Name of Faculty Dr. Yawer Abbas Khan Designation Asst. Professor Nature of Job/Appointment Regular 09 - 03 - 2023 Date of Joining E-mail yawer.abbaskhan@gmail.com **Education Qualifications** Name of the Degree Class Doctor of Philosophy (EEE) Ph. D First Class (NIT Patna) M. Tech. (EEE) PG First Class (NIT Patna) B. Tech. (EEE) UG First Class (NIT Srinagar) Work Experience 5 Years Teaching Research 06 years Industry Others Advanced Electrical Drives, Power Quality Issues, FACT Devices, Area of Specialization Special Electrical Machines, Power Systems **Professional Memberships** 1. Editorial Board Member and Section Editor of Journal "Insight Mechanics" 2. Editorial Board Member and Section Editor of Journal "Building Engineering," Academic Publishing. 3. Editorial Board Members of "Journal of Electrical and Electronic Engineering (JEEE)", Science Publishing Group. 4 Associate Editor "International Journal on Engineering Technologies and Informatics (IJETI)" Skeena Publishers. Active Reviewer for IEEE Transactions on Industrial Electronics; IEEE Transactions on Power Electronics; IET Electric Power Applications; IEEE Journal of Emerging and Selected Topics in Power Electronics; IEEE Industry Applications; Electrical Engineering, Springer Verlag; Measurements, Elsevier; IJE, Taylor and Francis; IEEE Canada, Canadian Journal of Electrical and Computer Engineering; IECON, Conference. Responsibilities held at Institution Level 1. Assistant Director (Academics), CBIT Hyderabad. Institute Level NAAC Coordinator for Criteria 1.1 and 1,2. 2. 3. Member of EDC Committee, CBIT Hyderabad. College level Deputy Incharge of Student Project Cell at BIET, 4. Hyderabad. 5. College level Incharge of Biometric Cell at BIET, Hyderabad. College level Incharge of Transferring Tech. to Society Committee at 6. BIET, Hyderabad. Member, Admissions Committee, BIET, Hyderabad. 7. Member, Renewable Energy Committee, BIET, Hyderabad. 8. Member, Social Welfare and Student Grievance Committee, BIET, 9. Hyderabad. 10. Member, NIRF Committee, BIET, Hyderabad. 11. Member, NAAC Committee, BIET, Hyderabad. 12. Member, Library Committee, BIET, Hyderabad. Departmental NIRF Innovation Coordinator. 1. Responsibilities held at Department Level 2. Innovation Ambassador, CBIT Hyderabad.

- HOD, EEE Department, BIET, Hyderabad. 3.
- Admin Incharge, EEE Department, BIET, Hyderabad, Δ
- Academic Incharge, EEE Department, BIET, Hyderabad. 5.
- 6 Departmental R & D Incharge, BIET, Hyderabad.
- Departmental Training & Placement Incharge, BIET, Hyderabad. 7
- Departmental Website Committee Incharge, BIET, Hyderabad. 8
- Incharge of Departmental NIRF Committee, BIET, Hyderabad. 9.
- 10. Member of Departmental NBA & NAAC Committee, BIET, Hyderabad.

Research Guidance

Awards Received

- 1. Best paper award in an IEEE Conference, 2020.
- "ISSN International Best Researcher Award" for the field of study, 2 "Electrical Engineering" presented in ISSN International Research Awards & Congress (IIRAC 2023).

Basic Electrical Engineering, Basic Electrical Engineering Lab, Electrical Circuit Analysis-I, Elements of Electrical & Electronics Engineering, Simulation of Electrical Systems, Control Systems, Control Systems Lab, Computer Aided Design of Electrical Machines, Computer Aided Design of Electrical Machines Lab, Power Systems-II, Power System Simulation Lab, Power Systems Operation & Control, Power System Dynamics, AI Techniques in Electrical Engineering, Power Electronics, Power Electronics Lab, Electrical Machines-I, Electrical Machines Lab-II.

National Journals -- 00

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National Conference - 01

International Journals – 05 International Conference - 12

1. Participated as a key note speaker in the workshop entitled "Impacts of LATEX and MATLAB in Engineering and Research (WILMER-2017)", held on November 9th - 11th 2017 at Silli Polytechnic Silli, Ranchi, Jharkhand Sponsored by Jharkhand Council on Science & Technology (JCST), Govt. of Jharkhand.

