

Research Publications (Journal Paper)

Department of Chemical Engineering

2023-24

1. SwikritiKhadke, BrindhaRamasubramanian, Pranto Paul, RaghavendraLawaniya, Suma Dawn, Angana Chakraborty, Biswajit Mandal, Goutam Kumar Dalapati, Avishek Kumar, Seeram Ramakrishna “Predicting Active Solar Power with Machine Learning and Weather Data” Materials Circular Economy, Springer, 5 (2023).

SCI/ Scopus/ Web of Sc: No (referred)

Impact Factor: 4.3

H-Index: 10

Citation: 0

ISSN No. Print ISSN: 2524-8146

DOI: doi.org/10.1007/s42824-023-00087-5

2. Pooja Jaiswal, Yogendra Kumar, Lipika Das, Vaishali Mishra, Rohan Pagar, Debashis Panda, KoushikGuha Biswas, “Nanofluids guided energy-efficient solar water heaters: Recent advancements and challenges ahead” Materials Today Communications, September, 2023, 37, 107059.

SCI/ Scopus

Impact Factor: 3.662

H-index: 42

Citation: 0

ISSN No. - 2352-4928

DOI: doi.org/10.1016/j.mtcomm.2023.107059

Link - <https://www.sciencedirect.com/science/article/abs/pii/S2352492823017506>

3. Radharani Das, Binay Kumar Dutta, “Development and Application of Ceramic Membranes for Treatment of Oily Wastes”, ES Energy & Environment, November 2023, 22, 1015pp (1-8). DOI: <https://dx.doi.org/10.30919/esee1015>

Scopus indexed (referred)

Impact factor: nil

H index: nil

Citation: NA

ISSN: 2578-0646 (Print Version)

ISSN: 2578-0654 (Online Version)

Link: <https://www.espublisher.com/journals/id/es-energy-environment>.

4. Uma Sankar Behera, **Sourav Poddar**, Hun-Soo Byun, “Maximizing methyl red dye removal efficiency: a targeted parameter approach.” Journal of Chemical Technology & Biotechnology.

Impact Factor: 3.4

H-index of the Journal: 130

Citation: 6.8

ISSN No. - 0268-2575/

DOI No. 10.1002/jctb.7626

SCI/Scopus/Web of Science: SCI

Link - <https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/10.1002/jctb.7626>

5. Shakti Prasanna Khadanga, **Deepak Kumar Samal**, Prabina Kumar Patnaik & Gopendra Kishore Roy, “Gas hold-up, pressure drop and flow regime study in semi-batch PSRBC bubble column”, Indian Journal of Chemical Technology, Vol. 30, March 2024 (**In Press**)
6. Shakti Prasanna Khadanga, **Deepak Kumar Samal**, Prabina Kumar Patnaik & Gopendra Kishore Roy, “Pressure drop and mass transfer study in multi-stage PSRBC sparger bubble column-An Experimental investigation”, International Communications in Heat and Mass Transfer, Accepted (26 th February 2024) (**In Press**)

2022-23

1. SwetaGayen, **BarnaliBej**, **Siddhartha SankarBoxi**, Rounak Ghosh, “Synthesis of graphene oxide and its application for purification of river water.” *Materials Today: Proceedings*, 2023, 72, 2630-2636.
Scopus index
Impact Factor: 2.59
H-index of the Journal: 56
Citation: 2
ISSN No. - 2214-7853
DOI: doi.org/10.1016/j.matpr.2022.08.131
Link -<https://www.sciencedirect.com/science/article/pii/S221478532205297X>
2. SubhasisDattaBanik, IhitaBanik, HimadriSasmal, **Keka Rana**, Souvik Das, Debasish Sarkar, “Application of turbulence promoter in protein recovery from food wastewater by dynamic shear enhanced ultrafiltration”, *Journal of Water Process Engineering*, August 2022, 48, 102877.
SCI/Scopus/web of science index
Impact Factor: 7
H-index of the Journal: 59
Citation: 3
ISSN No. - 2214-7144
DOI:doi.org/10.1016/j.jwpe.2022.102877
Link: <https://ugccare.unipune.ac.in/Apps1/User/WebA/CAREList>
Link: <https://www.sciencedirect.com/science/article/abs/pii/S221471442200321X>
3. Dipak Kumar Jana, SamyabrataBhattacharjee, Petr Dostál, Zuzana Janková, **BarnaliBej**, “Bi-criteria optimization of cleaner biofuel supply chain model by novel fuzzy goal programming technique”, *Cleaner Logistics and Supply Chain*, July, 2022, 4, 100044.
SCI/Scopus index
Impact Factor: nil
H-index of the Journal:10
Citation: 9
ISSN No. - 2772-3909
DOI:<https://doi.org/10.1016/j.clscn.2022.100044>
Link: <https://www.sciencedirect.com/science/article/pii/S2772390922000178>

