Dr. Rayes Ahmad Lone
Sr. Assistant Professor, Department of Electrical Engineering
Islamic University of Science and Technology, Awantipora, Pulwama, J & K
Email**:** rayeslone@gmail.com, rayes.lone@islamicuniversity.edu.in
ORCID iD: 0000-0003-0798-1035

Career Objective

To utilize my skills, abilities, and experience effectively to foster a positive learning environment, enhance the quality of education for students, and continually acquire and develop new skills for professional growth.

Professional Experience

- Working as Assistant Professor in the Department of Electrical Engineering, Islamic University of Science and Technology, Awantipora, Pulwama, J & K, since March 2012 to till date.
- Worked as a Site Engineer (Electrical) for Airport Authority of India at Srinagar International Airport from July-2008 to June-2009.

Qualification

- **Ph.D. in Electrical Engineering** from NIT, Srinagar in 2024.
- **M.E. in Electrical Engineering** from PEC University of Technology, Chandigarh in 2011.
- **B. Tech in Electrical Engineering** from Punjab Technical University, Jalandhar in 2008.
- **Three Years Polytechnic Diploma in Electrical Engineering** from Jammu and Kashmir State Board of Technical Education in 2004.

Research publications

Journals

1. **Lone, R. A.,** Javed Iqbal, S., & Anees, A. S. **(2025).** Hybrid Optimization Technique for Siting and Sizing of Distributed Generators and DSTATCOM to Minimize Power Loss and Voltage Deviation with Time-Domain Analysis. **Arabian Journal for Science and Engineering (Under Review).**
2. **Lone, R. A.,** Iqbal, S. J. and Anees, A. S. **2024.** Techno–Economic Feasibility Analysis of a Solar Photovoltaic System for Optimized Power Distribution Network. **Energy & Environment Advances** 1(3), pp. 138-145; https://doi.org/10.69626/eea.2024.0138.
3. Ahmed Sharique Anees, Salman Ahmad, **Rayes Ahmad Lone**, Zahoor Ahmad Ganie, Innovative Solutions for Sustainable Space Heating: Integrating Solar Air Heaters and Low-Cost Retrofitting Windows for Hilly Region of Kashmir, e-Prime **- Advances in Electrical Engineering, Electronics and Energy**, **2024**, 100872, ISSN 2772-6711, https://doi.org/10.1016/j.prime.2024.100872
4. **Lone, R. A.,** Javed Iqbal, S., & Anees, A. S. **(2023).** Hybrid technique for optimal placement and sizing of distributed generation units considering real and reactive power injection. **International Journal of Green Energy**, 21(9), 2084–2101. https://doi.org/10.1080/15435075.2023.2288330
5. **Lone, R. A.,** Javed Iqbal, S., & Anees, A. S. **(2023).** Optimal location and sizing of distributed generation for distribution systems: An improved analytical technique. **International Journal of Green Energy**, 21(3), 682–700. https://doi.org/10.1080/15435075.2023.2207638
6. Sheikh Suhail Mohammad, Sheikh Javed Iqbal, **Rayes Ahmad Lone**, Improved Utilization of Solar Energy Using Estimated Optimal Tilt Factor and Trackers, **Energy Reports**, Volume 8, Supplement 14, **2022,** Pages 175-183, ISSN 2352-4847, https://doi.org/10.1016/j.egyr.2022.10.392

7. **Rayes Ahmad Lone**, "Power System Stability Analysis of Small Scale Hydro Plant and its Enhancement using PI Controller ", **International Journal of Emerging Technologies and Innovative Research**, ISSN:2349-5162, Vol.5, Issue 8, page no. pp598-603, **August-2018,** Available at : http://www.jetir.org/papers/JETIR1808989.pdf
8. **Rayes Ahmad Lone,** "Design of a Controller for Canal Based Small Hydro Power Plant", **International Journal of Emerging Technologies and Innovative Research** (www.jetir.org), ISSN:2349-5162, Vol.5, Issue 5, page no.894-900, May-**2018,** Available: http://www.jetir.org/papers/JETIR1805889.pdf
9. Zahoor Ahmad Ganie, **Rayes Ahmad Lone**, Performance of Single Phase Transformer with Different Supplies using SIMULATION Journal: **International Journal of Electrical Engineering & Technology** Volume: 4, Issue: Number 1 **(2014),** Pages:41-49, https://www.ripublication.com/Volume/ijeetv4n1.htm
10. Zahoor Ahmad Ganie, **Rayes Ahmad Lone,** Reduction of iron loss in a transformer using embedded core, **journal of Electronics and Electrical Engineering and international research**. Publication house volume 07, Number I PP 83-92, http://www.irphouse.com/volume/ijeeev7n1.htm
11. **Rayes Ahmad Lone, (2013)** Modelling and analysis of small hydro power plant and performance enhancement using PID controller, **IOSR, Journal of Electronics and Electrical Engineering**, Volume 6 issue 2, PP 06-14, DOI: 10.9790/1676-0620614
12. Mr. Rayes Ahmad Lone, Zahoor Ahmad Ganie **(2013)** Modelling and Fault analysis of canal type small hydro power plant, **IJCER, International Journal of Computational Engineering Research**, Volume 03, issue 06, PP 60-70, https://www.ijceronline.com/papers/Vol3_issue6/part%202/K0362060067.pdf

