

CV_Uttam Kumar Ghorai

• PERSONAL INFORMATION

Name: Dr. Uttam Kumar Ghorai

Nationality: Indian

URL for web site: <https://ukgresearch.wixsite.com/home>

Metrics: Uttam Kumar Ghorai-Google Scholar (h-index 40, 5466 citations)



• EDUCATION

2016 PhD in Materials Science and Nanotechnology, Jadavpur University, Kolkata

2011 MTech in NanoScience and Technology, Jadavpur University, Kolkata, India

• CURRENT POSITION(S)

2016- Assistant Professor and Head, Department of Industrial Chemistry and Applied Chemistry, Ramakrishna Mission Vidyamandira, Belur Math, India

• PREVIOUS POSITIONS

2026 Visiting Professor, Sorbonne University, France

2024 Visiting Professor, University of Alberta, Canada

2022-23 Visiting Professor, University Cite Paris, France

2011-16 Course Coordinator, Department of Industrial Chemistry and Applied Chemistry
Ramakrishna Mission Vidyamandira, Belur Math, India

2006-07 Trainee Analyst, ACC Ltd, India

• FELLOWSHIPS AND AWARDS

2026 Prof. Asima Chatterjee Award-2026 (National Young Scientist)

2025 INSA Young Associate, Indian National Science Academy

2024 SMC Bronze Medal 2024, Society for Materials Chemistry

2024 Thieme Chemistry Journals Award 2024, Thieme, Stuttgart, Germany

2023 Merck Young Scientist Award (Winner) in Chemical Science

2022 SERB International Research Experience (SIRE) fellowship, DST-SERB, India

2022 Brics Young Innovator Prize 2022, Brics Young Scientist Forum

2021 Elected as an Associate Fellow, West Bengal Academy of Science & Technology (WAST), India

2021 Associateship (Chemistry), Indian Academy of Sciences (IASc)

2020 NASI-Young Scientist Platinum Jubilee Award 2020 (Chemical Science), The National Academy of Sciences (NASI), India

2020 Dr. R. L. Thakur Memorial Award (Young Scientist Category), Indian Ceramic Society

2019 INAE Young Associate, Indian National Academy of Engineering (INAE)

2019 INAE Young Engineer Award, Indian National Academy of Engineering (INAE)

2018 MRSI Young Scientist Award 2018, Materials Research Society of India (MRSI)

2018 Elected Fellow, Indian Chemical Society

2018 Teacher Associateship Research Excellence fellowship (TARE), DST-SERB, India

2017 Indian Chemical Society Award (Young Scientist Category), Indian Chemical Society

2014 Best Paper Award & Gold medal, Optics; 14 International Conference on Light
2013 MRSI Best Poster Award 2013, Material Research Society of India (MRSI)
2012 CSIR-SRF fellowship, Council of Scientific & Industrial Research
2009 Graduate Aptitude Test for Engineering (GATE), Ministry of Human Resources
Development (MHRD)

• **REVIEWING AND EDITORIAL ACTIVITIES**

2024 Guest Editor, Small, Chemistry-An Asian Journal, Chemistry Select, Wiley
2022- Guest Editor, Catalysis Today, Elsevier
2018- Reviewers of Nature communications; Nature Protocols; Journal of the
American Chemical Society; Angewandte Chemie; Advanced Materials;
Advanced Energy Materials; Advanced Functional Materials; Advanced
Science; Small; ACS Catalysis; ACS Nano; ACS Applied Energy Materials;
ACS Applied Materials & Interfaces; ACS Sustainable Chemistry &
Engineering; Inorganic Chemistry; ACS Applied Nano Materials; Applied
Catalysis B: Environment and Energy; Chemical Engineering Journal; Green
Chemistry, Journal of Materials Chemistry A etc.

