Name:	**Dr. Champa Nandi**
Contact number :	09436502334
E-mail's :	chmpnandi@gmail.com, cnandi@tripurauniv.ac.in
Fax :	0381-237-4802
Academic Qualifications :	1. **Ph.D. (NIT, Agartala), 2016** 2. **M.Tech (EE), (Tripura University) Gold Medallist 2008** 3. **B.E. (EE), (NIT Agartala)**
Present Designation/position :	Assistant Professor and H.O.D, Department of Electrical Engineering, Tripura University (A Central University)
Topics Taught :	**Grid Integrated Renewable Energy, Microgrid, Digital Control System, Sensors and Systems, Power Electronics Converters**
Title of Ph.D. Dissertation:	Some Aspects of FACTS Controllers in terms of Power Quality issues
Teaching Experience:	1. Since July 2010 — Assistant Professor, Department of Electrical Engineering, Tripura University 2. July 2008 to July 2010 — Assistant Professor (Contractual), Department of Electrical Engineering, NIT Agartala
Research Experience Ph.D. Guidance:	1.**No of Ph.D. Scholar Submitted Dissertation:01** 2.**Total No of Ph.D. Scholar :05 (ongoing)**
M.Tech Thesis Guided: Ongoing:	24 03
List of Funded Project Completed:	**MHRD funded GIAN Program:** **Program Coordinator of 10 days GIAN Program on "Smart Grid: Secure & Sustainable Energy" an MHRD Program, during 16th September 2016 to 25th September 2016, Funded by MHRD. Fund Received 8.16 lac.**
Workshop /Seminar organized:	07
Professional Membership:	IEEE, IEI

<div align="center">

List of all Publications
https://scholar.google.co.in/citations?user=x-6xVGwAAAAJ&hl=en

</div>

Software Knowledge:	**PSCAD, MATLAB**
Publications (Last 2 Years): **Journals**	**2022** 1. Sanghita Baidya, V. Potdar, P. Pratim Ray, **Champa Nandi,** Reviewing the opportunities, challenges, and future directions for the digitalization of energy, Energy Research & Social Science, Volume 81,2021,102243,ISSN 2214-6296, ELSEVIER , Impact Factor: 6.834 https://doi.org/10.1016/j.erss.2021.102243 (https://www.sciencedirect.com/science/article/pii/S2214629621003364)

2021

2. S. Bhattacharjee, **Champa Nandi**, "Technical feasibility study and optimization analysis on solar-biomass based pumped storage hydropower plant", Int. J. of Environment and Sustainable Development, Inderscience Enterprises Ltd, Vol 20, July 2021, https://doi.org/10.1504/IJESD.2021.116864

3. U Das, S Mandal, S Bhattacharjee, **Champa Nandi** A review of different configuration of hybrid energy systems with case study analysis, International Journal of Environment and Sustainable, ISSN online:1478-7466, ISSN print:1474-6778 , Volume 21, 2022 , Pages 116-137, Impact Factor: **0.63** Inderscience Publishers (IEL), https://dx.doi.org/10.1504/IJESD.2022.119387

2020
4. S. Bhattacharjee, **Champa Nandi**, "Design of a voting based smart energy management system of the renewable energy-based hybrid energy system for a small community", Energy, ELSEVIER, Volume:214 (2021), PP:1-15, online 1st October 2020 (Impact Factor: 7.082) https://doi.org/10.1016/j.energy.2020.118977

Book Chapters

2022
1. Das U., **Nandi C**., Bhattacharjee S., Mandal S. (2022) Energy Impacts on Climate Change: Issues, Challenges and Solutions with Clean Conversion Technology. In: Leal Filho W., Manolas E. (eds) Climate Change in the Mediterranean and Middle Eastern Region. Climate Change Management. Springer, Cham. January 2022, Print ISBN: 978-3-030-78565-9 , Online ISBN: 978-3-030-78566-6 https://doi.org/10.1007/978-3-030-78566-6_6

