

CURRICULUM VITÆ

Dr. SUBIR DATTA

Assistant Professor



Department of Electrical Engineering
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Personal Details:

Date of Birth: 09/05/1983

Sex: Male

Father's Name: Shri Rakhai Chandra Datta

Nationality: India

Permanent Address: Vill+PO-Jatan Bari; Dist.- Gomati ; Agartala; Tripura-799104

Educational Qualifications:

Doctor of Philosophy (Ph. D.): Electrical Engineering, NIT Silchar, 2017

Thesis Entitled, "*Simulation of Grid Connected Speed Sensor-less DFIG-based Wind Energy Conversion System With its Power Quality Improvement*".

Master of Technology (M.Tech.): Power and Energy System Engg., NIT Silchar, 2010.

Bachelor of Technology (B.Tech.): Electrical Engineering, NERIST, Itanagar, 2008.

Diploma: Electrical Engineering, PTI (WBSCTE), Narsingarh, Tripura, 2004

High School: 2000, Tripura Board of Secondary Education

Research Interest:

- ❖ Renewable Energy Systems
- ❖ AC/DC Micro-grid
- ❖ Power Electronic Converter Topologies and Their Applications in Power and Energy Systems
- ❖ FACTS Devices and Its Integration with Power and Energy Systems.
- ❖ Power System Stability Analysis
- ❖ Power Quality Assessment and Improvement of Electrical System.

Details of Previous Employments:

- ❖ Assistant Professor, Department of Electrical Engineering, MZU (Jan., 2012 to till date).
- ❖ Engineer (TTA), BSNL, Silchar, Assam (July, 2011-January 2012).

Administrative Experience:

- ❖ Chairman, Central Time Table Committee, SET, MZU (Oct. 2018-to-Till date).
- ❖ Member, Central Time Table Committee, SET, MZU (Aug. 2017-to-Sept. 2018).
- ❖ Faculty-In-Charge for Departmental time table (both for exam and class routines), EE Dept., MZU. (Aug.2017-to-Till date).

- ❖ Faculty-In-Charge for various laboratories of EE Dept., MZU (Jan.2013-to-Till date).
- ❖ Member of Quality Circle Committee, Result Review and Analysis Committee, EE Dept., (July 2017 to Till date).
- ❖ Member, Board of Professional Studies, EE Dept. (April 2015 to April 2018).
- ❖ Member, Board of Professional Studies, ECE Dept. (13th October 2016 to Till date).
- ❖ Member, Swatch Bharat Avhiaan, EE Dept. (Sept. 2016 to Till date).
- ❖ Member, Mizoram University Techno Club (MZUTC), (July 2013-to-June 2015, and July 2016-to-Till date).
- ❖ Member, Departmental Purchase Committee, EE Dept. (Sept. 2012-to- Till date).
- ❖ Member, Departmental Library Committee, EE Dept. (April 2012-to- Till date).
- ❖ Member for verifying and moderating the Departmental results, EE Dept. (March 2013-to-Till date).
- ❖ Faculty-In-Charge for Alumina, EE Dept. (Oct. 2013-to-till date).
- ❖ Co-ordinator for Departmental Exam, EE Dept., MZU, (Aug. 2016-to-July 2017).
- ❖ Departmental Project Co-ordinator for B.Tech./M.Tech. Programmes, EE Dept., MZU (Aug.2015-to-2016, & Aug.2017-to-Till date).
- ❖ Faculty-In-Charge for Parent Teacher meeting, EE Dept., MZU, (Aug.2017-to- Till date).
- ❖ Faculty-Coordinator, Departmental Career Counseling Cell, EE Dept., MZU, (May 2015-to-till date).
- ❖ Faculty-In-Charge of the Department's Master Register, EE Dept., MZU, (July 2012-to-June 2015).
- ❖ Faculty Coordinator, Training & Placement, SET, MZU (Oct. 2012 to Sept. 2013).
- ❖ Prepared B.Tech./M.Tech. Syllabus (partially), EE Dept. MZU.
- ❖ Member, Ph.D Admission Committee 2018-19, Dept. of EE, MZU.
- ❖ Member, M. Tech. Admission Committee 2018-19, Dept. of EE, MZU.

