

Research Publications (Journal Paper)

Department of Chemical Engineering

2024-25

1. Uma Sankar Behara, **Sourav Poddar**, Minal P. Deshmukh, Jitendra S. Sangwai and Hun-Soo Byun, “Comprehensive Review on the Role of Nanoparticles and Nanofluids in Chemical Enhanced Oil Recovery: Interfacial Phenomenon, Compatibility, Scalability and Economic Viability” Energy & Fuel, July 16, 2024, 38, (15), 13760 - 13795.

Impact Factor: 5.2

H-index of the Journal: 221

Citation: 9.2

ISSN No. –0887-0624

DOI No. <https://doi.org/10.1021/acs.energyfuels.4c02248>

SCI/Scopus/Web of Science: SCI

Link-<https://pubs.acs.org/doi/10.1021/acs.energyfuels.4c02248>

2. J. N. Ullas Krishnan, **Sourav Poddar**, T. Sriharsha, Ashwin Kumar Maroli and J. Sarat Chandra Babu, “Alumina-supported multi-metal catalyst for e-waste management for reclamation of valuable products”, INDIAN CHEMICAL ENGINEER, August 7th, 2024, 66, 4, 393-402.

Impact Factor: 1.2

H-index of the Journal: 19

Citation: 3

ISSN No. –0019-4506

DOI No. <https://doi.org/10.1080/00194506.2024.2392191>

SCI/Scopus/Web of Science: SCI

Link -<https://www.tandfonline.com/doi/full/10.1080/00194506.2024.2392191>

3. Uma Sankar Behara, **Sourav Poddar**, Hun-Soo Byun, “Electrocoagulation treatment of wastewater collected from Haldia industrial region: Performance evaluation and comparison of process optimization”, Water Research, October 28th, 2024, 268, B, 122716.

Impact Factor: 11.5

H-index of the Journal: 376

Citation: 20.8

ISSN No. –0043-1354

DOI No. <https://doi.org/10.1016/j.watres.2024.122716>

SCI/Scopus/Web of Science: SCI

Link -<https://www.sciencedirect.com/science/article/abs/pii/S0043135424016154>

4. Sumalatha Boddu, Murthy Chavali, John Babu Dulla, Venkata Narayana Allugunulla, Indira Mikkili, Sireesha Malladi, Sudheera Mannepalli, **Anoar Ali Khan**, “Innovative magnetic biochar for textile wastewater treatment: A sustainable solution for methylene blue and Congo Red dye removal.” Biomass Conversion and Biorefinery, November, 2024, 265, 117019-117025.

Impact Factor: 3.5

H-index of the Journal: 45

Citation:

ISSN No.- 21906815

DOI No.: <https://doi.org/10.1007/s13399-024-06324-4>

SCI/Scopus/Web of Science: SCI

Link-<https://link.springer.com/article/10.1007/s13399-024-06324-4>

5. Subhajit Saha, Sayan Pusti, **Tapas Kumar Manna**, **Biswajit Mandal**, **Sutapa Roy & Lipika Das**, “Studies on the development and performance of natural dye-sensitised solar cell”, Indian Chemical Engineer, July, 2024.

Impact Factor: 1.5

H-index of the Journal: 19

Citation:

ISSN No.-

DOI No. 10.1080/00194506.2024.2370868

SCI/Scopus/Web of Science: SCI

Link-<https://www.tandfonline.com/doi/full/10.1080/00194506.2024.2370868>

6. S. Halder, U.S. Behera, **S. Poddar**, J. Khanam, S. Karmakar, “Preparation of Microsponge Drug Delivery System (MSDDS) Followed by a Scale-Up Approach”, AAPS PharmaSciTech, July, 2024, 15, 162.

Impact Factor: 3.4

H-index of the Journal: 116

Citation: 0

ISSN No. - 1530-9932

DOI No. <https://doi.org/10.1208/s12249-024-02874-y>

SCI/Scopus/Web of Science: SCI

Link-<https://link.springer.com/article/10.1208/s12249-024-02874-y>

7. Gourab Chatterjee, **Asit Kumar Saha**, Shamama Khurshid, and Achintya Saha, “A Comprehensive Review of the Antioxidant, Antimicrobial, and Therapeutic Efficacies of Black Cumin (*Nigella sativa* L.) Seed Oil and Its Thymoquinone” *Journal of Medicinal Food*, April, 2025, 28, (4), 325-339.

Impact Factor: 1.7

H-index of the Journal: 107

Citation: 3

ISSN No. - 1096-620X Online ISSN: 1557-7600

DOI No. 10.1089/jmf.2024.k.0149

SCI/Scopus/Web of Science: Both Scopus and Web of Science.

Link - <https://www.liebertpub.com/doi/10.1089/jmf.2024.k.0149>

8. Sunilbaran Kuila, **Tanushree Ghosh**, Sutapa Roy, Lipika Das Samanta, Anisha Satpati & Prabal Sahoo, “Synthesis of interpenetrating network (IPN) hydrogel using polyvinyl alcohol and Na-alginate for adsorptive separation of antibiotic molecules” *Indian Chemical Engineer*, March, 2025, 265, 117019-117025.

