

Research Publications (Journal Paper)

Department of Chemical Engineering

2025-26

1. Gourab Chatterjee, Joyita Dutta, Payel Roy, Milan Hait, Sayantan Pradhan, **Asit Kumar Saha**, Arijit Bag, Gourisankar Roymahapatra, “Repurposing of Nigella Sativa Phytochemicals against Human 3-Phosphoglycerate Dehydrogenase: Docking, Binding-site Analysis and ADMET Profiling”, ES Chemistry and Sustainability, September 2025, 4, 1730.

Impact Factor: 3.3

H-index of the Journal: 5

Citation: 75

ISSN:3065-1689 (Print Version); 3065-1697 (Online Version)

DOI: 10.30919/cs1730

SCI/Scopus/Web of Science: All

Link - <https://dx.doi.org/10.30919/cs1730>

2. Gourab Chatterjee, Anuska Raichoudhury, Shamama Khurshid, **Asit Kumar Saha**, Achintya Saha, “Assessment of Antimicrobial and Antioxidant Efficacy of SCFE-CO₂ Extracted Nigella sativa L. Seed Oil”, Asian Journal of Dairy and Food Research, DR-2369, November, 2025, 44, 1-6.

Impact Factor:

H-index of the Journal:

Citation:

ISSN:0971-4456 (Print); 0976-0563 (Online)

DOI: 10.18805/ajdfr.DR-2369

SCI/Scopus/Web of Science: All

Link:[https://www.researchgate.net/publication/397376220_Assessment_of_Antimicrobial_and_Antioxidant_Efficacy_of_SCFE-CO₂_Extracted_Nigella_sativa_L_Seed_Oil](https://www.researchgate.net/publication/397376220_Assessment_of_Antimicrobial_and_Antioxidant_Efficacy_of_SCFE-CO2_Extracted_Nigella_sativa_L_Seed_Oil)

3. **Lipika Das Samanta, Ankita Mazumder, Deepak Kumar Samal**, “RTD study through self-rotating liquid distributing stirrer in a continuous stirred tank for a liquid-liquid system” Next Research, December, 2025, 2, 100760.

Impact Factor: NA

H-index of the Journal: NA

Citation: NA

ISSN No. 3050-4759

DOI No. <https://doi.org/10.1016/j.nexres.2025.100760>

SCI/Scopus/Web of Science: NA

Link:

<https://www.sciencedirect.com/science/article/pii/S305047592500627X?via%3Dihub>

4. **Deepak Kumar Samal, Ankita Mazumder**, “Performance evaluation of self-rotating liquid distributing stirrer-an experimental approach”*Chemical Engineering Science*, Accepted 24 July 2025, 319, 122288.

Impact Factor: 4.3

H-index of the Journal: 225

Citation: 7.9

ISSN No. –1873-4405

DOI No. <https://doi.org/10.1016/j.ces.2025.122288>

SCI/Scopus/Web of Science: SCI

Link:

<https://www.sciencedirect.com/science/article/pii/S0009250925011091?via%3Dihub>

5. Uma Sankar Behera, **Sourav Poddar**, Hun-Soo Byun, “Pyrolysis of Orange Peel Waste to Pyrofuels and Pyrochar: Optimization, and Techno-Economic Insights for Industrial Scale-Up,” *RSC Sustainability*, October, 2025, 3, 5527-5555.

Impact Factor: 4.9

H-index of the Journal: 15

Citation: 0

ISSN No. –2753-8125

DOI No. [10.1039/D5SU00575B](https://doi.org/10.1039/D5SU00575B)

SCI/Scopus/Web of Science: SCI

Link-<https://pubs.rsc.org/en/content/articlelanding/2025/su/d5su00575b>

6. Sumalatha Boddu, Solomon Godwin Neelamegam David, Jagadishwar Rao Gudipudi, Subbaih Tondepu, **Anoar Ali Khan**, Ramesh Naidu Mandapati, “Isotherm, Kinetic, and thermodynamic Insights on Effective Sequestration of Cr(VI) by using De-oiled Karanja Seed Biochar”.*Periodica Polytechnica Chemical Engineering*, September, 2025, 69(3), 457-469.

