

Dr. Mohd Khursheed

Associated Professor, Department of Electrical Engineering, Faculty of Engineering & IT Integral University, Lucknow

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(Google Scholar, | Orcid Id, Scopus, |Web Of Science, | Research gate, | linked in)

PROFILE

- Dr. Mohd Khursheed Currently working as Associate Professor in the Department of Electrical Engineering at Integral University, Lucknow (U.P), India from 03 Feb. 2015.
- He also served as a HOD in the Department of Electrical Engineering at Integral University, Lucknow (U.P), India, from Sept. 2012 to Feb. 2015.
- Prior to this, he worked as Assistant Professor in the Department of Electrical & Electronics Engineering at Integral University, Lucknow (U.P), India from Sept. 2009 to July 2012.
- Ph.D. in Renewable Energy from Electrical Engineering Department, Integral University, Lucknow, UP, India, 2020.
- M. Tech in Power System and Drives from Aligarh Muslim University. UP, India, 2008.
- B.E. in Electrical Engineering from Aligarh Muslim University, UP, India, 2006.

RESEARCH INTEREST:

- Renewable energy Integration
- DC Microgrid
- Electrical Vehicle Technology
- Hybrid Renewable Energy Systems
- Distributed Energy Generation
- Al in Renewable Energy System

SUMMARY OF RESEARCH ACCOMPLISHMENT:

- PhD Thesis Title: Performance Evaluation of Hybrid Solar PV /Diesel Engine Systems for Telecommunication Base Station Power Supply, advancing solar energy technology.
- Supervising 4 PhD thesis. Moreover, successfully supervised 11 PG thesis on latest research topics, 13 innovative B Tech Projects
- Published several research papers in Int. journals, int. conferences, edited 01 book and published 5 innovations (Indian Patent).
- Paper Titled, "Performance Analysis of Power Flow Controller used for Solar PV based Grid Integrated System", got Best paper awards in 2nd IEEE International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET- 2022).

- Served as Technical Program/ Scientific / Advisory Committee member in different international conferences.
- Served as Co Session Chair in Energy Conversion Congress and Exposition Asia, 2021, Singapore, May 24-27, IEEE 2021

PROFESSIONAL MEMBERSHIP:

- Life Member, Institution of Engineers (IE), India (M-1520487)
- International Association of Engineers (IAENG) Society for Electrical Engineering, Hong Kong.
- Professional Member, Institute For Engineering Research and Publication (IFERP), India (Id.No.-99325191)

COURSE TAUGHT:

- **PG level:** Advance Electric Drives II, Power System Control and dynamics, Advanced Power system Analysis, FACTS Devices & Power Transmission, Measurement & Control
- **UG level:** Basic Electrical Engineering, Electrical Engg. Material, Electrical machine, Control system, Network Theory, Power system Analysis, Power Station Practice, High Voltage Engg., Power system Dynamics, Element of Power System, Static Electric Drive, Non-Conventional Energy Resources etc.

ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILTY

- Worked as Head of the Electrical Engg, Department I U, Lucknow (2012-2015)
- Prepared complete Evaluation Scheme and syllabus of Electrical Engineering Department and Started M Tech.(PS&D) program and developed the evaluation scheme and syllabus for the same, 2012
- Member of Academic Council of Integral University, Lucknow (2012-2015)
- Coordinator of Project Evaluation Committee of EED, I U, Lucknow
- Chairman of Enquiry Committee of EED, I U, Lucknow
- **Coordinator** of **Departmental Examination committee** (2019 to 2023)
- Course Coordinator for UG & PG class (from 2018 to 2024)
- Incharge of one team of Energy Audit Committee of EED, I U, Lucknow
- Head Examiner for the PG & UG level subjects (from 2017 to 2024)
- Organized as a Coordinators and Resource persons Six week (30 hours) Value Added Course (VAC) on "Electric Vehicle Technology", organized by Department of Electrical Engg, under the aegis of Human Resource Development Centre (HRDC) & DQAC Integral University, Lucknow, U.P., India from 6th Sept to 20th Oct., 2022
- Organized as a Co-Convener one day Seminar on "GATE Preparation for Electrical Engineering Students" organized by EED, IU, Lucknow in Association with ACE Engineering Academy, Lucknow, U.P, India on 12th Oct. 2022
- Organized as a Coordinator an one day workshop on "Internet of Things (IoT) and It's Applications" organized by Department of Electrical Engineering in collaboration with Electrocus Solutions, Lucknow under the aegis of DQAC 23rd September, 2021.
- Co-Chaired Two Sessions (PEC 5& PEC 10), IEEE 12th International Conference on Electrical and Electromechanical Energy Conversion ECCE Asia 2021 (Energy Conversion Congress and Exposition – Asia, 2021) held in Singapore from May 24-27, IEEE 2021