4. Dipak Kumar Jana, PrajnaBhunja, Sirsendu Das Adhikary, **BarnaliBej**, “Optimization of Effluents Using Artificial Neural Network and Support Vector Regression in Detergent Industrial Wastewater Treatment” *Cleaner Chemical Engineering*, September, 2022, 3, 100039-100055.
SCI
Impact Factor: nil
H-index of the Journal: Not found
Citation: 21
ISSN No. - 2772-7823
DOI: doi.org/10.1016/j.cce.2022.100039
Link - <https://www.sciencedirect.com/science/article/pii/S2772782322000377>

5. TaanishaMukhopadhyaya, **BarnaliBej**, “Nanotechnology and Nanosensors in the welfare of Energy and Environment”, *International Journal of Engineering Research and Technology (IJERT)*, October, 2022, 11, 46-63.
SCI /Scopus index: No
Impact Factor: nil
H-index of the Journal: Not found
Citation: 0
ISSN: 2278-0181
DOI:10.17577/IJERTV11IS100029
Link: <http://www.ijert.org>
Link: <https://www.ijert.org/nanotechnology-and-nanosensors-in-the-welfare-of-energy-and-environment-nte>

6. Dipak Kumar Jana, SamyabrataBhattacharjee, Sudipta Roy, Petr Dostál, **BarnaliBej**, “The optimization of biodiesel production from waste cooking oil catalyzed by ostrich-eggshell derived CaO through various Machine Learning approaches.” *Cleaner Energy Systems*, November, 2022, 3,100033.
SCI/Scopus indexed
Impact Factor: nil
H-index of the Journal: not found
Citation: 4
ISSN No. -2772-7831

DOI:<https://doi.org/10.1016/j.cles.2022.100033>

Link -<https://www.sciencedirect.com/science/article/pii/S2772783122000322>

7. SamyabrataBhattacharjee, Avijit Ghosh, **Biswajit Mandal**, **Sunil BaranKuila**, “Adsorptive separation of dye by filled polymeric FIPN hydrogel” Indian Chemical Engineer-Taylor & Francis, 2023 March; 65(2), 180-195.

Web of Science, Scopus

Impact Factor: 0.285

H-index of the Journal: 17

Citation: 0

Online ISSN: 0975-007X

Print ISSN No. – **0019- 4506**

DOI - <https://doi.org/10.1080/00194506.2022.2117655>

Link:<https://www.tandfonline.com/doi/abs/10.1080/00194506.2022.2117655>

8. **Sutapa Roy**, **Asit Kr Saha**, Shreyadhrita Panda, Gopal Dey, “Optimization of turmeric oil extraction in an annular supercritical fluid extractor by comparing BBD-RSM and FCCD-RSM approaches.” Materials Today: Proceedings, January, 2023, 76(1), 47-55.

