

Dr. Hussain Kalathiripi

Assistant Professor (EEE)

Ph. D (NIT Rourkela)



Career Highlights

5 years of research experience at NIT Rourkela, INDIA

1 year of industry experience

- GENERAL ELECTRIC COMPANY, Begumpet, Hyderabad

10+ years of academia teaching (U.G and P.G) experience

- O P JINDAL UNIVERSITY, Raigarh, CG, India
- NATIONAL INSTITUTE OF TECHNOLOGY, Rourkela, Odisha, India
- VIGNANA BHARATHI INSTITUTE OF TECHNOLOGY, Ghatkesar, Hyderabad
- TKR COLLEGE OF ENGINEERING, Meerpet, Hyderabad
- AURORA'S SCI., TECHN. AND RESEA. ACADEMY, Chandrayangutta, Hyd.
- **Sreenidhi Institute of Science and Technology (SNIST)**, Hyderabad, India

Awards and Honors

- ♦ Adjudged best research presentation from electrical engineering in research scholar week (RSW 2017) conducted by NIT Rourkela in February 2017.
- ♦ Received **travel grant** of 75,000 INR from Department of Science and Technology, Ministry of Science and Technology, Government of India for IEEE conference (ICDL 2017) held at Manchester, UK.
- ♦ Qualified **GATE** 2008 with 81.09 percentile.
- ♦ Qualified in FET-2010 (Faculty Eligibility Test) conducted by JNTU, Hyderabad, Telangana.
- ♦ Worked in GE, Hyderabad for one year as an Intern (Got an opportunity to work on DC Trip Unit project which is one of the best products of GE)
- ♦ Gold Medalist in M.Tech (PE)
- ♦ Awarded almost five years institute fellowship during Ph.D.
- ♦ Ph.D. thesis has been reviewed by Robert Ross from Delft University of Technology (World QS Ranking-54)

Research Interests

Condition monitoring of high voltage equipment

Transformer insulation diagnosis

Dielectric vegetable oils

Artificial Intelligence in High Voltage Engineering.

Courses Taught

Power System -II.
Advanced Power System Analysis.
High Voltage Engineering.

AC Machines.
Machine Modeling Analysis

Electrical Circuits.
PLC

Power Electronics

Machines-I.
Machines-II.
Network Analysis.
Power System-II.

EDUCATION

1. Ph.D (HVE), NIT Rourkela, 2019
2. M.Tech(PE), Griet, JNTU, Hyderabad, 2010
3. B.E, Osmania University College of Engineering, Hyderabad 2005
4. DEEE, JNGP, Hyderabad, 2000
5. Prathibha High School, Kodad, 1997

PUBLICATIONS

Journals

1. **Hussain Kalathiripi** and Subrata Karmakar. "Analysis of Transformer Oil Degradation due to Thermal Stress Using Optical Spectroscopic Techniques", *International Transactions on Electrical Energy Systems*, Vol. 27, No. 9, e2346, 2017.
2. **Hussain, K** and S. Karmakar. "Dissolve Gas Analysis of Aged Transformer Oil: A Case Study", *Journal of Electrical Engineering*, Vol. 15, 2015.
3. **Hussain K.** and S. Karmakar, "A Novel Fault Analysis Technique for Aged Oil-Filled Power Transformer", *Engineering Failure Analysis, Elsevier*, 2017 (Under review).

Conferences

1. **Hussain, K.** and Subrata Karmakar, "Fault analysis of oil-filled power transformers using spectroscopy techniques", **IEEE 19th International conference on dielectric liquids (ICDL)**, University of Manchester, Manchester, June 25-29, UK, pp. 1-5, 2017.
2. **Hussain, K.** and Subrata Karmakar, "Partial discharge study in transformer oil using acoustic emission technique and UV-visible spectroscopy", **IEEE Condition assessment techniques in electrical systems (CATCON)**, IIT Ropar, November 16-18, Ropar, 2017.
3. **Hussain, K.** and Subrata Karmakar, "Condition assessment of transformer oil using UV-Visible spectroscopy", **IEEE Power Systems Conference (NPSC)**, IIT Guwahati, pp. 1-5, 2014.
4. **Hussain, K.** and Subrata Karmakar, "Incipient fault diagnosis of power transformers using optical spectrophotometric technique", **International Conference on Optics & Photonics (ICOP)**, Kolkata, pp.96540R-96540R, 2015.
5. **Hussain, K.** and Subrata Karmakar, "Incipient Fault Diagnosis in Oil-filled Power Transformers using Fourier Transform Infrared Spectroscopy", **International Conference on High Voltage Engineering and Technology (ICHVET- 2015)**-January 29-30, Hyderabad, pp. 29-31, 2015.
6. **Hussain, K.** and Subrata Karmakar, "Analysis of transformer oil degraded oil due to thermal stress using optical spectroscopic techniques", **National conference on recent trends in power engineering**, IIT Madras December 29-30, Madras, 2015.
7. Subrata Karmakar and **Hussain, K.**, "Study of partial discharge activity in oil filled needle-plane electrode using acoustic emission technique and its effect on dielectric liquid", **IEEE 19th International conference on dielectric liquids (ICDL)**, University of Manchester, Manchester, June 25-29, UK, pp. 1-4, 2017.
8. Subrata Karmakar, Shivani Meshram and **Hussain Kalathiripi**, "Evaluation of Partial Discharge Aged Transformer Oil using Optical Spectroscopy Techniques", **International Conference on High Voltage Engineering and Technology (ICHVET- 2019)**, February 7-8, Hyderabad, 2019.
9. Subrata Karmakar, Anurag Dutta and **Hussain Kalathiripi**, "Investigation of the Effect of High Voltage Impulse Stress on Transformer Oil by Infrared Spectroscopy", **International Conference on High Voltage Engineering and Technology (ICHVET- 2019)**, February 7-8, Hyderabad, 2019.
10. Subrata Karmakar, Anurag Dutta and **Hussain Kalathiripi**, "A Novel Method of Fault Prediction in Transformer Oil using Infrared Spectroscopy", **CATCON 2019**, IIT Madras, Nov 21-23 (Accepted).