AHIN ROY

Research Fellow, Advanced Microscopy Laboratory, Trinity College

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EXPERIENCE

Research Fellow

CRANN- Advanced Microscopy Laboratory, Trinity College, Dublin

August 2019 – Ongoing Dublin, Ireland

- Postdoctoral research on electron microscopy of nanomaterials

Research Associate

Indian Institute of Science, Bangalore

Nov 2017 – July 2019 Bangalore, India

- Postdoctoral research on electron microscopy & simulation of nanomaterials, Grant writing, Grad student mentoring

JSPS Postdoctoral Fellow

Kyushu University, Japan

Sep 2015 – Sep 2017 Fukuoka, Japan

- Aberration-corrected atomic-scale electron microscopy & simulation of nanomaterials, maintenance of JEOL-ARM microscopes

PROJECTS

Three-dimensional nanoanalyses of catalytic nanocomposite by electron tomography

Fellow, Japan Society for Promotion of Science, MEXT, Japan

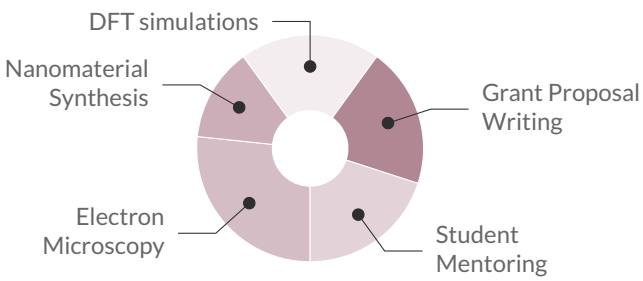
2015 – 2017 Kyushu University, Japan

Engineering Photoluminescence of WS_2 through Doping and Electrical Biasing

co-PI, DST, India & JSPS, MEXT, Japan

2019 – ongoing IISc Bangalore, Kyushu University

SKILLSET



EDUCATION

Ph. D

IISc Bangalore

2011 – 2015 Bangalore, India

Thesis title: Investigations of Structural and Electronic Aspects of Ultrathin Metal Nanowires

AWARDS

- **Best Poster Award**
  EMSI Meeting, Mahabalipuram, Chennai - 2017
- **Young Scientist Award in Physics**
  Dr. K. V. Rao Scientific Society - 2015
- **JSPS Postdoctoral Fellowship**
  JSPS, MEXT, Japan - 2015
- **Gold Award, Shell India Computational Talent Prize**
  Shell India - 2014
- **Science Communication Scholarship**
  RSC & Imperial College, London - 2012
- **Integrated Ph. D Fellowship**
  IISc Bangalore - 2009
- **Certificate of Distinction**
  International Australian Mathematics Olympiad - 2002

PUBLICATIONS

A. Roy *et al.*, Single crystalline ultrathin gold nanowires: Promising nanoscale interconnects, AIP Adv., 3, 032131 (2013)

A. Roy *et al.*, Wrinkling of atomic planes in ultrathin Au nanowires, Nano Letters, 14, 4859 (2014)

A. Roy *et al.*, Semiconductor-like sensitivity in metallic ultrathin gold nanowire-based sensors, J. Phys. Chem. C, 118 (32), 18676 (2014)

A. Roy *et al.*, Manipulation of optoelectronic properties and band structure engineering of ultrathin Te nanowires by chemical adsorption, ACS Appl. Mater. Inter., 9, 19462 (2017)