power Control and Management of DC Micro Grid” which has received POSOCO award in the year 2020.
- Guided Mr Nandkishore Kinhekar on the Ph.D thesis “Demand Side Management Using Smart Grid Technology” which has received POSOCO award in the year 2016.