CURRICULUM VITAE

Dr. Aditya Kumar, PhD
Email: adityaku43@gmail.com
Ph. No.: +91 736 705 3318

ACADEMIC CAREER

June 2012
Doctor of Philosophy (Ph.D.) (Materials Science and Engineering) - University of Siegen, Germany
July 2006
Master of Technology (M.Tech.) (Chemical Engineering) - Indian Institute of Technology (IIT), Kanpur, India
June 2004
Bachelor of Technology (B.Tech.) (Chemical Engineering) - National Institute of Technology (NIT), Warangal, India

WORK EXPERIENCE - 12 YEARS

- **Indian Institute of Technology (IIT-ISM), Dhanbad, India -** Jan 2024 – till date
    - **Position –** HOD, Chemical Engineering
- **Indian Institute of Technology (IIT-ISM), Dhanbad, India -** April 2021 – till date
    - **Position –** Associate Professor
- **University of Kiel, Germany – May 2022 – June 2022**
    - **Position –** Visiting faculty
- **Indian Institute of Technology (IIT-ISM), Dhanbad, India -** Aug 2017 – April 2021
    - **Position -** Assistant Professor
- **National Institute of Technology (NIT), Rourkela, India -** April 2014 **-** August 2017
    - **Position -** Assistant Professor
- **The Ohio State University, Columbus, USA -** July 2012 **-** March 2014
    - **Position -** Senior Scientist (Postdoctoral Research Associate)

SPONSORED PROJECTS

1. Industrial scale up of biodegradable, non-polymer super-hydrophobic jute fabric exhibiting excellent water repellency & stiffness for shopping/hand bag products; Role - Principle investigator; Funding Agency - National Jute Board, Government of India
2. Conservation of the metallic cultural heritage assets by waterborne superhydrophobic and anti-dust coatings; Role - Principle investigator; Funding Agency - SHRI, Department of Science and Technology, Government of India
3. Development of cheap and durable anti-fingerprint and anti-reflective coatings for electronic and optical display panels; Role - Principle investigator; Funding Agency - SERB, Department of Science and Technology, Government of India
4. Technical evaluation of REME-PHI Technology for the air-conditioned coaches of the Indian railways and other public air-conditioned transportation; Role - Principle investigator; Funding Agency – Oxive Air LLP & Zeco Aircon Ltd.

5. Study of nanomechanical and nanotribological interaction of particle-particle and particle-surface contact; Role - Principle investigator; Funding Agency - SERB, Department of Science and Technology, Government of India
6. Synthesis of chitosan based mixed matrix membrane for removal of heavy metal from aqueous solutions; Role – Co-Principle investigator; Funding Agency – TEQIP Collaborative Research Scheme
7. Development of cheap and durable super-hydrophobic and super-oleophobic coatings for electronic and optical display panels; Role - Principle investigator; Funding Agency - FRS, IIT (ISM) Dhanbad, India
8. Synthesis and characterization of superhydrophobic coatings for industrial applications; Role - Principle investigator; Funding Agency - Seed money, NIT Rourkela, India

THESES SUPERVISION (as on July 2024)

Postdoc	:	1 (completed), 3 (ongoing)
PhD Students	:	5 (awarded), 9 (ongoing)
Master Students	:	12 (awarded), 1 (ongoing)
UG Students	:	20 (awarded), 3 (ongoing)

PUBLICATIONS (as on July 2024)

Patent	:	01
Research publications	:	77
Books/book chapters	:	12
Conferences/seminars	:	26
Book	:	01

(Overall citation: 2720, h-index: 31, i10-index: 57)

AWARD & HONOURS

- Top 2% of scientist worldwide 2023
- Young Researcher Award 2023 by World Leadership Academy
- Awardee of Duo-India fellowship program 2022
- Inder Mohan Thapar Award 2020 (Life-time researcher award)
- Best paper presentation award in 8th International Conference on Mechanical and Intelligent Manufacturing Technologies, Cape Town, South Africa, 3-6 Feb, 2017
- News report in Current Science based on excellent liquid repellent textile is published by the Indian Academy of Sciences and the current science association. (Vol 114 (3), 10 Feb 2018)
- News report in Current Science based on No-stain cotton is published by the Indian Academy of Sciences and the current science association. (Vol 116 (3), 10 Feb 2019)
- Invitee lecture in Indo-German workshop on waste to wealth, CSIR-AMPRI Bhopal, India, Feb 2019
- Invitee lecture in Bioinspired Nanotribology and interfacial science, VIT Vellore, June 2020

EDITORIAL & BOOK

1. Lead editor of Book - Antiviral and Antimicrobial Smart Coatings, Elsevier (2023)
2. Associate Editor - Surface and Interface Engineering (Frontiers in Chemical Engineering), 2020-present
3. Guest Associate Editor - Biomedical Nanotechnology (Frontiers in Nanotechnology), 2022-present
4. Editorial Board Member of Material Science Research India
5. Reviewer in reputed journals like Applied Surface Science, Tribology International, Journal of Hazardous Materials, Journal of Industrial and Engineering Chemistry, Advances in Colloid and Interface Science, Corrosion Science, Progress in Organic Coatings, ACS-Omega, Langmuir, SERB-DST, GOI and Others