

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 - 13 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 (as on Aug 2025) (*Total external funding = 1294.457 lakhs*)

R&D Projects (PI)	:	06 (301.015 lakhs) – SERB, DST, NJB, DSML
R&D Projects (Co-PI)	:	05 (271.85 lakhs) – DST, TEQIP, TEXMIN, Industries
Consultancy (PI)	:	03 (38.792 lakhs) – Industries
Outreach (Coordinator)	:	03 (21.80 lakhs) – ANRF, JCSTI, Industries
Center of excellence (Co-PI)	:	01 (561.00 lakhs) – Ministry of Chemicals & Fertilizers
MoU/NDA (Coordinator)	:	03 (2-on going) – NJB, DSML, Zucco

THESES SUPERVISION (as on Aug 2025)

Postdoc	:	4 (completed), 2 (ongoing)
PhD Students	:	6 (awarded), 1 (submitted), 9 (ongoing)
Master Students	:	13 (awarded), 2 (ongoing)
UG Students	:	23 (awarded), 2 (ongoing)

PUBLICATIONS (as on Aug 2025)

Patent	:	01 (granted), 07 (published), 2 (submitted)
Research publications	:	86
Books/book chapters	:	12
Conferences/seminars	:	26
Book	:	01

(Overall citation: 3286, h-index: 33, i10-index: 59)

AWARD & HONOURS

- Top 2% of scientist worldwide 2023
- Member of Board of Studies (BOS) in Chemical Engineering, Bihar Engineering University Patna
- Guest lecture at workshop (SPARK) at IIT Kharagpur, July 2024
- External expert for UG project evaluation of Chemical Engineering, NIT Durgapur, May 2024
- External expert for UG project evaluation of Chemical Engineering, BIT Sindri, March 2024
- Keynote Speaker for State Level Interactive Workshop to improve research ecosystem in Higher Education Institutions of Jharkhand, Ranchi, Jan 2024
- Young Researcher Award 2023 by World Leadership Academy
- External expert for UG project evaluation of Chemical Engineering, BIT Mesra, May 2023
- 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

ORGANIZER/CORDINNTOR

- Convener of international conference on Net Zero Emission Technologies for Sustainable Development: Challenges & Opportunities (N0ET-2024), Dec 2024
- Convener of international conference on Net Zero Emission Technologies for Sustainable Development: Challenges & Opportunities (N0ET-2023), Dec 2023
- Convener of Virtual Workshop on Future of Chemical Engineering, March 2021
- Coordinator of FIST project of Rs. 1.56 Cr. 2020-2025

EDITORIAL & BOOK

1. Lead editor of Book - Antiviral and Antimicrobial Smart Coatings, Elsevier (2023)
2. Guest Editor - Energy and Climate Change, 2024-present
3. Associate Editor - Surface and Interface Engineering (Frontiers in Chemical Engineering), 2020-present
4. Guest Associate Editor - Biomedical Nanotechnology (Frontiers in Nanotechnology), 2022-present
5. Guest Associate Editor - Advanced Oxidation Process (Frontiers in Environmental Chemistry), 2024-present
6. Editorial Board Member of Material Science Research India
7. 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