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

    SCI/Scopus/Web of Science: SCI

    Link-https://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, 2025, 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