• Advisory Member of 1st International Conference on Renewable Energy and Green Technology (ICREGT-2020) Organized By SRM Institute of Science and Technology (SRM IST), Ghaziabad, in Association with Institute For Engineering Research and Publication (IFERP), 9th -10th Oct. 2020

STUDENTS SUPERVISION

PhD Under Supervision (4)

- Manoj Kumar (En. No.- 2100249), "A Novel Approach for Optimal Distributed Generations Planning in Distribution Networks" July 2021
- Ramesh (En. No.- 2100236), "Coordinated Control of Distributed Generations (DG) and Electric Vehicles in Distribution Network With Realistic Load Model" July 2021
- [Ajit Kumar Yadav (En. No.:2100002), "Performance Analysis of Hybrid Wind/PV/FC/Battery Systems to Supply A Critical DC Load", July 2021
- Batool Raouf (En. No.:2100209) ,"Switched Capacitor Multilevel Inverter Topology for Off- Grid Applications", July 2021

M.Tech Dissertation Supervised (11)

- Soumya Kumari (En. No.- 1100100715), July 2022, "Intelligence Power Flow Control for A Solar PV/Wind Energy Based Hybrid System", -- Supervisor
- [Batool Rouf (En. No.- 1900102927), June 2021, "Performance Evaluation of DC Microgrid Including Wind Turbine and Battery Sources", -- Supervisor
- [Samreen Fatima (En. No. 1900102928), June 2021,"Simulation and Performance Comparison of Variable speed Multi-Phase PMSM machine".—Co Supervisor
- [Khalilurrehman (En. No.- 1100100715), August 2020, "Comparison of Phase Shift and Level Shift Multi Carrier Pulse Width Modulation Techniques for Three Phase Cascaded H-Bridge Multilevel Converter", -- Supervisor
- Gaurav Ydave (En. No.- 1100100931), June 20019," Designing of the Power Flow Controller of Grid Integrated System", -- Supervisor
- Mohd Suhail Khan (En. No. 1700102232), June 2019, "Modelling and Simulation of Solar PV Based Grid -Tied Multilevel Inverter", -- Co Supervisor
- Amreen Fatima (En. No. 1500102123), 2018,"Simulation and Performance Comparison of Variable speed Multi-Phase PMSM machine".-- Supervisor
- Sabiha Ahmed (Roll No. 1400168004), May 2017,"Performance of Hybrid Power Generation System Using Solar and Wind Energy', -- Supervisor
- Ahmad Shadab (2014),"Yokto Level INA with D.C. offset Reduction".—Supervisor
- Arti Tiwari (2014),"Controlling of The Vibration of Vehicle Suspension System Using Pl Controller".—Supervisor
- Abhishek Jain (2014), " Controlling of PMBLDC Motor Using Instrumentation".—Co-Supervisor

UG (B. Tech.) Project Supervised : 12 Groups

PUBLISHED/GRANT PATENTS

• Low Cost Instrument to Detect the Degradation of Pharmaceutical Formulations Based Medicines (Application Number: 202111059361).- Published on 24/06/2022