Awards/Distinctions/Achievements:

- ❖ Qualified GATE in Electrical Engineering (2007, 2008 and 2012).
- ❖ Received 2nd prize in National Conference, Bhilai, India, 2010.

Professional Memberships:

- ❖ Member, IAENG, (Member ID-157178).
- ❖ Member, IACSIT, (Member ID-80351030).
- ❖ Life Member, ISTE, (Member ID-LM109050)

Research Papers Reviewed for Journals:

- ❖ International Journal of Electrical Power and Energy Systems
- ❖ IET-Generation, Transmission, Distribution

Details of Professional Trainings:

- ❖ Attended “**Refresher Course**”, UGC-HRDC, MZU Aizawl, 01st – 21st March, 2016.
- ❖ Attended “**Orientation Course**”, UGC-HRDC, MZU Aizawl, 18th Nov-15th Dec, 2014.
- ❖ Short term training program on, “**Recents in Evolutionary optimization techniques and applications (REOTA-1012)**”organized by the Department of Mathematics &Department of Mechanical Engineering, NIT Silchar, Assam from 1st to 7th June 2012.

- ❖ One day “**Industrial Training**” at Serlui ‘B’ Hydro Power Plant, Kolashib, Mizoram.
- ❖ One day “**Field Trip**” at PGCIL Rawmrikawn, Aizawl, Mizoram.
- ❖ “**Apprenticeship training**” at Grid sub-Station, 79 tilla, Agartala (Feb. 2005-to-July 2005)
- ❖ “**Industrial training**” at ONGC Tripura Asset, Agartala (May 2007-to-July 2007).

Workshop/Conference/Short Term Course Attended:

- ❖ National Conference on “**Total Station by Surveying**”, organized by Civil Engineering, Mizoram University, during 7th -12th May, 2018.
- ❖ National Conference on “**Strategies for Development of Higher Education in Northeast India**”, organized by Mizoram University, during 9th -11th April, 2018.
- ❖ Short term course on “**Research Methodology for Teacher**”, organized by HRDC, Mizoram University, during 19th -24th March, 2018.
- ❖ National workshop on “**Electromagnetics Microwave and Antenna**”, organized by Dept. Of ECE, Mizoram University, during 21st -25th August, 2017.
- ❖ Short term course on “**Recent trends in communication, signal processing & VLSI**”, organized by NIT Silchar, 14th -18th Feb., 2017.
- ❖ Gian course on “**Science and engineering of insulation in power systems and applied disciplines**”, organized by NIT Mizoram, during 22nd - 31st August, 2016.
- ❖ International Conference on “**Power and Advanced Control Engineering**”, Bangalore, India (ICPAC-2015), during 12th -14th August, 2015.
- ❖ Workshop on “**Labview and Multisim**” organized by Dept. of Electrical Engineering, MZU, During 28th -29th April, 2014.
- ❖ National workshop-cum-Training Programme on “**Research Methodology and application of SPSS in business studies**”, organized by the Department of management, Mizoram University from 28th February, 2013 to 9th March, 2013.
- ❖ Short Term Course on “**Electrical Power Control (STC-EPC)**” organized by the Department of Electrical Engineering, MNNIT Allahabad, UP, from 18th to 22th July 2013.
- ❖ Workshop on, “**Solar Energy and its Applications**” organized by the Department of Electrical & Mechanical Engineering, NIT Silchar, Assam from 29th to 31th March 2012.
- ❖ IEEE EDS Mini-Colloquium on “**The Future of NANO Electronics**” at NIT Silchar, 8th April 2010.

Seminar/Symposia/Workshop Organized:

- ❖ Organized National Workshop on “**Recent Trends in Power and Energy**” in the Department of Electrical Engineering, SET, Mizoram University from 08th -12th Oct., 2018.
- ❖ Organized Workshop on “**DigSilent Power Factory Software**” in the Department of Electrical Engineering, SET, MZU from 1st -2nd July, 2015.
- ❖ Organized National Level Championship on “**Robofiesta-2014**”, in the Department of Electrical Engg., SET, MZU from 27th - 28th May 2014.

Research Projects :

1. International Projects: Nil

2. National Projects:

- a. **Title:** Development of Improved Unipolar Modulation based Inverter for Transformerless Grid-Connected Photovoltaic Systems, Amount: Rs. 19.56 Lakh, Agency: DeitY, New Delhi, Role: Co-Principal Investigator.

