NAME: Dr. MUNISH MANAS

Job: Assistant Professor and Ph.D. Coordinator

Department of Electrical Engineering,

Central University of Haryana. Govt. of India

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<u>Aim</u>: To serve as a Faculty and Researcher in a premier technical teaching Institute that promotes quality education and research

EDUCATIONAL QUALIFICATION

DURATION	COURSE AND INSTITUTE	PERCENTAGE
September, 2012 to	Ph.D. (Awarded)	Awarded and coursework
continue		completed with 81% marks
July 2010 to March	M.Tech (Electrical Power	
2012	Systems) from Bharati Vidyapeeth	76.7%; 1 ST RANK in the
	University, C.O.E, Pune [Full Time]	University
July 2009	B.E. (Electrical) from B.V.P.,	66.4%, 4 YRS AGG.
	C.O.E, Pune	4 th rank in Department
2005	HSC,Ramjas School,{CBSE} Delhi	84.2% in P.C.M.
2003	SSC,Ramjas School,{CBSE} Delhi	91.3%

<u>AREA OF RESEARCH</u>: My area of research is "Design and Optimization of a Smart microgrid towards sustainability".

My Ph.D. project work was guided by Power Grid Corporation of India Ltd. and Central university of Jamia Millia Islamia, New Delhi.

FELLOWSHIPS and Spl. Nominations :

- 1. I have been AWARDED U.G.C. B.S.R. meritorious FELLOWSHIP from 2012 onwards.
- 2. Nominated Member of Arunachal Pradesh's Public Service Commission Examination Committee for Electrical Engineering.

- 3. Faculty Coordinator and Trainer for MNRE sponsored Photo Voltaic Skill Development Program- Suryamitra in Tezpur Central University.
- 4. Faculty Coordinator for MHRD Sponsored Ishan Vikas Internship Program for Tezpur Central University for the year 2016 in MNNIT Allahabad.
- Scientific Advisory Board Member for "2nd World Congress on Pollution Control & Advances in Environmental Engineering." to be held on 11th & 12th of October 2017 at Bangkok, Thailand.

TECHNICAL TEACHING EXPERIENCE:

- 1. I am working as Assistant Professor and Teacher Coordinator in The Electrical Engineering Department of Central University of Haryana, Mahendergarh from 26th September 2016.
- I have worked as an Assistant Professor in Tezpur University (A Central University) in the department of Electronics & Communication Engineering fro 1.5 years (from 26th March 2015 to 26th September 2016).
- 3. U.G.C. B.S.R. Research Fellow with Jamia Millia Islamia (A Central University) for 2.5 years.
- 4. I am Visiting Faculty for National Power Training Institute (N.P.T.I.) Faridabad for training their Executive Trainees and also, Senior Officials of Rural Electricity Corporation (R.E.C.) of India Ltd. and Rajasthan State electricity Board.
- 5. I am Visiting Faculty for Powergrid Corporation of India Ltd. Manesar Training and Leadership Centre for training their Executive Trainees on Smart Grids.
- 6. Invited Lecturer for Skill India Programme of DDU Kaushal Kendra, in Central University of Haryana, Mahendergarh
- 7. I have set up Control System Lab and introduced 4 new experiments in the same Lab at U.G. and P.G. level in Jamia Millia Islamia (A Central University) Electrical Engineering Department. In 2014.

- 8. I have set up BEE Lab, Electrical Machine Lab, Switchgear and Protection Lab, Transmission and Distribution Lab for the Department of Electrical Engineering Central University of Haryana.
- 9. I have designed curriculum for UG and PG Courses for Central University of Haryana and Tezpur University for the Department of Electrical Engineering.
- 10.1 have set up Electrical Machine Lab for Electrical Engineering Programme in Electronics and Communication Engineering Department of Tezpur Central University and introduced 5 new experiments over there.
- 11.1 have set up Power System Hardware Lab. For Electrical Engineering Programme and Computer Aided Power System Lab. with etap and Matlab software-based power system programs in Electronics and Communication Engineering Department of Tezpur Central University and introduced 5 + 5 new experiments over there.
- 12.I have set up Basic Electrical Engineering Lab in TSSM,s BSCOER, under Pune University, Electrical Department , Narhe ,Pune.
- 13.I have designed Syllabus of Electrical Engineering subjects like Power System-II, Computer Aided Power system, High Voltage Engineering etc. for Engineering School of Tezpur Central University under the supervision of Prof. Jiten C.Dutta.
- 14. I have held seminars on communication, management and teaching skills for faculty members of JSPM technical institute under Pune University in the line of mission 10X of WIPRO.