- System of Coordinated Automatic Framework For Multiple Unmanned Aerial Vehicles and Mobile Robot Used for Medical waste Transportation", (Application Number: 202211066959).--Published on 02/12/2022
- A Novel Triple Boost Switched Capacitor Multilevel Inverter (TB-SCMLI) with Lesser Components and Self Voltage Balance, Number: 202211019353 A---- Published on 12/05/2023
- Active-Neutral-Point-Clamped (ANPC) based 7-level switched-capacitor multilevel inverter (SC-MLI) with reduced magnitude of spikes in source current, Number: 202311018534).---Published on 12/05/2023
- Innovative IoT Enabled Advanced Traffic Management System, Number: 202341064023).--Published on 06/10/2023

PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

- Gyanendra Bahadur Singh, Mohd. Khursheed, Aakash Kumar Seth, Maloth Naresh, " Implementation of Proportional-Integral and Proportional-Resonant Controller for Off-Board Electric Vehicle Charger", UPB Sci. Bull., С, Vol. 86, 3, 2024, ISSN 2286-3540. in Series lss. https://www.scientificbulletin.upb.ro/rev_docs_arhiva/rezcf5_192035.pdf
- Ramesh, Mohd Khursheed, Bindeshwar Singh ,"Optimal Integration of DGs in Distribution Networks using Realistic Load Models with Hybrid MC-GA Technique", Journal of Electrical Systems, France, ISSN: 1112-5209, vol.20, issue 7, page no. 3916-3932, 19 Jun 2024 online available at:https://journal.esrgroups.org/jes/article/view/4484/3304
- Mohd Khursheed, Asim Rahman Ansari, Khadim Moin Siddiqui, Mohammad Sami, Munish Kumar," Intelligent Analysis of a Hybrid Energy System with Telecom Load", in Intelligent Data Analytics for Power and Energy Systems, LNEE, Springer, Singapore, vol. 802, issue 01, pp. 567-590, 17 Feb. 2022, DOI: https://doi.org/10.1007/978-981-16-6081-8_29
- Mohd Khursheed, M. A Mallick, Atif Iqbal,"Tuning of Controllers for a Boost Converter used to Interface Battery Source to BTS Load of a Telecommunication Site", in Renewable Power for Sustainable Growth, LNEE, Springer, Singapore, vol.723, issue 01, pp.415-426,21th April 2021, DOI: https://doi.org/10.1007/978-981-33-4080-0_40
- Asim Rahman Ansari, Mohd. Khursheed, Ahamad Riyaz, Mintu Kumar, "Generation of HVDC from Voltage Multiplier using Opto-Isolator and Marx Generator", in Renewable Power for Sustainable Growth, LNEE, Springer, Singapore, vol.723, issue 01, pp. 501-507, 21th April 2021, DOI: https://doi.org/10.1007/978-981-33-4080-0_48

- Khadim Moin Siddiqui, Mohd. Khursheed, Rafik Ahmad and Fazlur Rahman," Performance Assessment of Variable Speed Induction Motor by Advanced Modulation Techniques", in Renewable Power for Sustainable Growth, LNEE, Springer, Singapore, vol.723, issue 01, pp. 729-737, 21th April 2021, DOI: http://dx.doi.org/10.1007/978-981-33-4080-0_70
- Mohd Khursheed, M. A Mallick, Atif Iqbal, "Performance Analysis of Closed loop Control of Diesel Generator Power Supply for Base Transceiver (BTS) Load', International Journal of Innovative Technology and Exploring Engineering (IJTEE)', Elsevier, ISSN: 2278–3075 (Online), Volume-8 Issue-9, July 2019, Page No.:2483-2495, https://www.ijitee.org/download/volume-8-issue-9/
- Kavita Singh, Tarana Afrin Chandel, Mohd. Khursheed Siddiqui, Md. Arifuddin Mallick, "Effect of Bypass Diode under Partial Shading in SPV Module", International Journal of Engineering and Advanced Technology (IJEAT), Elsevier, ISSN: 2249-8958, Volume-8 Issue-5, June 2019
- Iqbala, M. Saad Bin Arif, Shahrin Md Ayobb, Khursheed Siddiqui, "Analysis of A Solar PV/Battery/DG Set-Based Hybrid System for A Typical Telecom Load: A Case Study", International Journal of Sustainable Energy, 259-276, vol36, issue 3 (Taylor& Francis), http://dx.doi.org/10.1080/14786451.2015.1017497, March 2017.