Impact Factor: 1.8

H-index of the Journal: 31

Citation: Nil

ISSN No. –15873765, 03245853

DOI No. : <https://doi.org/10.3311/PPch.40663>

SCI/Scopus/Web of Science: SCI

Link - <https://pp.bme.hu/ch/article/view/40663>

7. **Siddhartha Sankar Boxi, Barnali Bej**, Ayanika Chatterjee, Koushik Ghosh, Kushal Mishra. “Application of Biochar as Filter Media for River Water Purification.” *Chemistry Select*, November, 2025, 10(43), e03694.

Impact Factor: 2

H-index of the Journal: 70

Citation:

ISSN No. - 2365-6549

DOI- <https://doi.org/10.1002/slct.202503694>

SCI/Scopus/Web of Science: SCI, Scopus

Link –

<https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/slct.202503694>

8. **Siddhartha Sankar Boxi**, “Use of TiO₂ Nanocatalyst for the Production of Biodiesel From Sewage Sludge” *Chemistry Select*, December, 2025, 10(46), e03677 (1-8).

Impact Factor: 2.0

H-index of the Journal: 70

Citation: 0

ISSN No. - 2365-6549

DOI No. doi.org/10.1002/slct.202503677

SCI/Scopus/Web of Science: SCI

Link - <https://doi.org/10.1002/slct.202503677>

9. Swarnajit Bhattacharya, Asit Kumar Nayek, **Biswajit Mandal**, Amit Biswas, Mrinmoy Sen, Asim Halder, “An Advanced Internet of Things (IOT) - based Water Quality Monitoring Architecture for Sustainable Aquaculture Leveraging Long Range Wide Area Network (LoRaWan) Communication Protocol” *ES General*, October, 2025, 10, 1780.

Impact Factor: nil

H-index of the Journal: 54

Citation: 1

ISSN No. – 2836-4007

DOI: <https://dx.doi.org/10.30919/esg1780>

SCI/Scopus/Web of Science:

Link - <https://www.espublisher.com/journals/articledetails/1780>

10. **Sonali Samanta**, Rajat Chakraborty, **Asit Kumar Saha**, “Synthesis of eggshell and fish scale supported TiO₂ for photocatalytic methanol production by CO₂ reduction using water as a proton source in batch reactor under UV irradiation.” Brazilian Journal of Chemical Engineering, February, 2026, 1-15.

Impact Factor: 1.5

H-index of the Journal: 66

Citation:-

ISSN No. 0104-6632

DOI: <https://doi.org/10.1007/s43153-026-00662-8>.

SCI/Scopus/Web of Science: SCI, Scopus, Web of Science

Link-<https://link.springer.com/article/10.1007/s43153-026-00662-8>

11. Monojit Manna, Somrita Jana, Debraj Roy, Mehbub Rehaman Mondal, Ditu Barui, **Aditi Sinha**, “Enhancing Network Lifetime by Optimized resource allocation and scheduling to reduce Redundancy in DSR Protocol for wireless Ad Hoc networks” Indian Journal of Natural Sciences, April, 2026, 17 (95), 111524-111540.

ISI Impact Factor: 3.078

H-index of the Journal:

Citation:-

NAAS score: 4.34/2024

ISSN no: 0976-0997

DOI: No

SCI/Scopus/Web of Science: Web of science

Link: <https://tnsroindia.org.in/journals.html>

12. Uma Sankar Behera, **Sourav Poddar**, Dharmendra Kumar Bal, Hun-Soo Byun “Electrocoagulation of wastewater from Haldia industrial belt: adsorption, kinetic and process optimization.” Applied Water Science, February, 2026, 16 (4), 113.

Impact Factor: 5.7

H-index of the Journal: 98

Citation:0

ISSN No. –2190-5487

DOI No. 10.1007/s13201-026-02799-w

SCI/Scopus/Web of Science: SCI, Scopus, Web of Science, UGC CARE

Link-<https://link.springer.com/article/10.1007/s13201-026-02799-w>

13. **Keka Rana**, “Applications of Nanomaterials in Membrane Separation for Effluent Treatment in the Textile Industry”, International Journal of Advance in Molecular Engineering, March 2026, Volume 4, Issue 1, 1-8.