Scopus index

Impact Factor: 2.59

H-index of the Journal: 56

Citation: 3

ISSN No. – 2214 - 7853

DOI:<https://doi.org/10.1016/j.matpr.2022.09.039>

Link:

<https://www.sciencedirect.com/science/article/pii/S2214785322058497?via%3Dihub#ab005>

2021-22

1. A.A. Khan, M. Mondal, G. N.Halder, and **A.K.Saha**, “Bioconversion of chemically captured carbon dioxide into microalgal lipids, a potential source of biodiesel: An integrated technique” Fuel, 311, March 2022, 122549.

SCI/Scopus/web of science indexed

Impact Factor: 7.4

H-index of the Journal: 243

Citation: 3

Online ISSN: 1873-7153

Print ISSN No. - 0016-2361

DOI:<https://doi.org/10.1016/j.fuel.2021.122549>

Link: <https://ugccare.unipune.ac.in/Apps1/User/WebA/CAREList>

Link-<https://www.sciencedirect.com/science/article/abs/pii/S0016236121024182>

2. Amalesh Sirkar, **Somak Jyoti Sahu**, Detailed explanations for the occurrence and nature of interfacial phenomena in liquid–liquid systems on the basis of the theory of spontaneous surface convection. *Chemical Engineering Communications*, 209 (10), (2021), 1367-1376.

SCI indexed

Impact Factor: 2.91

H-index of the Journal: 59

Citation: 1

ISSN No.- 0098-6445

DOI: <https://doi.org/10.1080/00986445.2021.1969553>

Link: <https://ugccare.unipune.ac.in/Apps1/User/WebA/CAREList>

Link: <https://www.tandfonline.com/doi/abs/10.1080/00986445.2021.1969553>

3. Dipak Kumar Jana, Sudipta Roy, Priyanka Dey, **BarnaliBej**, “Utilization of a linguistic response surface methodology to the business strategy of polypropylene in an Indian petrochemical plant”, *Cleaner Chemical Engineering*, March, 2022, 2, 100010.

SCI

Impact Factor: nil

H-index of the Journal: Not found

Citation: 6

ISSN No. - 2772-7823

DOI:<https://doi.org/10.1016/j.clce.2022.100010>

Link: <https://www.sciencedirect.com/science/article/pii/S2772782322000109>

4. **Keka Rana**,ToulikMaitra,IndrashisSaha, Ankit Saha, Sarani Gupta, Debasish Sarkar, “Modeling, simulation and characterization of spinning basket membrane module in recovery of proteins from wastewater”, *Journal of Water Process Engineering*, Volume 42, August 2021, 102135.

SCI/Scopus/web of science index

Impact Factor: 7

H-index of the Journal: 59

Citation: 1

ISSN No.- 2214-7144

DOI:<https://doi.org/10.1016/j.jwpe.2021.102135>

Link: <https://ugccare.unipune.ac.in/Apps1/User/WebA/CAREList>

Link: <https://www.sciencedirect.com/science/article/abs/pii/S2214714421002221>

2020-21

1. Priya Jana, **Siddhartha SankarBoxi** “Studies on pH, Conductivity, and Moisture Retention Capacity of Coir Pith for Its Application as the Plant Growing Medium.” *Journal of Natural Fibers*, October, 19(8), 2020, 2861-2867.

SCI/Scopus/web of science index

Impact Factor: 3.507

H-index of the Journal: 47

Citation: 3

Print ISSN: 1544-0478

DOI: <https://doi.org/10.1080/15440478.2020.1827118>

Link: <https://www.tandfonline.com/doi/abs/10.1080/15440478.2020.1827118>

2. **BarnaliBej, Siddhartha SankarBoxi** “A short review on electrode materials and processing of Lithium-ion battery.” *Journal of Critical Reviews*, 2020, 7(08), 3749-3759.

Scopus/web of science index: SCI

Impact Factor: Nil

H-index of the Journal: No

Citation: 0

ISSN- 2394-5125

DOI: No

Link: <https://www.jcreview.com/admin/Uploads/Files/61ceaf397dcbd3.42069122.pdf>

3. **Siddhartha SankarBoxi, BarnaliBej, Keka Rana** “Production of Biodiesel from Waste Cooking Oil using Indigenous Copper Impregnated Graphene Oxide Supported Catalyst.” *Journal of Critical Reviews*, 2020, 7(09), 3497-3504.