Membership of Professional Bodies and Committees:

- 1. IEEE Professional Member; Kolkata Section; Membership ID.- 93350323
- 2. Core Team Member of IEEE Chair of Education Society (Prof. V.K. Chandna).
- 3. IEEE Smart Grid Community and IEEE Education Society.
- 4. IEEE Young Professionals, global community of dynamic early career members
- 5. Editorial Board Piscomed Publishing ltd. Singapore.
- 6. Reviewer for Springer TESG journal, Taylor and Francis Cogent Engineering Journal, IEEE's IET Renewable Energy Journal.
- 7. Lifetime Member of India Smart Grid Forum.

- 8. Intellectual Property Rights Cell Faculty member and NSS Faculty Member in Central University of Haryana, Mahendergarh.
- Member on Technical Program Committee (TPC)/ Advisory Board of the forthcoming 2nd IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE– 2016) proposed dates 23-25 December 2016.
- 10. NAAC Coordinator for ECE Department Tezpur Central University.
- 11. Electricity Tariff Design Committee Member for Tezpur Central University.
- 12. Tezpur city Solar PV Project Core Team Member.
- 13. Faculty Incharge for Electrical Machines Lab., Network Theory lab. And Power Systems Lab in Tezpur Central University.

INDUSTRY EXPERIENCE:

- 1. I took training in SMART GRID TECHNOLOGY in POWER SYSTEMS from POWERGRID CORPORATION OF INDIA LIMITED {**PGCIL**} - <u>AUG. 2009 TO</u> <u>NOV. 2009</u>
- 2. Worked as an Executive Trainee in Lanco Infratech (Hydro Electric) <u>DEC. 2009</u> <u>TO JUNE 2010</u>

TRAININGS AND PROJECTS:

- One Month Faculty induction Training Programme organized by Department of Education Central University of Haryana under the aegis of PMMMNMTT, MHRD.
- My Ph.D Project was completed in Powergrid Corporation of India Ltd. under DR. Subir Sen G.M. [SMART GRID] in POWERGRID CORPORATION and in and Central university of Jamia Millia Islamia.
- Completed Industrial Training in Smart Grid Department of Powergrid Corporation of India Ltd. Corporate office Gurugram under Mrs Vineeta Agarwal (Sr. GM {Smart Grid}) for 21 days in 2019 (Evening hours)
- 4. MNNIT Allahabad 15 days workshop on National Instrument's labVIEW Programming and Hardware interfacing.

- 5. MNNIT Allahabad 15 days workshop on Arduino Programming on water Level Alarm and quality management systems.
- 6. Several Faculty Development Programs by MeiTY, DST, University of Delhi, National Institute of technology, Warangal, AICTE, ShoDH with Central University of Haryana.
- 7. I have attended a Workshop on "Computational Intelligence and its application to Smart Grid " at I.I.T. DELHI in December 2012.
- 8. I have attended a 15 day workshop on "Issues in the Integration of Renewable Energy in the Smart grids" in Delhi Technological University (D.T.U.) formerly Delhi College of Engineering (D.C.E.) in December 2014.
- 9. Familiarization Workshop on Nanofabrication Technologies, the INUP; IIT Bombay and IISc Bangalore, Tezpur University.
- 10.I have done my M. Tech project in POWER SYSTEM RELIABILITY Studies SPONSORED BY PGCIL under DR. Subir Sen G.M. [SMART GRID] in POWERGRID CORPORATION Headquarters from <u>9th Sept 2011 to 27th April</u> 2012.
- 11.1 have completed training in VIBRATIONAL ANALYSIS OF ELECTRIC MACHINES in THERMAL POWER STATIONS at N.T.P.C. badarpur.
- 12. Participated in Induction cum Orientation Program on Professional Qualities in Education by IQAC, Tezpur University (A Central University).
- 13. Participated in Workshop on Philosophy, Anthropology, Culture, Community, Democracy and Politics 23rd to 25th April 2015; Tezpur University (A Central University).