DOI (Journal): 10.37591/IJAME,

ISSN: 3049-219X,

Link: <https://journals.stmjournals.com/article/article=2026/view=240253/>

14. Anirban Mukherjee, Basit Ismail Gilani, **Sibsankar Rahut**, Niwesh Ojha, Susanta Sinha Mahapatra, Bidhan Chandra Ruidas, “MXene-Based Palladium-Doped Bismuth Sulfide Nanorod for Highly Selective Electrochemical CO₂ Reduction to Formate”, Energy & Fuels, June 2, 2026.

Impact Factor: 5.3

H-index of the Journal: 233

Citation:0

ISSN No. - 1520-5029

DOI No. [10.1021/acs.energyfuels.6c01603](https://doi.org/10.1021/acs.energyfuels.6c01603)

SCI/Scopus/Web of Science: Scopus, Web of Science, UGC CARE

Link - <https://doi.org/10.1021/acs.energyfuels.6c01603>

15. Guruprasad Bhattacharya, Radhapada Manna, Puspendu Sardar, Sumit Kumar, **Sibsankar Rahut**, Amiya Kumar Jana, Amar Nath Samanta, “Facile Synthesis of Cu-Doped In₂S₃ Microflower Catalyst for Electrochemical CO₂ Reduction to Energy Fuels in a Wide Potential Range” Energy & Fuels, April 7, 2026, 40, (15), 8173–8189.

Impact Factor: 5.3

H-index of the Journal: 233

Citation: 2

ISSN No. - 1520-5029

DOI No. [10.1021/acs.energyfuels.5c06638](https://doi.org/10.1021/acs.energyfuels.5c06638)

SCI/Scopus/Web of Science: Scopus, Web of Science, UGC CARE

Link - <https://doi.org/10.1021/acs.energyfuels.5c06638>

16. **Ankita Mazumder, Tanushree Ghosh and Deepak Kumar Samal***, “Semi-fluidized bed reactor – a lab-scale comparative experimental investigation with liquid phase reaction.” International Journal of Chemical Reactor Engineering, May 2026; 24(4): 541–547.

Impact Factor: 1.4

H-index of the Journal: 49

ISSN No. – 2194-5748

DOI No. : 10.1515/ijcre-2025-0200

SCI/Scopus/Web of Science: Scopus, Web of Science

17. Sumalatha Boddu, Vivek Kumar, **Anoar Ali Khan**, “N, S co-doped biochar derived from Eichhorniacrassipes for rapid and selective removal of Malachite Green from wastewater.” International Journal of Environmental Analytical Chemistry, April, 2026, 1-18.

Impact Factor: 2.5

H-index of the Journal: 61

Citation: 0

ISSN No. –0306-7319 (Print) 1029-0397 (Online)

DOI No. 10.1080/03067319.2026.2656699

SCI/Scopus/Web of Science: SCI, Scopus

Link-<https://www.tandfonline.com/doi/full/10.1080/03067319.2026.2656699>

18. Aniket Samanta, Bittesh Barman, Brindha Ramasubramanian, Nilankar Diyali, Ajay Rathour, **Biswajit Mandal**, Avijit Ghosh, Sabyasachi Chakraborty, Bhaskar Biswas, Terence Kin Shun Wong, Goutam Kumar Dalapati, “Advancing the Future of Ammonia: Green Technologies, Process Intensification, and Pathways to Industrial Uptake”. Energy Technology, 25 May 2026, 14 (5), p.e202502015.

Impact Factor: 3.6

H-index of the Journal: 80

Citation:

ISSN No: 21944296, 21944288

DOI: <https://doi.org/10.1002/ente.202502015>

SCI/Scopus/Web of Science: Scopus, Web of Science, UGC CARE

Link: <https://onlinelibrary.wiley.com/doi/abs/10.1002/ente.202502015>