Name of Faculty Dr. Ahmad Sved Designation Asst. Professor

Nature of Job/Appointment Contract 27 - 07 - 2019 Date of Joining

E-mail ahmadsyed_eee@cbit.ac.in

Education Qualifications Name of the Degree

> Ph. D Doctor of Philosophy (EEE) Awarded PG M. Tech. (P&ID) Distinction B. Tech. (EEE) First UG

Class

Work Experience

Teaching 07 Years Research 06 years

Industry

Others

Renewable energy and power electronics, particularly in grid-Area of Specialization connected PV inverters design and its applications

IEEE membership (Reg.No:92661759)

Public relation committee member

IAENG-International Association of Engineers (Member No: 169729) Professional Memberships IAENG-Society of Electrical Engineering (Member No: 169729) SCIence and Engineering Institute (Member No:20200804006) Automatic Control & Dynamic Optimization Society (ACDOS)

Responsibilities held at Institution

Level

Responsibilities held at Department Level

No. of Books/Chapter Published with

details

Research Guidance

Awards Received

Basic Electrical Engineering, Electrical Circuits and Analysis and Control Systems, Wind and solar energy systems, Renewable energy Courses Handled at Under Graduate / Post Graduate Level. technologies, Electrical distribution systems, Electrical drives

National Journals -International Journals - 06 No. of Papers Published

National Conference -International Conference - 07 **Projects Carried out**

Application Number: 202141055280

Title of the Invention: Intelligent Motion Detecting Sensor for **Patents**

Domestic Application

Date of Publishing: 10.12.2021

Technology Transfer Invited Speaker

Ahmad Syed, S. Tara Kalyani, Xiaoqiang Guo and Freddy Tan Kheng Suan "A Photovoltaic Transformerless Inverter Topologies for Grid Integrated High Efficiency Applications" Book

title" Technological challenges and advances in wind and solar Energy applications" Publisher: CRC Press Taylor & Francis

group eISBN:9781003321897 March 2023

Ahmad Syed, S. Tara Kalyani, Xiaoqiang Guo, Huai Wang, B. Mouli Chandra, and Freddy Tan Kheng Suan "Evaluation of single-phase rectifier bridge clamping circuit solar power transformerless inverter topologies for electric vehicle applications" The Future of Road Transportation Electrification and Automation CRC Press Taylor & Francis eISBN:9781003354901 Nov 2023.