2021
2. S Baidya, **C Nandi** , Solar Energy Generation and Internet of Energy (IoE): Challenges and Purview Internet of Energy Handbook, Pawan Kumar, Srete Nikolovski, Z Y Dong eBook ISBN9781003048343, 2021, Taylor-Francis CRC Press https://www.taylorfrancis.com/chapters/edit/10.1201/9781003048343-7/solar-energy-generation-internet-energy-ioe-sanghita-baidya-champa-nandi

2020
3. Somudeep Bhattacharjee and Champa Nandi, "Design of an Industrial Internet of Things Enabled Energy Management System of a Grid Connected Solar–Wind Hybrid System Based Battery Swapping Charging Station for Electric Vehicle", Applications of Internet of Things: Lecture Notes in Network s and Systems, ISBN: 978- 981-15-6198-6, PP: 1-14 , Springer, August 2020http://link-springer-c443.webvpn.fjmu.edu.cn/chapter/10.1007%2F978-981-15-6198-6_1

4. SomudeepBhattacharjee, Uttara Das, Moumita Chowdhury and Champa Nandi, "Role of Hybrid Energy System in Reducing Effects of Climate Change", Dynamics of Energy, Environment and Economy, ISBN:978-3-030- 43578-3, PP: 115- 138, Springer, August 2020https://www.springerprofessional.de/en/role-of-hybrid-energy-system-in-reducing-effects-of-climate-chan/18142760

5. Somudeep Bhattacharjee and Champa Nandi, "Design of a Smart Energy

	Management Controller for Hybrid Energy System to Promote Clean Energy", Advances in Greener Energy Technologies , ISBN: 978-981-15-4245-9, PP: 527-563, May 2020, Springerhttp://link-springer-com-443.webvpn.fjmu.edu.cn/chapter/10.1007%2F978-981-15-4246-6_31
	6. Sanghita Baidya and Champa Nandi, "Green Energy Generation Using Renewable Energy Technologies", Advances in Greener Energy Technologies , ISBN: 978-981-15-4245-9, PP: 259-276, May 2020, Springer https://link.springer.com/chapter/10.1007/978-981-15-4246-6_16
	7. SomudeepBhattacharjee,Samrat Chakraborty and Champa Nandi, "An Optimization Case Study of Hybrid Energy System in Four Different Regions of India.", Advances in Greener Energy Technologies , ISBN: 978-981-15-4245-9, PP: 399-437, May 2020, Springer ttps://link.springer.com/chapter/10.1007/978-981-15-4246-6_23
Conferences	1.Aditi Datta. Anjan Mukherjee; Anjan K. Ghosh; Champa NandiSimulating the Effect of Electro Optic or Acousto Optic Modulator along with Noise in Spice, IEEE 7th International Conference on Electrical Energy Systems (ICEES)https://doi.org/10.1109/ICEES51510.2021.9383765 Electronic ISBN:978-1-7281-7612-3 Print on Demand(PoD) ISBN:978-1-7281-7613-0 2. Somudeep Bhattacharjee, Champa Nandi, "Design of an IIoT enabled Energy Management System of a Grid Connected Solar-Wind Hybrid System based Battery Swapping Charging Station for Electric Vehicle", International Conference on Computer Communication and Internet Of Things (ICCCIOT-2020), 03-04 February, 2020. **(Awarded Best Paper)** 3.Somudeep Bhattacharjee, Champa Nandi, "Technical, economic, feasibility and comparative analysis of three different configurations of energy system to control intermittency of renewable energy", Proceedings of 2nd International Conference on Information systems & Management science (ISMS) 2019, SSRN Electronic Journal, pp. 117-124, January 2020. 4. Somudeep Bhattacharjee, Champa Nandi, "Technical, economic, feasibility and comparative analysis of three different configurations of energy system to control intermittency of renewable energy", Proceedings of 2nd International Conference on Information systems & Management science (ISMS) 2019, pp. 117-124, December 06-07, 2019. 5.Uttara Das, Sarbani Mandal, Somudeep Bhattacharjee, Champa Nandi, " A review on renewable energies and its advantages on hybrid power generation". Paper presented on 2nd International Conference on New and Renewable Energy Resources for Sustainable Future, Jaipur, India, 07-09 Nov, 2019. 6.Somudeep Bhattacharjee, Champa Nandi, "Technical feasibility study and optimization analysis on solar-biomass based pumped storage hydropower plant". Paper presented on 2ndInternational Conference on New and Renewable Energy Resources for Sustainable Future, Jaipur, India, 07-09 Nov, 2019. 6.Somudeep Bhattacharjee, Champa Nandi, "Design of an IIoT enabled Energy Management System of a Grid Connected Solar-Wind Hybrid System based Battery Swapping Charging Station for Electric Vehicle". Paper presented on International Conference on Computer Communication and Internet of Things 2020 (ICCCIOT 2020), Tripura, India, 03-04 February, 2020. (awarded Best Paper) 7.Somudeep Bhattacharjee, Champa Nandi, Sushmita Reang, "Intelligent controller Design for Solar-Wind Hybrid System" IEEE 3rd International Conference for convergence Technology (12 CT) 2018 8.Somudeep Bhattacharjee, Saima Batool, Champa Nandi and UdsaneePakdeetrakulwong, "Investigating Electric Vehicle (EV) charging stationLocations for Agartala, India" , 2nd International conference of Multidisciplinary Approach on UN Sustainable Development Goals(UNSDGs), Session of Electrical Engineering and Technology. PP 2-13, 2017 9.C.Nandi ,A.K.Chakraborty "Voltage Collapse Mitigation by using SVC and Phase-Plane Trajectory Analysis" , IEEE 11th International Annual Conference