Research & Teaching Experience

Research:		09 Years
Teaching:	UG	07 Years
	PG+Ph.D.	01 Years

Total Number of Publications

- i. **Research Papers:** 09 (Journals)+13 (Conferences)
- ii. **Review Papers :** 01
- iii. **Books/Book Chapters :** 01
- iv. **Articles in News Papers/Magazines etc.:** Nil

Citation Details (as on 03-10-2018)

	Google Scholar	Scopus /Research Gate
h index	3	2
i10 index	Nil	Nil
Total Citations	26	17

Cumulative Impact factor

Link for Google Scholar: <https://scholar.google.co.in/citations?hl=en&user=yJtLWC4AAAAJ>

Link for Research Gate or Scopus: https://www.researchgate.net/profile/Subir_Datta

Research Guidance:

- i) Ph.D. : 2 (Pursuing)
- ii) M.Tech. : 1 (Pursuing)

Full Details of Published Papers:

A. Book/Book Chapters:

- ❖ Ksh. R. Singh, S. Datta and N. G. Singh “**An Approach to cereal grain classification**”, Lambert Academic publishing, Germany, ISBN:9 78-3-659-69377-7, **2015**.

B. Review Papers:

- ❖ S. Datta, D. Das, “**A Review of different types of the generator and power converter topologies for wind energy farm**”, National Conference on Advances & Research in electrical system Technology (AREST’11), April 23-24, 2011.

C. Research Papers:

International/National Journals:

- 1) S. Datta, J. P. Mishra and A. K. Roy, “**Operation and control of a DFIG-based grid-connected WECS using NSC during grid fault and with unbalanced non-linear load**”, International Journal of Ambient Energy, Vol.39, No.7, pp.732--742, 2018, Taylor and Francis, (ESCI/Scopus).

- 2) S. Datta, "**Effectiveness of Fuzzy-based FACTS Controller and Classical Controller in Enhancement of Power System Dynamic Stability - A Comparative Study**", Indian Journal of Science of Technology, Vol. 9, Issue No. 32, pp. 1-7, ISSN: 0974-6846, 2016, *Thomson Reuters/Scopus*).
- 3) S. Datta, "**Effectiveness of speed sensor and sensor-less controller in a grid connected DFIG-based WT system-a comparative Study**", International Journal of Electrical and Electronics Engineering (IJEEE), Vol.5, Issue no. 6, ISSN(P): 2278-9944; ISSN(E): 2278-9952, 2016.
- 4) S. Datta, J. P. Mishra and A. K. Roy, "**Performance Analysis of a Speed Sensor Less Grid Connected DFIG based Wind Energy Conversion System Using Nine Switch Converter**", Indian Journal of Science of Technology, Vol. 8, Issue No. 17 pp. 1-13, Index no. 0974-6846, 2015 (*Thomson Reuters/Scopus*).
- 5) S. Datta, J. P. Mishra and A. K. Roy, "**Modified Speed Sensor-less Grid Connected DFIG based WECS**", Indian Journal of Science of Technology, Vol. 8, Issue No. 16, pp.1-12, 2015, Index no. 0974-6846, (*Thomson Reuters/Scopus*).
- 6) S. Datta, Ksh. R. Singh and S. Deb "**Enhancement of fault ride through capability of DFIG based WECS**", International Journal of Advanced information science & Technology, Vol-28, No-28, 1-8, 2014, Impact Factor: 3.564, ISSN-2319-2682,
- 7) S. Datta "**Artificial Intelligence based STATCOM controller for enhancement power system dynamic stability**", International Journal of Applied Engineering Research, Vol.9, pp. 28101-28113, 2014, ISSN: 0973-4562 (*Scopus*).
- 8) S. Datta and A. K. Roy, "**ANFIS based 48-Pulse STATCOM Controller for Enhancement of Power System Stability**," International Journal of Modeling and Optimization vol. 2, no. 4, pp. 455-461, 2012 (ISSN: 2010-3697).
- 9) Ksh. R. Singh, S. Datta, S. Gope, Lalhmimgliana and M.S. Devi, "**Discrete Hopfield network for classification of food gains**", International Journal of Electrical Engineering, Vol. No.3, pp. 383-393, 2012, ISSN 0976-6545 (Print), ISSN 0976-6553(Online), Impact Factor: 3.2031.

