

Publications of Dr. D. Krishna Sandilya

Refereed Journals:

1. Aparna Singh, Srinivas Pasupuleti, Hari B. Vuthaluru, Gordon D. Ingram, **Krishna Sandilya Durbha**, Synthesis and characterisation of zirconium-modified neem seed for fluoride removal from aqueous media and groundwater. *Results in Chemistry*, **17**, 2025, Article 102566. [DOI: [10.1016/j.rechem.2025.102566](https://doi.org/10.1016/j.rechem.2025.102566)]
2024 Journal Impact Factor: **4.20**; **Q2** Journal
2. Ashwin Singh, **Krishna Sandilya Durbha**, Alok Sinha, Srinivas Pasupuleti, Comparative assessment of fluoride and arsenic mobilization mechanisms among the groundwater of the major affected river basins of India. *Water Supply*, **24**, 2024, 2969–2998. [DOI: [10.2166/ws.2024.196](https://doi.org/10.2166/ws.2024.196)]
2023 Journal Impact Factor: **1.90**; **Q3** Journal
3. Akash Pratim Bora, Lutukurthi D. N. V. V. Konda, Paidinaidu Paluri, **Krishna Sandilya Durbha**, Valorization of hazardous waste cooking oil for the production of eco-friendly biodiesel using a low-cost bifunctional catalyst. *Environmental Science and Pollution Research*, **30**, 2023, 55596–55614. [DOI: [10.1007/s11356-023-26177-0](https://doi.org/10.1007/s11356-023-26177-0)]
2022 Journal Impact Factor: **5.8**; **Q1** Journal
4. Akash Pratim Bora, Lutukurthi D. N. V. V. Konda, Srinivas Pasupuleti, **Krishna Sandilya Durbha**, Synthesis of MgO/MgSO₄ nanocatalyst by thiourea–nitrate solution combustion for biodiesel production from waste cooking oil. *Renewable Energy*, **190**, 2022, 474–486. [DOI: [10.1016/j.renene.2022.03.127](https://doi.org/10.1016/j.renene.2022.03.127)]
2024 Journal Impact Factor: **9.1**; **Q1** Journal
5. Paidinaidu Paluri, **Krishna Sandilya Durbha**, Equilibrium, kinetic and thermodynamic study for the adsorption of methylene blue onto activated carbons prepared from the banana root through chemical activation with phosphoric acid. *Biomass Conversion and Biorefinery*, **13**, 2021, 10575–10594. [DOI: [10.1007/s13399-021-01883-2](https://doi.org/10.1007/s13399-021-01883-2)]
2024 Journal Impact Factor: **4.1**; **Q2** Journal
6. Paidinaidu Paluri, Khwaja Alamgir Ahmad, **Krishna Sandilya Durbha**, Importance of estimation of optimum isotherm model parameters for adsorption of methylene blue onto biomass mass derived activated carbons: Comparison between linear and non-linear

methods, *Biomass Conversion and Biorefinery*, **12**, 2020, 4031–4048. [DOI: [10.1007/s13399-020-00867-y](https://doi.org/10.1007/s13399-020-00867-y)]