Sai Shiva, V. Verma, Y. A. Khan, "Q-MRAS based speed sensorless Permanent Magnet Synchronous Motor drive with Adaptive Neural Network for performance enhancement at low speeds," International conference on Energy, Materials and Informational technology (ICEMIT 2017), Amity University Ranchi, December 2017, Springer series.

GIAN Workshop on "Multi-phase Drive and Generation Systems for Advanced Industrial Applications 2018"By Professor Emil Levi, Liverpool John Moore University, Liverpool, UK Fellow IEEE at VNIT Nagpur from 7 Jan 2018-12 Jan.

- Seven-day workshop on "DSP Applications on ARM" by Prof. Donald Ray and Prof. S. K. Sinha at Department of Electrical Engineering, NIT Patna, under the aegis of TEQIP-II, from 26.08.2016 to 01.09.2016.
- 3. 6-days Workshop on "Advanced Industrial Automation Training" which includes Extension Training on Programmable Logic Controller (PLCs), HMI, SCADA Software, Drives and PLC Programming.
- 4 5-days short term course (STC) on "Advanced Power Electronic Converters for Renewable Energy & Industrial Drives" at Department of Electrical Engineering, NIT Patna, under the aegis of TEQIP, from 14.12.2015 to 18.12.2015.
- 5-days short term course (STC) on "Advances in Industrial 5. Control" at Department of Electrical Engineering, NIT Patna, under the aegis of TEQIP, from 27.11.2015 to 01.12.2015.
- 6. 5-days short term course (STC) on "Institute-Industry Interaction" at Department of Electrical Engineering, NIT Patna, under the aegis of TEQIP-II, from 05.12.2016 to 09.12.2016.
- 7. 3-days Workshop on "LabVIEW" Organized by Micro-Pro &

Courses Handled at Under Graduate / Post Graduate Level

No. of Papers Published

Projects Carried out Patents Technology Transfer

Invited Speaker

Details

No. of Books/Chapter Published with details

> of Short-Term Training 1.

Programs/Faculty Development Programs/Seminars/Workshops Other Trainings (Attended and/or Organized).

National Instruments in association with NIT Patna from 14.03.2016 to 16.03.2016.

- 8. Worked as Volunteer in the 5-day short term course (STC) on "Institute-Industry Interaction" at Department of Electrical Engineering, NIT Patna, under the aegis of TEQIP-II, from 05.12.2016 to 09.12.2016.
- 9. Attended a 5-Day online workshop on "Universal Human Values-I" from 03-04-2023 to 07-04-2023 Conducted and sponsored by AICTE, India.
- 10. Coordinated 2 Days Workshop on "Altair Flux", (28-Jun-2023 and 30-Jun-2023).
- Coordinated 5 Days Workshop on "Managing Business Incubators", from 19-Feb-2024 to 23-Feb-2024, at CBIT Hyderabad which was jointly sponsored by MSME Hyderabad and Rajiv Gandhi National Institute of Youth Development, Sriperumbudur – 602 105, Tamil Nadu.
- 12. Coordinated 5 Days Workshop on "Management of Technology Business Incubators", from 17-Dec-2024 to 21-Dec-2024, at CBIT Hyderabad which was sponsored by MSME Hyderabad.

Details of Journal Publications/ Conferences (National and International)

## International/ International Conference:

1. Y. A Khan and V. Verma, "Inductance Vector Angle Based Speed Sensorless vector Controlled Switched Reluctance Motor Drive," National Symposium on Rotor dynamics (NSRD 2017), IIT Patna, December 2017.

2. Y. A. Khan and V. Verma, "Investigation of Pn and F-MRAS based Speed Estimators for Vector Controlled Switched Reluctance Motor Drive," IEEE, 8th International conference on Power Electronics drives and Energy Systems, IIT Madras, December 19-21.

3. Y. A. Khan and V. Verma, "F-MRAS based Speed Sensorless vector Controlled Switched Reluctance Motor Drive," IEEE, 2nd International conference on Energy, Power and Environment, NIT Meghalaya, June 1-3.