	INDICON 2014. Puna, 11th -13th Dec,2014 10.S.Saha, C.Nandi, "Modelling and Harmonic Analysis of Domestic/Industrial Loads", National Seminar on Enaergy Science & Engineering (NSESE-2013), 29-30 Nov, 2013 11. C.Nandi and A.K.Chakraborty, "Wind Power Plants with VSC Based STATCOM in PSCAD/EMTDC Environment", International Conference on Power and Energy Systems (ICPES 2012), November 17-18, 2012,Pune. 12.C.Nandi,S.Deb and M.Debbarma, "Voltage stability improvement using Static Var Compensator in power system with variable load", International Conference on Sunrise Technologies ICOST-2011 13-15 January 2011,Maharastra. 13.S.DebM.Debbarma, and C.Nandi, "Microprocessor based Over current Relay with IDMT, Very Inverse and Extremely Inverse Characteristics", International Conference on Sunrise Technologies ICOST-2011 13-15 January 2011,Maharastra. 14.C.Nandi, S.Deb and M.Debbarma, "Study and Simulation of the SVC and STATCOM effect on Voltage Collapse and Critical Fault Clearing Time", 3rd International Conference of computer Modeling and Simulation(ICCMS-2010),7-9 January 2011,Mumbai. 15.M.Debbarma,S.Deb and C.Nandi, "Modeling of Photovoltaic Cell, Module and Array Based onTBP1275 Photovoltaic Module in Matlab/Simulink Environment" , 3rd International Conference of computer Modeling and Simulation(ICCMS-2010),7-9 January 2011,Mumbai.
List of Workshop /Seminar organized	List of Workshop /Seminar organized 1. Coordinator of two days workshop jointly organized by Techbriddhi, IIT Guwahati & Department of EE, Tripura University and Tripura University on 18-19th January 2016, 18th to 19th January 2016 2. Coordinator of 10 days GIAN Program on "Smart Grid: Secure & Sustainable Energy" an MHRD Program, during 16th September 2016 to 25th September 2016, Funded by MHRD 3. Coordinator of 5 days workshop on "PHOENICS 2016" a UGC NRCPS Program, jointly organized by Institute of radio Physics and Electronics and Department of EE, Tripura University, 29th Feb 2016 to 4th March 2016 4. Coordinator of two days workshop jointly organized by Micro Pro & National Instruments Company and Tripura University on 18-19th January 2016, Funded by National Instruments, 18th to 19th January 2016 5. Coordinator of one day workshop on "Smart Grid" held on 27th April 2015 at Tripura University, Funded by Tripura University
Seminar/workshop Attended	1.Successfully completed One-week Online Faculty Development Programme (FDP) on Development of Teacher's e-kit and MOOCs in Four Quadrant Format of e-Content, Organized By Guru Angad Dev Teaching Learning Centre (GAD-TLC) of MHRD under PMMMNMTT Scheme, 12-20 September 2020 2.Participated and Successfully Completed AICTE TRAINING AND LEARNING (ATAL) ACADEMY sponsored ONLINE Faculty Development Programme on "TRENDS AND ISSUES IN CONTROL SYSTEM ANALYSIS AND DESIGN" organized by the Department of ECE, Government College of Engineering Srirangam, Trichy 12. India, from 17.08.2020 to 21.08.2020 3.Successfully completed One-week Online Faculty Development Programme (FDP) on Developing Multimedia enriched Powerful Presentations, Organized By Guru Angad Dev Teaching Learning Centre (GAD-TLC) of MHRD under PMMMNMTT Scheme, 11-16 August 2020 4.Attended Online training Programme on Digital Tools for Writing, Authoring and Reviewing Manuscripts, jointly organized during 21st September and 2 nd October 2020. This programme is endorsed by NBA/AICTE/UGC. 5.Participated an online National Webinar on "Promotional Avenues for Teachers

