



Dr. Sohel Das
Associate Professor

Dr. Sohel Das is an Associate Professor in the Department of Computer Science & Engineering (CSME) at the School of Engineering, Dayananda Sagar University. With over 3 years of experience spanning research and academia, his expertise lies in Semiconductor nanomaterials, Optical Sensors, Catalyst Design, Energy Devices, Signal Processing, and Machine Learning. He has made significant contributions through high-impact research publications, patents, conferences and book chapters.

Educational Qualifications

- Ph.D. in Biotechnology and Medical Engineering, NIT Rourkela (2024).
- Research focus: Semiconductor quantum dots for the application in optical sensing and catalyst design.
- M. Tech. in Instrumentation and Control Engineering, University of Calcutta (2016).
- Research focus: Biomedical signal processing and data compression.
- B. Tech. in Electronics and Instrumentation Engineering, Guru Nanak Institute of Technology, Kolkata (2012).

Experience:

Dr. Sohel Das has over 3+ years of experience across research and academia.

Since 2023 He has served as Research Scientist and as an Assistant Professor in INSOFE and uGDX School of Technology, Atlas SkillTech University, respectively.

Research, Patents & Publications

His Publications towards his research work includes

Patents

- Holds 4 granted patents on optical sensors and catalyst design.

Publications

- 8 SCIE Journal Publications
- 2 International Conference Publications
- Attended 3 international conferences
- 3 Book Chapters

Research Interest:

His research interests lie at the intersection of nanomaterials, quantum dots, environmental remediation, sensing technologies, and data-driven materials research. He is particularly interested in the design and synthesis of semiconductor and carbon-based quantum dots, graphene-derived nanomaterials, and hybrid nanostructures for applications in optical sensing, photocatalysis, and energy conversion. His work focuses on developing sustainable and multifunctional nanomaterials through waste valorization approaches, enabling the conversion of low-value biomass and waste resources into high-performance engineered materials.

He is actively exploring the integration of artificial intelligence, machine learning, and data analytics with nanomaterial design to accelerate materials discovery and optimize performance. His current interests include material design for wearable electronics, self-powered sensing systems, electroluminescent and photonic devices, environmental monitoring, and healthcare applications.

He is particularly motivated by the development of multifunctional quantum dot-based platforms capable of simultaneous sensing, energy harvesting, and pollutant remediation, with an emphasis on low-cost and scalable solutions for real-world societal challenges.

His area of interest in research includes semiconductor quantum dots, optical sensors, catalyst design, energy devices, cellular imaging, signal processing, machine learning.

LINKS:**Scopus Link:**

<https://www.scopus.com/authid/detail.uri?authorId=57233262400>

ORCID Link:

<https://orcid.org/0000-0001-9111-6524>

Google Scholar Link:

<https://scholar.google.com/citations?user=QvgFY3wAAAAJ&hl=en>