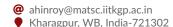
AHIN ROY

Electron microscopist, Materials chemist & Nanomaterials simulist



EMPLOYMENT

Assistant Professor

Materials Science Centre, IIT Kharagpur, WB, India

Jan 2022 - Ongoing

Kharagpur, WB, India

• Synthesis, simulation and electron microscopy of nanomaterials

Research Fellow

CRANN- Advanced Microscopy Laboratory, Trinity College, Dublin

Aug 2019 - Oct 2021

Dublin, Ireland

Synthesis and AC-STEM of oxide & 2D materials

Research Associate

Indian Institute of Science, Bangalore

Nov 2017 - July 2019

Bangalore, India

• Electron microscopy & simulation of catalytic nanomaterials

JSPS Postdoctoral Fellow

Kyushu University, Japan

Sep 2015 - Sep 2017

Fukuoka, Japan

 Electron microscopy & simulation of nanomaterials, operation and maintenance of JEOL ARM-200F microscope

PROJECTS

Atomic-scale Structural and Electronic Interrogation of Symmetry-broken Noble Metal Nanostructures for Oxygen Reduction Reaction

PI, Startup Research Grant (SRG), Science and Engineering Research Board (SERB), India

2022 - 2024

■ IIT Kharagpur

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 WS₂ through Doping and Electrical Biasing

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

2019 - 2021

IISc Bangalore, Kyushu University

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

SELECTED PAPERS

Adv. Funct. Mater., 2214883 (2023)

Adv. Energy Mater., 2203747 (2023)

Adv. Energy Mater., 2203013 (2022)

Nat. Electron., 4, 893–905 (2021)

Nat. Nanotechnol., 16, 592–598 (2021)

ACS Nano, 14, 13418-13432 (2020)

ACS Nano, 14, 5909-5916 (2020)

ACS Catal. 10, 43-50 (2020)

J. Mater. Chem. C, 5, 7307-7316 (2017)

ACS Appl. Mater. Interfaces, 9, 19462–19469 (2017)

J. Phys. Chem. C, 118, 18676-18682 (2014)

Nano Lett., 14, 4859-4866 (2014)