in Higher Education: CAS Regulations- 2018", Organized By Guru Angad Dev Teaching Learning Centre (GAD-TLC) of MHRD under PMMMNMTT Scheme, on 5th September, 2020.

6.An One-week Online Faculty Development Programme (FDP) on "Energy and Environment: Conversion, Generation, Storage, and Efficient Utilization", Organized by Department of Electrical Engineering and Civil Engineering, North Eastern Regional Institute of Science & Technology (NERIST) under Ministry of Education, Government of India, during 24th August to 28th August, 2020.

7.Participated and Successfully Completed One Weak National AICTE Funded Workshop on "Recent Trends in Quantum Computing", Organized by Department of Information Technology, Tripura University (A Central University), Suryamaninagar, Tripura (West), Tripura, India, during 23rd September, 2019 to 27th September, 2019.

8.3 week duration Refresher course on "ICT in science Education" Funded by UGC- Human Resource Development Centre, Mumbai University, Mumbai, Maharashtra, India, during 3rd October 2016 to 22nd October 2016

9. Two Days Workshop on "Power Electronics application on Electrical Drives" organised by Department of Electrical Engineering, NIT, Agartala. November 2015.

10.4 weeks Orientation Program organised by UGC Academic Staff College , University of Mumbai, 28th February 2015 to 24th March 2015

11.Tutorial workshop on "Recent Trends in ROBOTICS" organised by IEEE 11th International Annual Conference INDICON 2014. Puna, 11th -13th Dec,2014

12.Orientation Program on "Business English Certification: Teacher Support Programme(TSP) , 12 Nov 2013 to 14th Nov 2013
13.   National Seminar on "Higher Education: Past, Present and Future-A Special Reference to North East India", October 25th -26th, 2013

14. One day Workshop on "Basics of Photonics"1st February, 2014. Organized by Department of Electrical Engineering, Tripura Institute of Technology, Narsingarh, Agartala. Sponsored by TEQIP-Phase II, Govt of India

15.One day Panel Discussion on Women & Science, "Careers of Woman in Science" , 25th February 2014, Organized by Women's Studies Centre Tripura University