• **TOP TEN MOST SIGNIFICANT PUBLICATIONS (*Corresponding author)**

1. A. Adalder, K. Mitra, S. Bhowmick, **U. K. Ghorai***, **Advanced Energy Materials (Impact Factor: 26)**, 2025, e05111
2. S. Bhowmick, A. Adalder, A. Maiti, S. Kapse, R. Thapa, S. Mondal, **U. K. Ghorai***, **Chemical Science (Impact Factor: 7.5)**, 2025, 16, 4806-4814
3. N. Mukherjee and **U K Ghorai***, **ACS Catalysis (Impact Factor: 13.1)**, 2025, 15, 17, 14823–14844
4. N. Mukherjee, A. Adalder, S. Paul, N. Barman, R. Thapa, K. Mitra, R. Urkude, **U. K. Ghorai***, **Advanced Functional Materials (Impact Factor: 19)** (2025): e19797.
5. A. Adalder, K. Mitra, N. Barman, R. Thapa, S. Bhowmick, **U. K. Ghorai***, **Advanced Energy Materials (Impact Factor: 26)**, 2024, 2024, 2403295.
6. S. Paul, A. Adalder, N. Barman, A. Bera, K. Mitra, R. Thapa, **U. K. Ghorai***, **Advanced Functional Materials (Impact Factor: 19)**, 2024, 34, 2408314
7. N. Mukherjee, A. Adalder, N. Barman, R. Thapa, R. Urkude, B. Ghosh and **U. K. Ghorai***, **Journal of Materials Chemistry A, (Impact Factor: 9.5)** 2024, 12, 3352-3361
8. A. Adalder, S. Paul, N. Barman, A. Bera, S. Sarkar, N. Mukherjee, R. Thapa, **U. K. Ghorai***; **ACS Catalysis (Impact Factor: 13.1)**, 2023, 13, 13516-13527.
9. J. Mukherjee, S. Paul, A. Adalder, S. Kapse, R. Thapa, S. Mandal, B. Ghorai, S. Sarkar, **U. K. Ghorai***; **Advanced Functional Materials (Impact Factor: 19)**, 2022, 32, 2200882

10. **U. K. Ghorai***, S. Paul, B. Ghorai, A. Adalder, S. Kapse, R. Thapa, A. Nagendra, A. Gain; **ACS Nano (impact factor: 16.5)**, 2021, 15, 5230-5239.

In summary, Dr. Ghorai has been able to develop a vibrant research program in the field of Applied Chemistry and Materials Science at Ramakrishna Mission Vidyamandira Institution, Belur Math, Howrah. His efforts are grounded in effective scientific research that has a significant practical application. **In recognition of his contributions, he has been honored with four prestigious NATIONAL ACADEMY AWARDS from India's premier scientific academies: INSA (INSA Young Associate 2025), NASI (NASI-Young Scientist Platinum Jubilee Award 2020), IASc (Associateship 2021), and INAE (INAE Young Engineer & Young Associate 2019).** Imbued with the great ideology of the epoch-making thinker Swami Vivekananda, Dr. Ghorai has tried to translate the vision of the Sage: 'Upliftment of Society and Implementation of Modern Technologies'.

His research outputs are summarized as below,

- International peer-reviewed journal publications: **160** (for the complete list, see Google Scholar: <https://scholar.google.com/citations?user=Kceh3v4AAAAJ&hl=en>)
- Invention disclosure/Patent: **09**
- Technology Licensing/Transfer/MOU: **3 (completed), 2 (under process)**
- Invited Talk/Lecture: **>30**
- No. of PhD students supervised: **7 (Dr. Jit Mukherjee, Dr. Angshuman Santra, Dr. Shyamal Murmu, Dr. Arnab De, Dr. Sourav Paul, Dr. Ashadul Adalder and Dr. Santosh Ramesh Waghela)**
- No. of PhD students under supervision: **4**
- No. of M.Sc Students supervised for their Master Project: **>40**
- No. of sponsored research projects as principal investigator: **7 (Total budget~ INR 308 Lakhs; ANRF-ARG, SERB-CRG, Indo-French_CEFIPRA, WB-DHESTBT SERB-OVDF, SERB-TARE, Birla Carbon India Private Limited, Berger Paints India Ltd, Calderys steel casting India Pvt Ltd etc.)**
- No. of Institutional projects as group leader: **7 (Total budget~ INR 300 Lakhs, DST-FIST, DBT Star status etc.)**