

Detailed Bio-data

Anil Jakhar received the B.Tech. degree in Electrical Engineering from Rajasthan Technical University, Kota, Rajasthan, India, in 2015, and the M.Tech. degree in Power Electronics and Drives in 2019, followed by the Ph.D. degree in Electrical Engineering in 2024, from the Malaviya National Institute of Technology (MNIT) Jaipur, Jaipur, Rajasthan, India. After completing his Ph.D., he has been associated with the Indian Institute of Technology Kanpur (IIT Kanpur) as a Postdoctoral Fellow with the Department of Sustainable Energy Engineering for more than one year. He is currently an Assistant Professor with the Department of Electrical Engineering, Maulana Azad National Institute of Technology (MANIT), Bhopal, Madhya Pradesh, India, since May 2026.

Dr. Jakhar was the recipient of the Best Poster Prize Award at the IEEE 5th International Conference on Sustainable Energy and Future Electric Transportation (SEFET 2025), Jaipur, India. He has authored or co-authored more than 23 technical papers in IEEE Transactions and international conferences, and has three Indian patents filed/published. His research interests include multilevel inverters, grid-tied photovoltaic systems, renewable energy integration, advanced power electronic converters, electrical power systems for CubeSat applications, and compact power architectures. He regularly serves as a reviewer for leading journals, including *IEEE Transactions on Power Electronics*, *IEEE Transactions on Industrial Electronics*, *IEEE Transactions on Industry Applications*, *IEEE Transactions on Circuits and Systems I: Regular Papers*, *IEEE Transactions on Circuits and Systems II: Express Briefs*, *IEEE Journal of Emerging and Selected Topics in Power Electronics*, *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*, and *IEEE Transactions on Consumer Electronics*.

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BOOK CHAPTER

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2. **Anil Jakhar**, N. Sandeep and Arun Kumar Verma, “A Multi-Level Single-Phase Boosting Inverter System”, (Patent Application No.: 202511026936), Status: **Filed, Indian Patent Office,** Date of Filing: 24/03/2025.
3. **Anil Jakhar**, Pravin Kumar, and Amarendra Edpuganti, “An Efficient Single-Stage Power Conversion System For Small Satellite Electrical Power Systems”, (Patent Application No.: 202611003876), Status: **Published, Indian Patent Office,** Date of Filing: 14/01/2026.