16.2 weeks duration Staff Development Program on "Power Electronics and Drives – Recent Development", Organised by NIT Agartala 21st Feb – 4th March, 2011

| List of M.Tech Research Project Guided by Dr. Champa Nandi | 1. **Microgrid Analysis with Converters (2020-2021)**
 2. **Harmonic Analysis of Hybrid Microgrid(2020-2021)**
 3. **Intelligent Controller Design for Clean Energy Generation (2020-2019)**
 4. **Solar Energy Harvesting and Optimization with Solar Panels (2020-2019)**
 5. **Design of Automatic charging controller for PV-Grid Integrated EV charging station (2018-2019)**
 6. **An Automatic control and protection System for Islanded Microgrids (2018-2019)**
 7. **Energy Management System for Grid Connected Hybrid Power Plant with storage Facility (2018-2019)**
 8. **Carbon Monoxide Level Detection and Control in a GPS Enable vehicle (2017 -2018)**
 9. **Design of an Intelligent Energy Management Controller for Hybrid Power** |

Plant (2017 -2018)

10. **Renewable energy management through micro-grid controller design**(2017 - 2018)
11. **Intelligent Controller Design for hybrid PV hydroelectric Power Plant** (2016 -2017)
12. **Efficient Smart Home Automation system**(2016 -2017)
13. **Development of Smart Metering System for automatic water Level Control and measurement of water consumption. (2016 -2-017)**
14. **Full order state feedback controller for UPFC (2015-2016)**
15. **Controller Design of STATCOM** (2014-2015)
16. **Controlled Portable Solar Battery Charging System for Mobile Devices**(2014-2015)
17. **Synchronize the undistributed utility network under abnormal power-grid condition using enhanced phase-locked loop (EPLL).** (2014-2015)
18. **Harmonic Elimination of Cascaded Multi-level Inverter**. (2014-2015)
19. **STATCOM and Total Harmonics Distortion Analysis** (2013-2014)
20. **Role of FACTS Controller on Voltage Collapse**. (2012-2013)
21. **Power Flow & Voltage Control Using FACTS Devices**. (2012-2013)
22. **Modelling and Simulation of Grid Connected Wind Power Plant**. (2011-2012)
23. **Modelling and Simulation of IEEE 14- Bus System with UPFC**. (2010-2011)
24. **Benefits of Utilizing FACTS Controllers in Power System**. (2010-2011)

Ph.D Scholars

Photo	Name	Title of thesis	Supervisor	Contact
	SOMUDEEP BHATTACHARJEE (FULL TIME)	Novel Energy Management System Design for Renewable Energy based Hybrid System to combat Climate Change	Dr. Champa Nandi	Email: somudeepbhattacharjeephd@gma Research gate ID: https://www.researchgate.net/profile/Son Bhattacharjee Google scholar ID: Somudeep Bhattacha Google Scholar
	SANGHITA BAIDYA (FULL TIME)	Protection Scheme for Solar PV based DC Microgrid	Dr. Champa Nandi	Email:sanghitabaidya7@gmail.com
	BRAHMA NAND THAKUR (Visvesvaraya Ph.D Scheme) (PART TIME)	Intelligent Controller Design for Hybrid Hydro PV power Plant for Energy Management	Dr. Champa Nandi	Email: brahmanand.thakur@bitdurg.ac.ir Google scholar ID: BRAHMANAND TI Google Scholar
	UTTARA DAS (ADF Ph.D Scheme) (FULL TIME)		Dr. Champa Nandi	Email:uttarad1995@gmail.com Research gate ID:https://www.researchgate.net/profil Das-4 Google scholar ID:Uttara Das - Google S

	ADITI DATTA (PART TIME)	Design and Analysis of optical communication system using chaos shift keying **(Thesis submitted)**	Prof. Anjan Mukharjee , Retired Prof. TU (Supervisor), Prof Anjan Ghosh, Ex-VC, TU (Co-Supervisor), Dr. Champa Nandi (Co-Supervisor)	Email: daditidatta@gmail.com Research gate ID: https://www.researchgate.net/profile/Aditi-[
	SANGITA DAS BISWAS (PART TIME)		Dr. Champa Nandi (Supervisor) Dr. Bikram Das ,Assistant Professor, NIT, Agartala (Co-Supervisor)	Phone number: 09436183551 E-mail: sdasbiswas@tripurauniv.in Research gate ID: http://www.researchgate.net/profile/Sangita-Biswas-2 Google scholar ID: Sangita Das Biswas - G Scholar