2024 Journal Impact Factor: **4.1**; **Q2** Journal

7. Akash Pratim Bora, Dipanshu Prakash Gupta, **Krishna Sandilya Durbha**, Sewage sludge to bio-fuel: A review on the sustainable approach of transforming sewage waste to alternative fuel, *Fuel*, **259**, 2020, Article 116262. [DOI: [10.1016/j.fuel.2019.116262](https://doi.org/10.1016/j.fuel.2019.116262)]
2024 Journal Impact Factor: **7.5**; **Q1** Journal
8. Veerendra Singh, Rajat Rautela, **Krishna Sandilya Durbha**, and Y. Rama Murthy, Study of the kinetics of the magnesium leaching from serpentine bearing chromite overburden rocks for mineral carbonation, *Mineral Processing and Extractive Metallurgy*, **129**, 2020, 282–289. [DOI: [10.1080/25726641.2018.1505206](https://doi.org/10.1080/25726641.2018.1505206)]
2024 Journal Impact Factor: **1.0**; **Q3** Journal
9. Sudhakar Singha, Srinivas Pasupuleti, **Krishna Sandilya Durbha**, Soumya S. Singha, Rambabu Singh, A. S. Venkatesh, An analytical hierarchy process-based geospatial modeling for delineation of potential anthropogenic contamination zones of groundwater from Arang block of Raipur district, Chhattisgarh, Central India, *Environmental Earth Sciences*, **78**(24), 2019, Article 694. [DOI: [10.1007/s12665-019-8724-z](https://doi.org/10.1007/s12665-019-8724-z)]
2024 Journal Impact Factor: **2.8**; **Q2** Journal
10. Srinivas Pasupuleti, **Sandilya D. K.**, Sudhakar Singha, Soumya S. Singha and Sarbani Saha, Delineation of groundwater potential zones utilising geospatial techniques in Kadiri watershed of Anantapur district, Andhra Pradesh, India, *Journal of Environmental Biology*, **40**(1), 2019, 61–68. [DOI: [10.22438/jeb/40/1/MRN-935](https://doi.org/10.22438/jeb/40/1/MRN-935)]
2024 Journal Impact Factor: **0.7**; **Q4** Journal
11. **D. Krishna Sandilya** and A. Kannan, Quantification of surface area and intrinsic mass transfer coefficient for ultrasound–assisted dissolution process of a sparingly soluble solid dispersed in aqueous solutions, *Ultrasonics Sonochemistry*, **19**(3), 2012, 509–521. [DOI: [10.1016/j.ultsonch.2011.09.008](https://doi.org/10.1016/j.ultsonch.2011.09.008)]
2024 Journal Impact Factor: **9.7**; **Q1** Journal
12. **D. Krishna Sandilya** and A. Kannan, Intensification of the dissolution of a sparingly soluble solid from a spinning disk in the presence of power ultrasound, *Industrial & Engineering Chemistry Research*, **50**(23), 2011, 13083–13091. [DOI: [10.1021/ie101702u](https://doi.org/10.1021/ie101702u)]
2024 Journal Impact Factor: **3.9**; **Q2** Journal

13. **D. Krishna Sandilya** and A. Kannan, Effect of ultrasound on the solubility limit of a sparingly soluble solid, *Ultrasonics Sonochemistry*, **17**(2), 2010, 427–434. [DOI: [10.1016/j.ultsonch.2009.10.005](https://doi.org/10.1016/j.ultsonch.2009.10.005)]

2024 Journal Impact Factor: **9.7**; **Q1** Journal

14. V. V. Basava Rao, Ch. Sailu and **D. Krishna Sandilya**, An experimental study of liquid-particle flow in circulating fluidized bed, *Chemical Engineering Communications*, **194**(3), 2007, 353–367. [DOI: [10.1080/15397730600830062](https://doi.org/10.1080/15397730600830062)]

2023 Journal Impact Factor: **2.0**; **Q3** Journal

Conferences:

International

1. Akash Pratim Bora, Sriya Naik, **Krishna Sandilya Durbha**, Investigation of parametric optimisation for the extraction of rice bran oil with the aid of ultrasound and its synthesis to biodiesel, International Conference on Process Engineering and Advanced Materials 2020 (ICPEAM2020), 13 – 15 July 2021, Borneo Convention Centre Kuching, Malaysia; E3S Web of Conferences, Volume 287, 2021, Article number 04014. [DOI: [10.1051/e3sconf/202128704014](https://doi.org/10.1051/e3sconf/202128704014)]
2. Akash Pratim Bora, Dipanshu Prakash Gupta, **Krishna Sandilya Durbha**, Sono-assisted synthesis of Ca/Si catalyst using rice husk for the production of biodiesel from waste cooking oil, International Conference on Advances in Chemical Engineering (AdChE-2020), February 2020, UPES, Dehradun, India.
3. Veerendra Singh, Rajat Rautela, Y. Rama Murthy, and **K. Sandilya Durbha**, Use of Serpentine Bearing Chromite Overburden Rocks for CO₂ Sequestration, XVI International Seminar on Mineral Processing Technology (MPT) 2017, organized by Indian Institute of Mineral Engineers, 1–3 February, 2017, Chennai, Tamil Nadu, India.
4. **D. Krishna Sandilya** and Kannan. A., Effect of ultrasound on the particle breakage and solid dissolution, Poster presentation at Indo-German Workshop on Advances in Reaction and Separation Processes, February 2008, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India.