Scopus/web of science index: SCI

Impact Factor: nil

H-index of the Journal: No

Citation: 0

ISSN-2394-5125

DOI: No

Link: <https://www.jcreview.com/admin/Uploads/Files/61cebc8eccc0224.49441432.pdf>

4. **R. Das**, A. K. Mukherjee, I. Sinha, A. Mukherjee, "Adsorption Performance of Indian Neem Leave Powder for Removal of Cationic Methylene Blue Dye from Dying Industry Effluents: Kinetics and Isotherms" Education in Chemical Science and Technology (Indian Chemical Society), Vol. 7, December 2020, pp. 75-88.

SCI/Scopus/web of science index: (referred)

Impact Factor: nil

H-index of the Journal: 39

Citation: 0

ISSN No. -194522

DOI: Not found

Link:

http://indianchemicalsociety.com/uploaded_files/ChemicalEducation%20in%20Sci%20&%20Tech%20December%202020.pdf

Link: <https://indianchemicalsociety.com/>

5. Lipika Das Samanta, Somak Joyti Sahu, Sutapa Roy, "Photocatalytic removal of Malachite Green through ZnO/CeO₂ nanocomposite catalyst", Turkish Journal of Computer and Mathematics Education, Vol.11 (03) 2020, 1886-1892.

SCI/Scopus/web of science index: referred

Impact Factor: 0.31

H-index of the Journal: 4

Citation: 0

ISSN No. 1309-4653

DOI: <https://doi.org/10.17762/turcomat.v11i3.11903>

Link: <https://turcomat.org/index.php/turkbilmater/article/view/11903/8716>

6. Rabindranath Jana, Aditi Sinha, "Nanomaterials in Medical Applications", Turkish Journal of Computer and Mathematics Education, Vol.11 No.03 (2020), 1939-1950.

SCI/Scopus/web of science index: referred

Impact Factor: 0.31

H-index of the Journal: 4

Citation: 0

ISSN No. 1309-4653

DOI: <https://doi.org/10.17762/turcomat.v11i3.11909>

Link: <https://turcomat.org/index.php/turkbilmata/article/view/11909/8722>

7. Keka Rana, Debasish Sarkar, "Hydrodynamic study of the Single-Stirred Membrane Filtration Module: A CFD-based approach", Turkish Journal of Computer and Mathematics Education, Vol.11 No.03(2020), 1854-1860.

Scopus/web of science index: referred

Impact Factor: 0.31

H-index of the Journal: 4

Citation: 0

ISSN No. 1309-4653

DOI: <https://doi.org/10.17762/turcomat.v11i3.11899>

Link: <https://www.turcomat.org/index.php/turkbilmata/article/view/11899/8712>

8. Somak Jyoti Sahu, "Detail Kinetic Study of Linear Alkyl Benzene Sulfonation", Int. J. HIT Transaction: ECCN. Vol.6: Issue 1A (2020), 30-27.

Scopus/web of science index: No

Impact Factor: Nil

H-index of the Journal: No

Citation: 0

ISSN: 0973-6875

DOI: not found

Link: https://hithaldia.in/eccn/vol6_1a/J5_6.pdf

9. Mrinal Kanti Dash, Santanab Giri, Gibinda Chandra De, **Radha das**, Gourisankar Roymahapatra, Topological analysis to predict the bonding nature of $Py-nM^+@H_2$ (Py = pyridazine, pyrimidine, pyrazine and M = Li, Na, K) compounds. Int. J. HIT Transaction: ECCN, Vol-7(1A), pp: 09-20, 2021.

Scopus/web of science index: No

Impact Factor: Nil

H-index of the Journal: No

Citation: 0

ISSN No.: 0973-6875

DOI: not found

Link: https://hittransaction.in/journals/7_1A/J7_1A_02.pdf

