

Dr. Subhash Joshi T G

Dr. Subhash Joshi T G is the Principal of ER&DCI Institute of Technology. He also serves as the Associate Director (Scientist F) of C-DAC Thiruvananthapuram. He pursued his **Ph.D. in Electrical Engineering** from **Indian Institute of Science (IISc), Bangalore, India** in the area of **Power Electronics and M.Tech in Electrical Engineering** from **National Institute of Technology (NIT), Calicut, India** with specialization in **Power Electronics**. He has more than 25 years of experience in the field of engineering & technology in various organizations in PSU and in Govt sectors in the domains of Electro-Optic Tracking System, Power Electronics focused on High voltage High Frequency Power Conversion, PWM methods, and Power Quality solutions. He has completed 13 sponsored projects from Meity, MoP, DAE etc.

Research Publications

Publications	Number of Publications
Journal Articles	6
Conference Proceedings	24
Patents Granted	6
Patents Recently Applied	6
Copyright	2

Patents Granted:

1. "A Novel Evaluation Method for Microwave Tube Protective Device with Fuse Wire based on Exact Fault Current", (2023).Indian Patent:436846 dated 01/07/2023.
2. "An electronic assembly for voltage balancing during turn-on of semiconductor devices", (2022).Indian Patent:396856 dated 13/05/2022.
3. "Method and System for Tracking Global MPP in a Solar Panel Array". (2021). Indian Patent:377706 dated 23/09/2021.
4. "A High Voltage High Pulse Power Switch using Electrically Triggered Thyristor". (2020). Indian Patent: 338970 dated 22/06/2020.
5. "Selective Harmonic Detection Using Cascaded Virtual Synchronous Reference Frame". (2020). Indian Patent: 350920 dated 05/11/2020.
6. "A Method of Construction of Unit Vector Using Single Grid Voltage". (2011). Indian Patent: 298635 dated 07/06/2011.

Copyright:

1. "Firmware for Real-time Control of STATCOM for Grid Integrated Reactive Power Compensation Mode of Operation". (2023). Indian Copyright:SW-17738/2023 dated 08/12/2023.

2. "Planar PCB Designer Tool", (2023). Indian Copyright:SW-17795/2023 dated 13/12/2023.

Achievements:

1. **DG Award for Core Research**, for the Development of High Voltage High Frequency Planar magnetic Components.
2. **G20 Meeting**, Invitee in the G20 Clean Energy Meet held at Goa, July 2023.
3. **Track Chair**, of the IEEE International Conference on Power Electronics, Smart Grid, and Renewable Energy (PESGRE), held at Trivandrum on December 17, 2023.
4. **TAP**, Member of Technology Advancement and Proliferation(TAP) Group of C-DAC.
5. **Technical Committee member**, of ANERT for the evaluation of "Kerala State Energy Conservation Awards 2022".
6. **Judging Committee member**, of EMC for the evaluation of "Kerala State Energy Conservation Awards 2022".
7. **Review Member**, of proposal review committee of RCI, DRDO.
8. **Technical Program Chair**, of IEEE International conference on "Power Electronics Drives and Energy System (PEDES 2020)" scheduled on 16-19 December 2020.
9. **Member of the team**, in the "Director General Excellence in Hardware Award 2020".
10. **Technical Program Chair**, of IEEE International conference on "Power Electronics, Smart Grid and Renewable Energy (PESGRE 2020)" held on 2-4 January 2020.
11. **Proposal reviewer of MoP**, for the scheme Research Scheme On Power (RSOP).
12. **Best Presentation Award**, in session Power Engineering, in the EECS Research Students Symposium-2017 held at IISc, Bangalore.
13. **Honourable Mention**, in the "Director General Research and Development Award 2016" for the contribution in Research and Development.
14. **Session Chair**, of Research Challenges in Power Electronics and Power Systems (RCPEPS -2016) held at NIT, Calicut on 6th May 2016.
15. **Session Chair**, of 4th National Conference on Emerging Technology (NCET) held at GEC Barton Hill, Trivandrum, 25-26 September 2015.
16. **Session Chair**, of 3rd National Conference on Emerging Technologies, held at GEC Barton Hill, Trivandrum, 1-2 August 2014.
17. **Best Paper Award**, in the technical session "Power Electronics Applications in Power Systems" in 6th NPEC 2013, held at IIT Kanpur.

18. **Best Performance Award**, of C-DAC.
19. **Best Performance Award**, of C-DAC.
20. **Second Best Project Award**, for the overall impact of the project "Custom Power Devices".