- Ahmad Syed, S. Tara Kalyani, Xiaoqiang Guo, Huai Wang, B. Mouli Chandra, and Freddy Tan Kheng Suan "Analysis of recent developments in three-phase transformerless inverter topologies for photovoltaic and Electric Vehicle applications" The Future of Road Transportation Electrification and Automation CRC Press Taylor & Francis Group elSBN:9781003354901 Nov 2023
- Ahmad Syed, S. Tara Kalyani, Xiaoqiang Guo, Huai Wan, Freddy Tan Kheng Suan and Suresh Babu G "Recent advancements and challenges of Powertrain Technologies in Electric Vehicles application" The Future of Road Transportation Electrification and Automation CRC Press Taylor & Francis Group. eISBN:9781003354901 Nov 2023.
- 1. Participated in a one-day awareness workshop on "Intellectual Property Rights" at JNTUH campus on 26-07- 2014.
- 2. Participated in a one-day workshop on "Power System Deregulation- Recent Trends" organized by Department of Electrical and Electronics Engineering, JNTUH College of Engineering, Hyderabad, Under TEQIP-II, 26-07-2014.
- 3. Participated in a Three-Day workshop on "Computer Applications to Power Systems Using MI-POWER" Organized by Department of Electrical and Electronics Engineering, JNTUH College of Engineering, Hyderabad, Under TEQIP-II,18-03-2015 to 20-03-2015.
- 4. Participated in a three-day workshop on "Solar PV Certificate training programme" conducted by Ecoglaze consultant pvt Limited Hyderabad from 21-01-2015 to 23- 01-2015.
- 5. Participated in one-day workshop on "Issues of solar PV integration into the grid: Experience from a practitioner's viewpoint" Persatuan AlumnivUM (PAUM) Clubhouse, Malaysia on 16th November 2016.
- Participated in one-day workshop on "Machine learning by using MATLAB" in SIET2019 conference at Asia pacific university of technology & Innovation (APU) kuala lumpur, Malaysia on 24-25th September 2019.
- 7. Participated in one-day workshop on "Electromagnetic and thermal simulation of PMSM (IPM) motor" at Altair Webinar (ANZ ASEAN India),07-05-2020.
- 8. Participated in a one-day workshop on "simulation driven innovation for e-mobility" at Altair Webinar (ANZ ASEAN India),27-05-2020.
- 9. Participated in a three "How to draft effective scientific publications, patents and patent filling" organized by Department of Electrical and Electronics Engineering, Research and Development Cell, In Association with IEI & ISTE Chapter, BIET from 02.07.2020 to 04.07.2020.
- A three-Day Faculty Development Program on "Real time hardware in-the-loop simulation for power electronics and power systems", at Anurag university, Hyderabad, during 27-05-2020 to 29-05-2020.
- 11. A One Week Faculty Development Program on "Outcome Based Education and NBA Accreditation Process-(UG)", at CBIT(A), Hyderabad during 28-05-2020 to 01-06-2020.
- 12. A Five-Day Faculty Development Program on "Recent Trends In Electrical Engineering", at Vishnu Institute of Technology, Bhimavaram, during 08-06-2020 to 12-06- 2020.
- A Five-day Faculty Development Program on "Recent Innovations and Technologies in Electric Vehicles", at GATES Institute of Technology, Anantaapuramu, during 08-06-2020 to 12-06-2020
- A One Day national level Faculty Development Program on Simulation of Power electronic converters through python", at RGMCET, Kurnool, during 11-06-2020.
- 15. A One Week Faculty Development Program on "Advance research methodology and innovative teaching Padagogy", at Tulasi ranjigai kwad patil college of engineering and technology, Nagpur, during 08-06-2020 to 13-06-2020.
- 16. A One Week Faculty Development Program on "Design of Solar PV System Using PVsyst Software", at Vaagdevi College of Engineering, Hyderabad, Warangal during 09- 06-2020 to 13-06-2020.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.Other Trainings (Attended and/or Organized).

