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Current position: **Assistant Professor** in department of Electrical Engineering, Aliah University, India

- Highest Academic Qualification: **Ph D (Electrical Engineering)**
- **Cumulative work experience** (other than PhD and MS degree research assistantship)**: 12 years**
- **Cumulative research experience** (including PhD and MS degree research assistantship)**: 16 years**

Education

Ph.D., Electrical Engineering (June.2017), National Institute of Technology (Durgapur, India)

Dissertation Topic: Development of a new load flow method and optimization of power flow for the radial distribution systems using evolutionary techniques

M-Tech., Power System Engineering (2007), Visveswaraya Technological University, Karnataka, India

Thesis Topic: Soft switch PWM Converter using IGBT

B.E., - Electrical & Electronics Engineering (2005)

Curriculum Projects accomplished during PhD, M-TECH & B.E:

- Soft switched PWM Converter using IGBT. IISC, Bangalore
- Worked near about six months Bangalore Load Dispatch Centre, KPTCL.
- Study of Excitation system, B.H.E.L. Bangalore
- Improvement of power factor in college campus.

Work Experience

- Assistant Professor at Aliah University, India, (2012-Present)
- Assistant Professor at BUIE, INDIA, (2008-2012).
- Lecturer in S J B I T college of Engineering, Bangalore. (2007-2008)
- Lecturer in Ghousia College of Engineering, Bangalore. (2005-2007)

Supervised: 15 M-tech students and 3 PhD students

Research Interest: Smart grid, Application of Soft Computing Tools and Evolutionary Optimization in various fields of Power Systems including facts devices, Renewable Energy, Distributed Generation, Shunt Capacitors and Radial Distribution Networks. stability analysis, security analysis, contingency analysis, and battery energy storage system (BESS)

Programming Environment: C, PSPICE, MI-POWER, MAT LAB, Python

Publication

International Journal

1. Md Aftab Alam, **Nasim Ali Khan** and Debabrata Atta, "Modular Control Strategy for A Wind Turbine Based Self-Sustained Nano grid", Journal of Electrical Systems, Vol. 20, No. 3 (**2024**).

2. Anindita Das Mondal and **Nasim Ali Khan**, "A Study on Modelling and Simulation of Hybrid Solar Wind System under Variable Load Condition", Journal of Electrical Systems 20-3 (**2024**) :2994-3007. DOI: https://doi.org/10.52783/jes.4643

3. **N.A. Khan**, S.P. Ghoshal and S. Ghosh. "Optimal Allocation of DG and Shunt Capacitors for the Reduction of Total Voltage Deviation and Total Line Loss in Radial Distribution Systems using Binary Collective Animal Behavior Optimization Algorithm" International Journal of Electrical Power Components, Taylor & Francis, vol. 43, Issue 2, pages: 119-131, 2015.

4. **N.A. Khan**, S. Ghosh and S.P. Ghoshal. "Optimum Sitting and Sizing of Shunt Capacitors in Radial distribution system using Novel BPSO Algorithm", International Journal of Emerging Technology and Advanced Engineering. vol. 3, no. 2, February 2013.

5. **N.A. Khan**, S. Ghosh and S.P. Ghoshal. "Optimal allocation and Sizing of DG and Shunt Capacitors using differential evolutionary Algorithm", International Journal of Power and Energy Conversion, vol. 4, no. 3, February 2013.
6. **N.A. Khan**, S. Ghosh and S.P. Ghoshal. "Testing of a Novel Load Flow Algorithm for Different Radial Distribution Systems", DOI 10.1007/ s00202-012-0258-2, International Journal of Electrical Engineering, Springer-Verlag, Berlin Heidelberg, 2012.

7. **N.A. Khan**, S. Ghosh and S.P. Ghoshal. "A new approach for placement of Capacitor in radial distribution system for improvement of Voltage Profile and reduction of power loss", International Journal of Engineering, Science and Metallurgy, vol. 2, no.1, pages: 361-364, 2012.
8. **N.A. Khan**, S. Ghosh and S.P. Ghoshal. "A Canonical Complementary PSO Approach in Radial Distribution System for Reduction of Total Line Loss and Improvement of Voltage Profile", International Journal of Electrical and Power Engineering, vol. 6, Issue 1, pages: 8-12, 2012.

International Conference

1. Md Aftab Alam, **Nasim Ali Khan** and Debabrata Atta, "Towards Self-Sustainable Buildings in Smart Cities of India: An Initiative", Proceedings of the 2nd GEAST Global Conference on 'Energy, Environment & Climate Change', September 10, 2022, ISSN: 2583-0228.