Impact Factor: 1.2

DOI No. 10.1080/00194506.2025.2469566

SCI/Scopus/Web of Science: Web of Science

Link - <https://doi.org/10.1080/00194506.2025.2469566>

9. Sunil Baran Kuila, Kalyan Maity, Amitava Bera, Niladri Sekhar Debnath, **Tanushree Ghosh**, Sutapa Roy & Chandan Datta, “Development of reinforced polymeric composite material using thermosetting polymers” *Indian Chemical Engineer*, March, 2025, 265, 117019-117025.

Impact Factor: 1.2

DOI No. 10.1080/00194506.2025.2475379

SCI/Scopus/Web of Science: Web of Science

Link - <https://doi.org/10.1080/00194506.2025.2475379>

10. Susmita Maity, **Rabindranath Jana**, “Development of Nanocomposites for Sensor Applications”, *International Journal of Applied Nanotechnology*, February, 2025, 11, Issue 1, 18-37.

Impact Factor: 6.358

H-index of the Journal: NA

Citation: NIL

ISSN No. - 2455-8524

DOI No. :10.37628/IJAN

SCI/Scopus/Web of Science: NA

Link - <https://journalspub.com/publication/ijan/article=15193/>

11. Sudip Kumar Samanta, Susmita Maity, **Rabindranath Jana**, “Critical Parameter in the Design of Breathing Apparatus”, International Journal of Environmental Chemistry, April, 2025, 11, Issue 1, 27-41.

Impact Factor: 5.923

H-index of the Journal: NA

Citation: NIL

ISSN No. - 2456-5245

DOI No. NA

SCI/Scopus/Web of Science: NA

Link - <https://journalspub.com/publication/ijec/article=16312/>

12. Zhitong Yao, Denzel Christopher Makepa, **Sourav Poddar**, Markus Reinmöller, Michael Bertelsen, Jingjing Jiang, Jiayao Tong, Jiuzhuo Cui, Jie Liu, Ivan Miguel De Cachinho Cordeiro, “Waste-to-energy: Pyrolysis-gasification conversion of packaging waste from both micro and macro perspectives.” Case Studies in Thermal Engineering, April, 2025, 71, 106228.

Impact Factor: 6.4

H-index of the Journal: 87

Citation: 01

ISSN No. - 2214157X

DOI No. [10.1016/j.csite.2025.106228](https://doi.org/10.1016/j.csite.2025.106228)

SCI/Scopus/Web of Science: SCI

Link-<https://www.sciencedirect.com/science/article/pii/S2214157X25004885>

13. K. Sahoo, U. S. Behera, **S. Poddar**, “Recycling processes and exploitation of waste to obtain energy and challenges: a mini-review,” International Journal of Environmental Science and Technology, June, 2020, 71, 106228.

Impact Factor: 3.0

H-index of the Journal: 110

Citation:00

ISSN No. –17351472

DOI No. <https://doi.org/10.1007/s13762-025-06502-5>

SCI/Scopus/Web of Science: SCI

Link - <https://link.springer.com/article/10.1007/s13762-025-06502-5>

14. Keka Rana, “Analysis of Optimal Clearance Volume Between Two Concentric Cylinders in a Couette Flow Membrane Module using a Computational Fluid Dynamics Approach”, International Journal of Environmental Chemistry, April, 2025, 11, Issue 1, 18-26.

Impact Factor: 0

H-index of the Journal: Nil

Citation: 0

DOI No.: 10.37628/IJEC

ISSN No.: 2456-5245

Link: <https://journalspub.com/publication/ijec/article=16287/>.

15. Sumalatha Boddu, Bhanu Prasad Marri, Raveena Malkari Katika, Indira Mikkili, John Babu Dulla, Venkata Narayana Allugunulla, Sireesha Malladi, **Anoar Ali Khan**, “Green Synthesis of Copper Oxide Nanoparticles (CuONPs) using Ricinus Communis: Efficient Photocatalytic Dye Degradation and Antibacterial Applications”. Water, Air, & Soil Pollution, March, 2025, 236:209

Impact Factor: 3.8

H-index of the Journal: 141

Citation: Nil

ISSN No.- 00496979

DOI No. <https://doi.org/10.1007/s11270-025-07841-2>

SCI/Scopus/Web of Science: SCI

Link- <https://link.springer.com/article/10.1007/s11270-025-07841-2>

16. Debasish Das Sharma, Priyanka Khan, Rupsa Biswas, Sumona Show, **Anoar Ali Khan**, Gopinath Halder “Deciphering the linear and non-linear biosorptive removal of the anti-inflammatory drug enrofloxacin”. New Journal of Chemistry, January, 2025, 49, 2898-2916.

Impact Factor: 2.7

H-index of the Journal: 146

Citation: Nil

ISSN No.- 11440546

DOI No.: <https://doi.org/10.1039/D4NJ05043F>

SCI/Scopus/Web of Science: SCI

Link - <https://pubs.rsc.org/en/content/articlelanding/2025/nj/d4nj05043f/unauth>