PAPER PUBLISHED IN INTERNATIONAL CONFERENCES

- Desh Deepak Sharma, Mohd Khursheed, "Optimal Voronoi-based Control Algorithm for Drone Intrusion Detection", 3rd IEEE International Conference on Control, Computing, Communication and Materials 2024 (ICCCCM 2024), United Group of Institutions, Prayagraj, India, 10-11 August 2024.
- Asim Rahman Ansar, M. K. Siddiqui, Mohd. Aslam Ansari, Mohsin Aziz, "Performance Assessment of Permanent Magnet Brushless DC Motors with Intelligent Controller", 2nd IEEE International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET- 2022), NIT Patna, India, 24-25 June 2022, DOI:10.1109/ICEFEET51821.2022.9848157,
- M K Siddiqui, Abu S Wasti, Gaurav yadav, Mohd Aslam Ansari, "Performance Analysis of Power Flow Controller used for Solar PV based grid integrated system", 2nd IEEE International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET- 2022), NIT Patna, India, 24-25 June 2022. https://ieeexplore.ieee.org/document/9847906
- Sk Moin Ahmed, Hasan K Zahir, Atif Iqbal, Adil Sarwar, Md Khursheed, "A Multi-Domain Simulation of An Environmental Friendly Hybrid Electric Vehicle (HEV) Using Battery Model", 2009 Third International Conference on Power Systems, Kharagpur, INDIA December 27-29, Paper No: 192.
- Shirazul Islam, Farhad Ilahi Bakhsh, Mohammad Khursheed, Shamsuddin Ahmad, and Atif Iqbal, "A Novel Technique for the Design of Controller of a Vector-Controlled Permanent Magnet Synchronous

Motor Drive", Annual IEEE India Conference (INDICON 2011), BITS Hyderabad, India, 16-18 Dec., 2011. https://ieeexplore.ieee.org/document/9848157

- Shirazul Islam, Mohammad Khursheed, Farhad Ilahi Bakhsh, Atif Iqbal, "Design and Performance Analysis of an Indirect Vector-Controlled Closed- loop Drive System using D-partition Technique", IEEE International Conference on Process Automation, Control and Computing, Coimbatore, Kerala, India, 20-22 July, 2011.
- Ahmad Faiz Minai1, Mohd. Khursheed Siddiqui, "Smart Grid Control for Hybrid Energy Generation Systems", International Conference on Emerging Trends in Engineering and Technology College Of Engineering, Teerthanker Mahaveer University, Moradabad, India, 2012.
- Farhad Ilahi Bakhsh, Shirazul Islam, and Mohammad Khursheed, "Performance Analysis of Low Wind Speed Based Grid-connected Wound Rotor Induction Generator using Input Voltage Control Scheme and Slip Power Control Scheme", International Conference on Emerging Trends in Engineering and Technology College Of Engineering ,Teerthanker Mahaveer University, Moradabad,India, 6-7 April 2012.
- Mohd. Khurshid Siddiqui, Mohsin Aziz, Shirazul Islam." Enhancement of Power scenario of Utter Pradesh by the implementation of advanced Technologies & New Policies" in the 2nd International Conference on Emerging Trends in Engineering and Technology College Of Engineering ,Teerthanker Mahaveer University, Moradabad,India, on 12-13 April 2012.

PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

- Ahmad Sadab, Mohd. Khursheed Siddiqui, Awill Anurag Misra, Mohd. Amir Ansari, "CMOS Implementation of Cascaded Instrumentation Amplifier with DC Offset Voltage Reduction", International Journal of Enhanced Research in Science Technology & Engineering, ISSN: 2319-7463 Vol. 4 Issue 5, May-2015, pp: (8-17), Impact Factor: 1.252, Available online at: www.erpublications.com Page- 8.
- Anurag Misra, Mohd. Amir Ansari, Ahmad Sadab, Mohd. Khursheed Siddiqui, "Fate of MOSFET Anatomy Implementing Double Gate To Dwindle The Short Channel Aspects and Drain Induced Barrier Lowering", International Journal of Enhanced Research in Science Technology & Engineering, ISSN: 2319-7463 Vol. 4 Issue 4, April-2015, pp: (125-131), Available online at: www.erpublications.com.
- Arti Tiwari1, Mohd. Khursheed Siddique, Mohd. Naseem, "Controlling The Vibration of Bus Suspension System Using PID Controller", International Journal of Emerging Technology and Advanced Engineering, ISSN 2250-2459, ISO 9001:2008, Volume 5, Issue 2, February 2015,

- Abhishek Jain, Prabhat Ranjan Sarkar, Mohd. Khursheed, "Modeling and Performance Analysis of a Permanent Magnet Brushless DC motor using Instrumentation Technique", International Journal of Engineering Research and General Science, ISSN 2091-2730, Volume 3, Issue 1, January-February, 2015
- Abhishek Jain, Prabhat Ranjan Sarkar, Mohd. Khursheed, "Controlling of Permanent Magnet Brushless DC Motor using Instrumentation Technique", International Journal of Advance Engineering and Research Development, ISSN(P): 2348-6406, Volume 2, Issue 1, page 83-90, January 2015
- Mohd Khursheed, Adil Sarwar, Shirazul Islam, Farhad Ilahi Bakhsh, "Performance Evaluation of an Indirect Vector Controlled Drive Using Synchronous Current Controller", International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622, Vol. 1, Issue 4, pp.2062-2071, 2011.
- Farhad Ilahi Bakhsh, Shirazul Islam, Mohammad Khursheed, "Modeling, analysis and simulation of VFT for power flow control through Asynchronous Power System", International Journal on Electrical and Power Engineering, USA, ISSN:2158-7574, Vol No:2, issue 3, pp.4 8, 2011.02, DOI: 01.IJEPE.2.3.23. (Elsevier)

BOOK EDITED/ AUTHORED

 Mohd Khursheed, Mirza Mohd shadab, "Recent advancement in Power System Engineering", Aargone Press New Delhi, ISBN 978-93-94070, 2021

BOOK CHAPTERS

- Asif Khan, Mohd Khursheed, Jian Ping Li, Farhan Ahmad, Ahmad Neyaz Khan," Machine Learning Aplication for Solar PV Forecasting", in Photovoltaic Systems Technology,111 River Street, Hoboken, N07030, USA, John Wiley & Sons, May 2024, ch.9, pp177-190, ,ISBN: 978-1-394-16765-4. ttps://doi.org/10.1002/9781394167678.ch9
- M. A. Mallick, M. Khursheed. I. Ashraf, "Study on Energy Management Using Solar Photovoltaic Based Appliances in Rural Areas of India", Book Publisher international, Third Floor, 207 Regent Street, London,15 Dec 2020, ISBN: 978-93-90431-71-7, eBook ISBN: 978-93-90431-76-2, DOI: 10.734/bpi/etert/v11

National conference (03)

- Mohd. Khursheed, Shirazul Islam, Farhad Ilahi Bakhsh, Mohsin Aziz, "Enhancement of Indian Power Grid through Smart Grid Model Implementation: A Survey" in NCETMEE-12, Departments of Mechanical & Electrical Engg., Integral University, Lucknow, June 12-13, 2012.
- Mirza Mohd. Shadab, Mohd khursheed, "Modelling and Simulation of wind turbine" in NCETMEE-12, Departments of Mechanical & Electrical Engg., Integral University, Lucknow, June 12-13, 2012

 Vijay Kr. Jayswal, Syed Azam Ali, Vikas Kr. Maurya, Mohd. Khurshid Siddiqui, "Development of Hexagonal Electrical Distribution System"in NCETMEE-12, Departments of Mechanical & Electrical Engg., Integral University, Lucknow, June 12-13, 2012