2. Md Aftab Alam, **Nasim Ali Khan** and Debabrata Atta, "A Digital Control Strategy for Wind Turbine-Permanent Magnet Synchronous Generator," 2022 International Interdisciplinary Conference on Mathematics, Engineering and Science (MESIICON), 2022.

3. Anindita Das Mondal and **Nasim Ali Khan**, "A Review on Standalone Hybrid Renewable System", National Conference on Innovation in Engineering and Technology (NCIET-2022).

4. Anindita Das Mondal and **Nasim Ali Khan**, "A metaheuristics optimization approach in Hybrid Renewable energy system", International Conference on Power Electronics and Sustainable Development (ICPESD-2022).

5. Anindita Das Mondal and **Nasim Ali Khan**, "A study on load sensitive power generation in Hybrid solar-wind system", International Conference on Advancements in Mechanical Engineering (ICAME-2020), pp:18.

6. Anindita Das Mondal and **Nasim Ali Khan**, "A study on load sensitive power generation in Hybrid Renewable Energy system using Evolutionary Algorithms based -Energy Management System control", International Conference on Water, Energy, Environmental Sustainability (WEES-2020), pp 99.

7. Anindita Das Mondal and **Nasim Ali Khan**, " A Metaheuristic Optimization Approach in Hybrid Renewable Energy System.," International Conference on Power Electronics & Sustainable Development (ICPESD-**2022**)," Topics in Intelligent Computing and Industry Design,3(2): 97-105. ISBN: 978-1-948012-16-4. Doi: 10.26480/icpesd.02.2022.97.105

Patent:

1. Anindita Das Mondal, **Nasim Ali Khan**, Sameer Kasim and Mir Abu Bakkar Siddik, "Metaheuristic Enhanced Power Generation System", The Patent Office, Government of India, Design No.: 424978-001, Dated: 28/07/2024.
2. **Nasim Ali Khan**, Md Aftab Alam and Debabrata Atta, "Monitoring System for Sustainable Microgrid", The Patent Office, Government of India, Design No.: 424183-001, Dated: 22/07/2024.
3. **Nasim Ali Khan**, Debabrata Atta and Anirban Mukherjee, "IOT enabled food vending machine", The Patent Office, Government of India, Design No.: 433135-001, Dated: 08/10/2024.
4. Mr. Santu Mondal, Prof. (Dr.) Mohammad Israr, **Dr. Nasim Ali Khan**, Mr. Soumya Kanti Mondal, Dr. Sheuli Chakraborty, Perona Sanyal, Dr. Arindam Biswas "AI based data processing machine for materials properties prediction and quantification", The Patent Office, Government of India, Design No.: 420727-001, Dated: 20/06/2024.
5. National Institute of Technology, Jamshedpur, Dr. Mrinal Kanti Sarkar, **Dr. Nasim Ali Khan,** Dr. Simanta Kumar Samal and Dr. B Anil Kumar, "Portable charging device for electric vehicles", The Patent Office, Government of India, Design No.: 433135-001, Dated: 08/10/2024.

Books

1. Dr. Akhib Khan Bahamani, Dr. G. Srinivasulu Reddy, Dr. Nasim Ali Khan, Dr. M.S. Priyadarshini, Mr. D Venkatabramhanaidu " A Text Book On Power System – I " ISBN: 9789366653549

   https://www.google.co.in/books/edition/A_Text_Book_On_Power_System_I/XW4vEQAAQBAJ?hl=en&gbpv=1&dq=inauthor:%22Dr.+Nasim+Ali+Khan%22&printsec=frontcover

2. Birendra Krishna Ghosh, **Nasim Ali Khan,** Rajat Kumar Mandal, Ankon Das, Aniruddhwa Ghosh, Chiranjit Bhunia & Saakshyadip Bhowmick "Adaptive Control of DC Microgrid Using EMS and Meterological Data". In: Rani, A., Kumar, B., Shrivastava, V., Bansal, R.C. (eds) Signals, Machines and Automation. SIGMA 2022. Lecture Notes in Electrical Engineering, vol 1023. Springer, Singapore. https://doi.org/10.1007/978-981-99-0969-8_29
3. **Nasim Ali Khan**, Mir Abubakkar Siddik, Prabir Mondal, Swarnali Bhar, Sourav Majumdar & Soumya Basu (2023). "Application of Binary Flower Pollination Optimization in Radial Distribution System. In: Advances in Data Science and Computing Technologies. ADSC 2022. **Lecture Notes** in Electrical Engineering, vol 1056. Springer, Singapore. https://doi.org/10.1007/978-981-99-3656-4_48