National

1. Paidinaidu Paluri¹, Khwaja Alamgir Ahmad, **D. K. Sandilya**, Comparison of linear and non-linear method for determination of optimum equilibrium isotherm for adsorption of methylene blue onto prepared activated carbon, 72nd Annual session of Indian Institute of Chemical Engineers (CHEMCON-2019), December 2019, Delhi, India.
2. Paidinaidu Paluri and **D. Krishna Sandilya**, Preparation and Characterization of activated carbons from coconut pulp and removal of methylene blue from an aqueous solution, 71st Annual session of Indian Institute of Chemical Engineers (CHEMCON-2018), December 2018, Jalandhar, India.
3. Ash Narayan Ram, **D. K. Sandilya**, V. K. Saxena, Adsorption of methylene blue onto Potassium Hydroxide Treated Tea Waste Activated Carbon: Adsorption Isotherm and Kinetic Studies, 70th Annual Session of the Indian Institute of Chemical Engineers (CHEMCON-2017), December 2017, Haldia, India.
4. Paidinaidu Paluri and **D. Krishna Sandilya**, Preparation and characterization of activated carbons from green coconut pulp by chemical activation with phosphoric acid, 69th Annual Session of the Indian Institute of Chemical Engineers (CHEMCON-2016), December 2016, Chennai, India.
5. **D. Krishna Sandilya** and Kannan. A., Effect of ultrasound on the particle breakage and solid dissolution, National Level Conference in Chemical Engineering (CHEMVIGOR-2008), March 2008, Vignan's Engineering College, Guntur, Andhra Pradesh, India.
6. **D. Krishna Sandilya** and Kannan. A., Enhancement of Solubility using Ultrasound, 59th Annual Session of the Indian Institute of Chemical Engineers (CHEMCON), December 2006, Bharuch, Gujarat, India.
7. **D. Krishna Sandilya** and Kannan. A., Ultrasound - assisted Intensification of Solubility, National conference on Recent Advances in Chemical Engineering (RACE), November 2006, S.V. University, Tirupati, Andhra Pradesh, India.
8. **K. Sandilya Durbha**, T. Balanarsaiah and V. V. Basava Rao, Flow Structure of Liquid-Solid Circulating Fluidized Bed (LSCFB), 57th Annual Session of the Indian Institute of Chemical Engineers (CHEMCON), December 2004, Mumbai, Maharashtra, India.

9. **D. Krishna Sandilya**, T. Bala Narasaiah & V. V. B. Rao, Liquid-Solid Circulating Fluidization and its Applications, All India Seminar on Advances in Fluidization Engineering, Febuary 2004, Tirupati, Andhra Pradesh, India.
10. **D. Krishna Sandilya**, E. Santosha & V. V. B. Rao, Prediction of Transport Velocities in Liquid - Solid Circulating Fluidized Bed., 56th Annual Session of the Indian Institute of Chemical Engineers (CHEMCON), December 2003, Bhubaneswar, Orissa, India.
11. **D. Krishna Sandilya**, B. Rajendra Kumar, A. S. Kanthi & V. V. B. Rao, Estimation of Richardson - Zaki's Constant in Liquid - Solid Fluidized Bed., 56th Annual Session of the Indian Institute of Chemical Engineers (CHEMCON), December 2003, Bhubaneswar, Orissa, India.
12. **D. Krishna Sandilya** and V. V. Basava Rao, Flow Behavior in Liquid - Solid Circulating Fluidized Bed Regime, 55th Annual Session of the Indian Institute of Chemical Engineers (CHEMCON), December 2002, Hyderabad, Andhra Pradesh, India.

Books Authored:

1. Subbu, M., and **D. K. Sandilya**, "GATEway to Chemical Engineering," Volume 1 of 5 (Process Calculations & Thermodynamics), Rishal Publications, Chennai, India (2018). ISBN: 978-81-935993-2-7.
2. Subbu, M., and **D. K. Sandilya**, "GATEway to Chemical Engineering," Volume 4 of 5 (Reaction Engineering & Process Control), Rishal Publications, Chennai, India (2018). ISBN: 978-81-935993-5-8.

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