4. Y. A. Khan and V. Verma, "A Novel Method of Estimating Stator Resistance for an F-MRAS based Speed Sensorless Vector Controlled Switched Reluctance Motor Drive," IEEE, 54th International Universities Power Engineering Conference, 3rd-6th September 2019, Bucharest, Romania.

5. Y. A. Khan and V. Verma, "Comparative Analysis of Different Converter Topologies for an SRM Drive with Conventional and Vector Control Schemes," IEEE, International Conference on Emerging Frontiers in Electrical and Electronic Technologies, 10-11 July 2020, NIT Patna, Patna, India. (Best Paper Award).

6. V. Verma, Y. A. Khan, S. Sharma, "A New Fault Tolerant Algorithm for Speed Sensorless Drive Using Stationary Reference Frame Variables," International conference on Energy, Materials and Informational technology (ICEMIT 2017), Amity University Ranchi, December 2017, Springer series.

7. B. Sai Shiva, V. Verma, Y. A. Khan, "Q-MRAS based speed sensorless Permanent Magnet Synchronous Motor drive with Adaptive Neural Network for performance enhancement at low speeds," International conference on Energy, Materials and Informational technology (ICEMIT 2017), Amity University Ranchi, December 2017, Springer series.

8. R. Kumar, V. Verma, Y. A. Khan, B.S Shiva "Speed sensorless vector control of Synchronous Reluctance Motor drive", IEEE, 1st International conference on PETPES, NIT Surathkal, Karnataka, Aug. 2019.

9. A. Raj, Y. A. Khan, V. Verma, "Comparative Evaluation of PSO, TLBO, and JAYA based Adaptive PI and FOPI Controllers for Vector Controlled Induction Motor Drive", IEEE-International Conference on Computing, Power, and Communication Technologies, GUCON 2021, Malaysia.

10. Y. A. Khan, V. Verma, "Torque Ripple Reduction for a DC Assisted Unipolar SRM Drive Operating Under MTPA Condition" IEEE-GlobconET 2022.

11. A. Kumar, Y. A. Khan, V. Verma, "Comparative Evaluation of PSO, TLBO, JAYA, Whale Optimization, and Greywolf Optimization Based Tuning of PI Controllers for Vector Controlled Synchronous Reluctance Motor Drive" IEEE-GlobconET, 2022.

12. B. Sai Shiva, Y. A. Khan, V. Verma, "K-MRAS Based Mechanical Sensorless Vector Controlled PMSM Drive" 2nd IEEE International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET-2022).

13. P. V. Laxmi, Y. A. Khan, T. Sukanth and V. Verma, "Current Sensorless Based Maximum Torque per Ampere Controlled Synchronous Reluctance Motor Drive," 2024 International Conference on Computer, Electronics, Electrical Engineering & their Applications (IC2E3), Srinagar Garhwal, Uttarakhand, India, 2024, pp. 1-6.

## National /International Journal:

1. **Y. A. Khan** and V. Verma, "A Novel Speed Estimation technique for a Vector Controlled Switched Reluctance Motor Drive" IET Electric Power Applications, April 2019. (**SCI**)

2. Y. A. Khan and V. Verma, "Improved MRAS based speed estimation for a vector controlled switched reluctance motor drive" IET Electric Power Applications, July 2020. (SCI)

3. Y. A. Khan and V. Verma, "Stator Resistance Estimation for MRAS Based Speed Sensorless Vector Controlled Switched Reluctance Motor Drive" Electrical Engineering, Springer, Dec. 2020. (SCI)

4. Y. A. Khan and V. Verma, "Implementation of a New Speed Estimation Technique Using MRAS for Vector

Controlled Switched Reluctance Machine" Measurements, Elsevier, 3-May, 2022. (SCI)

5. N. Khosravi, A. Abdolvand, A. Oubelaid, **Y. A. Khan**, M. Bajaj and S. Govender, "Improvement of power quality parameters using modulated-unified power quality conditioner and switched-inductor boost converter by the optimization techniques for a hybrid AC/DC Microgrid," Scientific Reports, Nature, 12, 21675, 2022. (**SCI**)

