

KUMARI SWATI

Research Scientist, Registered Patent Agent, Project Manager

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📍 Kolkata, India

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SUMMARY

Accomplished research scientist with a comprehensive background in Power system and high voltage engineering, and project management. Dedicated to contributing to the development of cutting-edge tools/technologies/solutions.

Passionate and registered patent agent – enthusiastic to leverage expertise in intellectual property law.

EXPERIENCE

SERB- National Post Doctoral Fellow

Jadavpur University, Kolkata [03/2022 – 03/2024]

- Led proposal development, secured research grant, project implementation and resource management.
- Principal Investigator for - Understanding the electrical insulation properties of HV equipment under electrical over voltage and thermal stress.
- Insulation testing of HV equipment - Transformers and Reactors, Insulators, Surge Arrestors, Air break and Earthing Switches.
- Instructor for "Electrical Engineering Materials" and "High Voltage Laboratory" courses for "UG and PG level."

Project Manager

IDEAS- TIH, Indian Statistical Institute Kolkata [06/2021 – 03/2022]

- Developed Detailed Project Proposal
- Developed grant strategies and cultivated sponsors.
- Served as primary liaison to sponsoring agencies, ensuring grant compliance.
- Procured equipment through GeM after finalizing specifications.
- Successful collaboration with NTPC Ltd for Technology development.

Post Doctoral Fellow

Khalifa University, Abu Dhabi, U.A.E [01/2020 – 01/2021]

- Designed and built a Raspberry Pi controlled smart indoor crop growing system
- Designing a source and delivery system for the applied electro-magnetic field
- Designed experiments, research methodologies, and conducted risk assessments.

Institute Pre-Doctoral Fellow

Indian Institute of Technology Madras [06/2019-12/2019]

- Managed the externally funded projects of the laboratory
- Project Proposal development and oversaw procurement
- Conducted research on condition monitoring of Gas Insulation System (GIS)

EDUCATION

MS & PhD [8.8 CGPA] (2015-2019)

Indian Institute of Technology Madras

B. Tech [8.63 CGPA] (2010-2014)

Dr. B. C. Roy Engg. College, WBUT

12th [81.4%] 2009

Jawahar Vidya Mandir, Shyamali, Ranchi

10th [93%] 2007

D.A.V H.F.C Barauni, Bihar

SKILLS

MATLAB & Simulink	COMSOL		
PLC and SCADA	Ansys-Fluent		
LabVIEW	LaTex	MS Office	
Multisim	GeM	Python	PSIM

ACHIEVEMENTS

Patent Agent – IPR (No.IN/PA-5968)

CGPDTM, DPIIT, Ministry of Commerce and Industry, GoI

SERB- NPDF (Secured Research Grant of Rs. 22 Lakhs)

SERB, DST, GoI

RESEARCH INTEREST

Renewable Energy, Real-Time Condition Monitoring, Partial Discharge, Dielectrics & Nano-Dielectrics, DRS, HV Insulation Diagnostics & Measurements, HV Equipment Insulation Testing, Sensors, Power Quality, Smart Grid, Electromagnetic Fields

POSITIONS OF RESPONSIBILITY

- Reviewer - IEEE Access journal
- Convener for two Workshops on Data Analytics - ISI Kolkata
- Convener for Technology Development/ Incubation/ Industry- ISI Kolkata
- Policy Making – ISI Kolkata