Citations - 207, H-Index - 09, I 10 index - 09,

Link: https://scholar.google.co.in/citations?user=VHR212YAAAAJ&hl=en

PUBLICATIONS in SCI, SCOPUS AND IEEE JOURNALS AND PROCEEDINGS:

- 1. M Manas, A Sinha, S Sharma, MR Mahboob, "A novel approach for IoT based wearable health monitoring and messaging system", *Journal of Ambient Intelligence and Humanized computing*, Vol. 10, issue 7, Springer 2019, SCI, (Impact Factor- 7.104)
- 2. Munish Manas, Biplob Jyoti Saikia, Deben Chandra Baruah, " Optimal distributed generator sizing and placement by analytical method and fuzzy

expert system: a case study in Tezpur University, India", vol. 3, Technology and Economics of Smart Grids and Sustainable Energy, 2018, Springer Inc., SCI, (I.F. -2.21)

- 3. Munish Manas, "Optimization of distributed generation based hybrid renewable energy system for a DC micro-grid using particle swarm optimization", *Distributed Generation & Alternative Energy Journal*, vol. 33, issue 4, 2018, Taylor and Francis INC. (SCI)
- Munish Manas, " Development of preferential regulations, transmission tariffs, and critical technological components for the promotion of smart grid globally", *Economics and Policy of Energy and the Environment*, Franco Angeli Inc.(SCI Indexed), vol. 75, issue 2, pp. 107-130, 2015, DOI: 10.3280/EFE2015-002008.
- Praveen Tiwari, Munish Manas et al., "A Techno-Economic Analysis of Microgrids with Hybrid Renewable Energy Sources development in South-Asian perspective", *Technology and Economics of Smart Grids and Sustainable Energy, Springer Inc.*, (SCI with I.F. 2.21) (DOI: 10.1007/s40866-017-0026-5)
- Zaheeruddin and Munish Manas, "A New Approach for the Design and Development of Renewable Energy Management System through Microgrid Central Controller", Energy Reports, Elsevier Inc., vol. 1, pp. 156-163, 2015; DOI: 10.1016/j.egyr.2015.06.00. SCI, (Impact factor 6.870)- Citations: 60
- **7.** B. Saharia and **Munish Manas**, "Viability analysis of Photovoltaic/Wind hybrid standalone Distributed Generation based system as applicable in isolated community of north-east region of India", **Distributed Generation and Alternative Energy Journal, SCI Taylor and Francis Inc.**, **Vol. 32, issue 1,** PP. 49-80 · January 2017.
- 8. Munish Manas, "Optimization of Distributed Generation based Hybrid Renewable Energy System for a DC Micro-Grid Using Particle Swarm Optimization ", Distributed Generation and Alternative Energy Journal, SCI Taylor and Francis Inc. Accepted for Publication.