Conferences

1. **Lone, R. A.,** Iqbal, S. J. and Anees, A. S. **2024**. Techno–Economic Feasibility Analysis of a Solar Photovoltaic System for Optimized Power Distribution Network, "International Conference on Renewable Energy and Sustainable Technologies (ICREST-2024) " JMI, New Delhi.
2. S. J. Iqbal, S. Showkat, S. S. Mohammad, V. Gajra, A. Ali and **R. A. Lone,** "A New Data-Analytic Approach for the Design, Operation and Control of Residential Solar PV Systems," **2023** International Conference on Power Energy, Environment & Intelligent Control **(IEEE),** Greater Noida, India, 2023, pp. 214-220, doi: 10.1109/PEEIC59336.2023.10451404
3. A. S. Anees, S. Ahmad and **R. A. Lone**, "Green Technology Based Space Heating Solutions for Cold Weather Condition: A Case Study of Kashmir Valley," **2023** International Conference on Power, Instrumentation, Energy and Control **(IEEE),** Aligarh, India, 2023, pp. 1-6, doi: 10.1109/PIECON56912.2023.10085784
4. **R. A. Lone,** S. J. Iqbal and A. S. Anees, "Multi-Objective Optimal Siting and Sizing of Distributed Generation Units by Grid-Search Algorithm," **2023** International Conference on Power, Instrumentation, Energy and Control **(IEEE),** Aligarh, India, 2023, pp. 1-6, doi: 10.1109/PIECON56912.2023.10085882
5. Sheikh Suhail Mohammad, Sheikh Javed Iqbal, **Rayes Ahmad Lone**, Improved Utilization of Solar Energy Using Estimated Optimal Tilt Factor and Trackers, **Energy Reports**, Volume 8, Supplement 14, **2022**, Pages 175-183, ISSN 2352-4847, https://doi.org/10.1016/j.egyr.2022.10.392

Research Grants

- **Co-Principal Investigator,** "Integrated Solar-Powered Induction Cooking and Passive Space Heating for Enhancing Food Vendors Livelihoods and Promoting Sustainable Tourism for Off-Grid Hilly Region". submitted to Science for Equity Empowerment and Development (SEED) under Scheme for Young Scientist and Technologist (SYST), **48.46 Lakhs, (Submitted).**

- **Co-Principal Investigator,** "Development of green technology based hybrid space heating for Kashmir valley". JKSTIC, DST, J&K, letter vide no. JKST&IC/SRE/439-443 dated 30th November 2021, **INR 4.99 Lakhs** for Two Year. (Completed)
- **Co-Principal Investigator**, "Transition towards clean, affordable and reliable electricity from Renewable Energy-based Distributed Generation resources for Residential Building Electrification". JKSTIC, DST, J&K, letter vide no. JKST&IC/SRE/J/1012-13 dated 1st October 2021 **INR 5.89 Lakhs** for Two Year. (Completed)

Patents

- Title of the Invention: "**Smart Waste Segregation System with Image Recognition for Medical Waste Management**" with the Application Number: 202511003336 A, Application Status: Published.
- Title of the Invention: "**Portable Induction-Based Water Heating Element for Efficient and Safe Water Heating Applications**" with the Application Number: 202411056514, Application Status: Application ready for Publication.
- Title of the Invention: "**Designing a Low Cost Retrofit Window for Better Thermal Insulation**" with the Application Number: 202411017555, Application Status: Published and Application Awaiting Examination.

Expert Talk Delivered

- Delivered an expert talk in the Entrepreneurship and Skill Development Programme (ESDP) on Solar Entrepreneurship under the 'PM SURYA GHAR MUFT BIJLI YOJANA', focusing on **Solar PV components, including inverters, charge controllers, batteries, and mounting structures at IUST** (April -2025).
- Delivered an expert talk on **"Harnessing Clean Energy: The Disruptive Power of Solar Technology"** during the Community Outreach Program on Renewable Energy for a Sustainable Future, organized by the Department of Physics & Dean, Outreach at Islamic University of Science and Technology on December 10, 2024.
- Resource Person in ATAL FDP titled "Grid Decarbonisation & Distributed Energy Resources to Mitigate Climate Change" at IUST (December-2023). Topic: **Optimal Utilization of Distributed Generation Sources challenges and Mitigation Strategies".**
- Talk on **"Recent Trends in Power System and Sustainable Development"** at SSM College of Engineering, Kashmir.
- Resource Person for Student Learning Assessment by Stanford University along with **National Project Implementation Unit (NPIU)** at NIT Srinagar.

Seminars/Workshops Organized

- Organized Two Week ISTE STTP workshop as coordinator on "Electric Power Systems", (sponsored NMEICT, MHRD-New Delhi) at IUST Awantipora on 12-06-2017. The event was coordinated by NMEICT wing at IIT Kharagpur, West Bengal.

Administrative/Departmental Responsibilities

- Member NAAC Accreditation
- Member for IT and Technology Enablers Committee under Institutional Development Plan (IDP).
- Member (HVC Nominee) Technical Evaluation Committee
- DPTC member for C4I4 Lab
- Chairperson Skill Development Committee

- Worked as I/C Head Department of Electrical Engineering
- Member Centre of Renewable Energy and Sustainable Technology (CREST)
- Chairman/Member DMC
- Chairperson Departmental Committee for Placements, Outreach & Industrial Internship
- Member Library Committee
- Coordinator CBCS
- Academic Coordinator-Batch 2020-2024
- Chairman SPMC
- Chairperson/Member DIQAU
- Member Selection/Screening Committee
- Coordinator Industry Connect

Personal Information

Complete Name	:	Dr. Rayes Ahmad Lone
Citizenship	:	Indian
Sex	:	Male
Category	:	General
Permanent Address	:	Kulgam, Jammu And Kashmir - 192232

DECLARATION

I hereby solemnly declare that the above furnished information is true to the best of my knowledge and belief.

Place: Awantipora Dr. Rayes Ahmad Lone
Dated: 04-04-2025