- A three-Day Faculty Development Program on "Emerging research opportunities in electrical engineering", at JBIET, Hyderabad, during 11-06-2020 to 13-06-2020.
- A Five-day Faculty Development Program on "Electrical vehicles", at VJIT, Hyderabad, during 11-06-2020 to 15-06-2020
- A One Week Faculty Development Program on "Recent Strategies on Micro- and Smart-Grid Technologies (RSMSGT-2020)", at GMRIT, Hyderabad during 15-06- 2020 to 19-06-2020
- A One Week Faculty Development Program on "Challenges & opportunities in electrical engineering", at BIET, Hyderabad, during 15-06-2020 to 20-06-2020
- 21. A One Week Faculty Development Program on "Industrial Relevance of electrical engineering", at BVRITH, Hyderabad, during 15-06-2020 to 20-06-2020
- A Seven Day Faculty Development Program and online training on "OpenModelica and OpenIPSL", at V.K.R, V.N.B & A.G.K College of Engineering, Gudivada, during 17-06-2020 to 23-06-2020.
- 23. A three-Day Faculty Development Program on "Recent developments in electrical and electronics engineering", at PVKK Institute of technology, Anantapuramu, during 19-06-2020 to 21-06-2020
- 24. A Five-Day Faculty Development Program on "Artificial Intelligence", at SIR C.R REDDY college of engineering, Hyderabad during 22-05-2020 to 25-06-2020.
- 25. A One Week Faculty Development Program on "Harnessing solar energy for reducing carbon footprint", at Sri shankaracharya technical campus, Bhilai, during 16-06-2020 to 20-06-2020.
- A One Week Faculty Development Program on "Recent Advances in Electrical Engineering", at Bharat institute of engineering and technology, Hyderabad, during 22-06- 2020 to 27-06-2020.
- 27. A One Week International FDP on "Control Theory and Applications" from 29-06-2020 to 03-07-2020 organized by Vignan Institute of Technology & Science in Association with Telangana Academy for Skill and Knowledge (TASK).
- 28. Participated in STTP on "LaTeX101x: LaTeX for Students, Engineers, and Scientists" IITBombayX, Bombay, during 24-09-2019 to 02-12-2019.
- Participated in 'eSim" training organized at Sreyas Institute of Engineering & Technology, Hyderabad in January 2020 semester, with course material provided by the Spoken Tutorial Project, IIT Bombay.
- 30. A One-day technical seminar on "Testing devices for susceptibility to power line disturbances, at CHROMA systems solutions on 04-06-2020.
- 31. A One-day technical seminar on "Decreasing risk of electrical shorts in lithium-ion battery cells, at CHROMA systems solutions, 11-06-2020.
- 32. A One-day technical seminar on "Electrical safety testing 101, at CHROMA systems solutions on14-06-2020.
- A One-day technical seminar on "LCR meters: selecting precision equipment for low, mid, and high frequency impedance measurements, at CHROMA systems solutions on 18-06-2020
- A One-day technical seminar on "how to achieve accurate power measurements, at CHROMA systems solutions on21-06-2020.
- 35. A One-day technical seminar on "testing PV inverters and solar energy devices, at CHROMA systems solutions on 30-06-2020.
 36. A One-day technical seminar on "Implementation on National Educational Policy-2020 at JNTUH college of engineering Jagtial in collaboration with AICTE & ISTE on 31-03-2021.
- 36. A one day international Webinar on "Machine Learning: Next Generation Intelligent E-Mobility" jointly organised by IEEE Power Electronics Society Student Branch Chapter, Harcourt



- Butler Technical University (HBTUK), IEEE STB HBTUK and IEEE UP Section in association with Department of Electrical Engineering (HBTUK) on 23 rd September, 2023.
- 37. Participated in the AICTE Recognized Faculty Development Programme on Energy Efficient and Decarbonization Technologies Conducted by Electrical Engineering Department from 05/06/2023 to 09/06/2023 (One Week) at Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad, Telangana
- 38. Participated in the AICTE Recognized Faculty Development Programme on ANSYS-EM for Electrical Engineering Application Conducted by Electrical Engineering Department from 17/07/2023 to 21/07/2023 (One Week) at Chaitanya Bharathi Institute of Technology, Hyderabad.
- 39. Participated in One-week online FDP on "Quality Education through OBE" organized by Chaitanya Bharathi Institute of Technology (Autonomous), Gandipet, Hyderabad500 075, Telangana, India., in association with IEEE Education Society Student Branch Chapter CBIT during 22nd 27th January 2024.

Details of Journal Publications/ Conferences (National and International)

International Conference:

- Ahmad Syed and S.Tara Kalyani "Neutral Point Clamped Full bridge Topology for Transformerless PV Inverters with improved clamping branch" in Proc. IET CEAT, Nov. 2016, Kuala Lumpur, Malaysia DOI: 10.1049/cp.2016.1315.
- 2. Ahmad Syed and S.Tara Kalyani "Three-Phase Eight Switch Inverter with Reduced Common mode voltage for Transformerless Photovoltaic Systems" in proc of IEEE March 2016 pp.2840-2844.
- 3. Ahmad Syed and S.Tara Kalyani "A novel single phase Multilevel Transforerless PV inverter for reduced common mode current" Materials today Proceedings Elsevier, Volume 5, Issue 1, Part 1, 2018, Pages 524-530
- 4. Ahmad Syed, S.Tara Kalyani, Xiaoqiang Guo, Freddy Tan Kheng Suan and Huai wang" A Modified H-Bridge Neutral-point-clamped Transformerless PV inverter for constant common mode voltage" 6th Internation conference "International conference on Emerging trends in engineering and technology (ICETEST-2020) From 17th december 2020 to 19th 2020, Thrissur, Kerala-India.
- Ahmad Syed, Sidharth D,Srinidhi, N.Vasavi T,Vishwas P,Sathish D "A Single-Phase Neutral Point Clamped Transformerless MOSFET Inverter Topologies for Grid Connected Photovoltaic Applications with Constant common-mode voltage 3rd International recent trends in engineering advanced computing and technology conference 2022, Saudi Arabia (Under publication)
- 6. Ahmad Syed, Vipin Karthik, Tara Kalyani Sandipamu, Mouli Chandra, Sathish D" An improved H5-Type Transformerless Photovoltaic inverter topology with constant common mode voltage for grid connected power systems applications" An International conference on Sustainable Energy and Clean Technologies (ICSECT-2022),2-4th sept 2022.Pandit Deendayal Energy university, Gujarat. (Scopus)
- 7. Ahmad Syed , Nagaraju Budidha , N.Kalpana , Tara Kalyani Sandipamu and Freddy Tan Kheng Suan" A Comprehensive Analysis of AC-Decoupling Techniques for Common Mode Leakage Current Reduction "Fourth International Conference on Advanced Engineering Optimization Through Intelligent Techniques(AEOTIT), Department of Mechanical Engineering Sardar Vallabhbhai National Institute of Technology (An Institute of National Importance of Government of India) Surat 395 007, Gujarat State, INDIA, Springer Proceedings and special issues of few international journals of repute September 28-30, 2023. (Scopus)(Under Publication).
- 8. Ahmad Syed, Nagaraju Budidha, N. Santosh Kumar, P. Hemeshwar Chary, G. Bhanu Prasad, Freddy Tan Kheng Suan "Analysis of Single-Phase H6-Clamping Transformerless Inverter topology for Constant Common mode voltage "First International Conference on Emerging Technologies & Applications in Electrical Engineering ETAEE 2023, Department: Electrical Engineering one of the significant Engineering Branch of NIT Raipur, Proceedings of T&F, CRC Press. Best paper award- (Under Publication). (Scopus)

National /International Journal:

1. B.Mouli Chandra, B.Venkata Prasanth, Ahmad Syed, T.P.Lakshmi Narayanan" MVA-Km Method And Genetic Algorithm For A Comprehensive Transmission Cost Allocation By Ac Power Flow" Mathematical Statistician And Engineering Applications, Vol 71,No.4 2022.

- 2. B.Mouli Chandra, B.Venkata Prasanth, Ahmad Syed, Prakash Y" Power control in a hybrid isolated power system with better power quality" Mathematical Statistician And Engineering Applications, Vol 71.No.4 2022.
- Ahmad Syed, S. Tara Kalyani and Freddy Tan Kheng Suan "An Improved MOSFET Neutral-point clamped full-bridge Transformerless Inverter for high efficiency distributed Photovoltaic system "International Journal of Advanced Science and Technology Vol. 29, No. 01, (2020), pp. 153 167.
 Ahmad Syed, S.Tara Kalyani and Freddy Tan Kheng Suan "A High-efficiency Neutral-Point-Clamped
- Ahmad Syed, S.Tara Kalyani and Freddy Tan Kheng Suan "A High-efficiency Neutral-Point-Clamped Transformerless MOSFET Inverter For Photovoltaic Applications" IET Power Electronics. ISSN 1755-4543, vol 11, issue 2 and Feb 2018, pp.246-252.
- 5. Ahmad Syed and S.Tara Kalyani "HBZVR-Type Single-Phase Transformerless PV grid connected Inverter with Constant Common-mode voltage" International Journal of Electronics Engineering Research. ISSN 0975-6450 Volume 9, Number 6 (2017) pp. 791-808 Research India Publications.
- 6. Ahmad Syed and S.Tara Kalyani "Evaluation of single phase transformerless photovoltaic inverters" Electrical and Electronics Engineering: An International Journal (ELELIJ), ISSN:2200-5846,Vol4,No2, and May 2015, pp.25-39.