- 9. Barnam Jyoti Saharia , Munish Manas and Bani Kanta Talukdar, "Comparative Evaluation of Photovoltaic MPP Trackers: A Simulated Approach", in Cogent Engineering Journal (SCOPUS Indexed), Taylor and Francis Inc., (2016), Vol. 3, pp 1-17. <u>http://dx.doi.org/10.1080/23311916.2015.1137206</u>
- 10.Zaheeruddin and Munish Manas "<u>Analysis of Design of technologies, tariff</u> <u>Structures and regulatory policies for sustainable growth of the Smart grid" in</u> *Taylor and Francis's "Energy Technology and Policy"<u>Journal</u>, Volume 2, issue 1, pp. 28-38, 2015, doi/full/10.1080/23317000.2015.1015083.*
- 11. Siddharath Narayan Shakya, Shivji Prasad, Munish Manas, Shantanu Bhadra, " A Novel Algorithm for Allocation of General Elective Subjects in Choice Based Credit System", Proceedings of International Conference on Trends in Computational and Cognitive Engineering, Pages 109-117, 2021, Springer, Singapore.
- 12. Barnam Jyoti Saharia, Zaheeruddin, Munish Manas and Amrita Ganguly, "Optimal Sizing and Cost Assessment of Hybrid Renewable Energy Systems for Assam Engineering College," in 12th IEEE India International Conference INDICON 2015, pp-1-6, DOI: 10.1109/INDICON.2015.7443106, (print ISBN: 978-1-4673-7398-2)
- Barnam Jyoti Saharia, Munish Manas and Subir Sen, "Comparative study on buck and buck-boost converters for MPP tracking for Photovoltaic Power Systems", in the 2016 Second IEEE International Conference on Computational Intelligence & Communication Technology, pp 382-387.
- 14. B. J. Saikia, M. Manas and D. C. Baruah, "Distribution loss reduction in a University of North East India through load factor improvement," 2015 IEEE International Conference on Energy Systems and Applications, Pune, India, 2015, pp. 203-208. doi: 10.1109/ICESA.2015.7503340
- 15. Manas, M.; Zaheeruddin, M.; Sharma, B.B., "Development of a benchmark for the interpretation of transformer frequency response analysis results," in *Cognitive Computing and Information Processing (CCIP), 2015* **IEEE International** *Conference on*, vol., no., pp.1-5, 3-4 March 2015.
- 16.Zaheeruddin; Manas, M., "Development of Self-Sustainable Technologies for Smart Grid in India," in Computational Intelligence & Communication Technology (CICT), 2015 IEEE International Conference on , vol., no., pp.563-568, 13-14 Feb. 2015. (Best Paper Award Power & Energy Track)

- 17. Jahan, Mosarrat; Manas, Munish; Sharma, Bharat Bhushan; Gogoi, Babu Bikash, "Feature extraction and pattern recognition of EMG-based signal for hand movements," in IEEE Advanced Computing and Communication (ISACC), 2015 International Symposium on , vol., no., pp.49-52, 14-15 Sept. 2015.
- 18. Aniruddha sinha, Shubham Sharma, Munish Manas et al., "Design of an Energy Efficient IoT enabled Smart System based on DALI network over MQTT protocol", Computational Intelligence & Communication Technology (CICT), 2017 IEEE International Conference on, 10-11 Feb. 2017 India.(Accepted).
- 19. Munish Manas et al. "An Artificial Neural Network based Maximum Power Point Tracking Method for Photovoltaic System", IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2014), December 23-25, 2016, Jaipur, India.
- 20.1 have presented a paper on the Topic "Smart Grid Roadmap for India" in the International Conference on Innovative Approaches In "Electrical, Power Control, Electronics Engineering and Applied Communication Technology" in Jawaharlal Nehru University, Applied Science Department.
- 21.PSAC Simulation method for Reliability Analysis and solution by Multi Agent System in Smart Grid Task Force- in ISGT national conference by Pune University.
- 22. Discharge Detection Technique for Stator using vibrational analysis –in INCON 6TH International conference by CETYS Universidad Mexico and ASM research.
- 23. Power System Reliability Analysis in Wind Energy Generation in National Conference GTBT 2011 by Pune University.
- 24. Fuel Cell Power Conditioning for Electric power Applications in National Conference GTBT 2011 by Pune University.

HOBBIES:

Presenting seminars on:

- 1. TIME and STRESS MANAGEMENT, Value Education and
- 2. Communication and Interpersonal SKILLS.

Also, Reading philosophical and Spiritual Books, writing poetry, swimming, and Weight Training.

STRENGTHS:

Hard working, Leadership Qualities, Persevering, Good communication Skills and multi tasking.