International/National Conference:

- 1) S. Datta, J. P. Mishra and A. K. Roy, "**Effectiveness of B2BC and NSC in a Grid Connected DFIG based WT System - A Comparative Study**", National Conference on Recent Trends in Engineering and Technology, 2017, TIT, Agartala.
- 2) S. Datta, J. P. Mishra and A. K. Roy, "**Active and reactive power control of a grid connected speed sensor less DFIG based wind energy conversion system**", IEEE-International Conference on Energy, Power and Environment: Towards Sustainable Growth (ICEPE), 2015, pp.1-6, ISBN: 978-1-4678-6503-1 IEEE.
- 3) S. Datta, J. P. Mishra and A. K. Roy, "**Performance Analysis of a DFIG based Variable Speed Wind Energy Conversion System**", 1st International Conference on Computing, Communication, Electrical, Electronics, Devices & Signal Processing, pp. 883-890, March-2015. (**Published in Discover Journal Vol. 47, Issue-216 pp. 29-36**).
- 4) S. Datta, J. P. Mishra and A. K. Roy, "**Modified Speed Sensor-less Grid Connected DFIG based Wind Energy Conversion System for Decoupled Control of Active and Reactive Power**", International Conference on Power and Advanced Control Engineering, pp.28-35, Aug-2015 (ICPAC-2015), ISBN: 978-1-4799-8371-1 IEEE.
- 5) S. Datta, J. P. Mishra and A. K. Roy, "**Unbalance and Non-linear Stator Voltage Control of a Grid Connected DFIG based WECS using NSC**", 12th IEEE India International Conference Electronics, Energy, Environment, Communication,

Computer, Control, (E3-C3), Dec-2015 (Indicon-2015), ISBN: 978-1-4673-6540-6 IEEE.

- 6) S. Sharma, J. P. Mishra, and S. Datta, "**Sliding Mode Power Control of a DFIG based Variable Speed Wind Energy Conversion System**", 12th IEEE India International Conference Electronics, Energy, Environment, Communication, Computer, Control, (E3-C3), Dec-2015 (Indicon-2015), ISBN: 978-1-4673-6540-6 IEEE.
- 7) S. Sharma, S. Datta, S. Ghosh, J. Joshi, "**Performance Analysis and Control Of 10 KW Permanent Magnet Synchronous Generator Connected to Grid Driven by Wind Turbine using Autonomous Converters applying SVPWM Technique**", 9th IRF International Conference, Bengaluru, India, 27th July-2014, ISBN: 978-93-84209-40-7.
- 8) S. Datta "**Utility of Information and Communication Technology and local self Government**", Two Day National Seminar, Govt. Degree College, Gandacherra, Tripura , 28th-29th July,2013.
- 9) S. Datta, and A. K. Roy, "**Fuzzy logic based STATCOM controller for enhancement of power system dynamic stability**", 6th international conference on electrical and computer engineering (ICECE 2010), Dhaka, Bangladesh, pp.294-297, 2010 (ISBN: 978-1-4244-6277-3 IEEE).
- 10) S. Datta, and A. K. Roy, "**Radial Basis Function Neural Network based STATCOM Controller for Power System Dynamic Stability Enhancement**", International Conference on Power Electronics (IICPE), New Delhi, India, pp.1-5, 2010, (ISBN: 978-1-4244-7883-5 IEEE).
- 11) S. Datta, and A. K. Roy, "**Fuzzy Logic Based Coordinated PSS and FACTS Controller for Enhancement of Power System Dynamic Stability**", International Conference on System Dynamics and Control (ICSDC 2010), MIT, Manipal, Karnataka, pp.1084-1090, 2010.
- 12) S. Datta, and A. K. Roy, "**Fuzzy Logic Based SVC Controller for Enhancement of Power System Dynamic Stability**", International Conference on Electrical Power and Energy System (ICEPES 2010), MNIT Bhopal, India, Page No.:-117-122, 2010.
- 13) S. Datta and A. K. Roy, "**Fuzzy logic base TCSC Controller for power system dynamic stability Enhancement**" Northeast Symposium on science and Technology, ICFAI, Agartala, Feb. 18-19, 2010.