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PUBLICATIONS IN REFEREED JOURNALS

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1. Tyagi, M., **Jagadevan, S***., Kukkar, D. 2024. Synergistic effect using green nano-zero-valent iron and biodegradation (*Pseudomonas* BSPS_PHE2) for cyanide and phenol removal in coke-oven wastewater. *Clean Technologies and Environmental Policy* (2024). https://doi.org/10.1007/s10098-023-02736-4 (Impact factor: 4.3).

2. Dey, S., Roy, A., Manna, K., Daniel, R., **Jagadevan, S.**, Pal, S. 2024. Adsorption of toxic Cd (II) on an Antibacterial Biopolymeric gel towards Fabrication of a gel Electrolyte-based Supercapacitor Device, *Industrial and Engineering Chemistry Research*, 63, 3539-3553 (Impact factor: 6.1).

3. Srivastava, A., Valsala, R. and **Jagadevan, S**. 2024. Biogeochemical modelling to assess the effect of bioclogging on multiple electron acceptor–mediated petroleum hydrocarbon bioremediation in vadose zone. *Environmental Science and Pollution Research*, https://doi.org/10.1007/s11356-024-33232-x (Impact factor: 5.8).

2023

1. Chawley, P. & **Jagadevan, S***. 2023. Biodegradation of quinoline by *Nitrosomonas mobilis* Ms1 through nitrification: A mechanistic study. *Biochemical Engineering Journal*, https://doi.org/10.1016/j.bej.2023.108933 (Impact factor: 4.446).

2. Sarkar, A.N., Padhi, S., Kumari, S., **Jagadevan, S**., Pal, S. 2023. Facile Synthesis of Carbon Dot Deposited γ-FeOOH Nanosheet/Polypyrrole Composite: A Robust Photocatalyst for Degradation of Antibiotics under Sunlight Irradiation with Enhanced Antibacterial Activity. *Industrial & Engineering Chemistry Research*, DOI: https://doi.org/10.1021/acs.iecr.2c03172 (Impact factor: 4.326).

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1. Kumari, S. & **Jagadevan, S***. 2022. Phosphorus recovery from municipal wastewater through struvite biomineralization using model gram-negative and gram-positive bacterial strains. *Journal of Cleaner Production*, DOI: https://doi.org/10.1016/j.jclepro.2022.132992 (Impact factor= 11.072).

2. Yadav, K., Prabhakar, R., **Jagadevan, S***. 2022. Enhanced defluoridation in household filter using binary metal hydrochar composite. *Journal of Cleaner Production*, DOI: https://doi.org/10.1016/j.jclepro.2022.133525 (Impact factor= 11.072).

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1. Chawley, P., Rana, A., **Jagadevan, S***. 2021. Envisioning role of ammonia oxidizing bacteria in bioenergy production and its challenges: A review. *Critical Reviews in Biotechnology*, DOI: 10.1080/07388551.2021.1976099 (Impact factor= 9.062).

2. Yadav, K., **Jagadevan, S***. 2021. Influence of torrefaction and pyrolysis on engineered biochar and its applicability in defluoridation: Insight into adsorption mechanism, batch adsorber design and artificial neural network modelling. *Journal of Analytical and Applied Pyrolysis*, 154(2021)105015 (Impact factor= 6.437).

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4. Kumar, N., Banerjee, C., **Jagadevan, S**. 2021. Identification, characterization, and lipid profiling of microalgae *Scenedesmus* sp. NC1, isolated from coal mine effluent with potential for biofuel production. *Biotechnology Reports*, 30, https://doi.org/10.1016/j.btre.2021.e00621

5. Jain, A., Kumari, N., **Jagadevan, S**., Bajpai, V. 2021. Surface free energy and bacterial attachment on microtextured Ti6Al4V Alloy. *Journal of Materials Engineering and Performance*, https://doi.org/10.1007/s11665-021-05651-1 (Impact factor = 2.036).

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1. Kumari, S., Jose, S., Tyagi, M., **Jagadevan, S***. 2020. A holistic and sustainable approach for recovery of phosphorus via struvite crystallization from synthetic distillery wastewater. *Journal of Cleaner Production*, 254, DOI: 10.1016/j.jclepro.2020.120037 (IF= 11.072).

2. Rana, A., Yadav, K., **Jagadevan, S***. 2020. A comprehensive review on green synthesis of nature-inspired metal nanoparticles: Mechanism, application and toxicity. *Journal of Cleaner Production*, 272, 122880 (IF= 11.072).

3. Chawley, P., Banerjee, C., **Jagadevan, S**[*]. 2020. Growth of planktonic and biofilm culture of *Nitrosomonas mobilis Ms1* in response to stoichiometric ammonia consumption. *International Biodeterioration & Biodegradation*, 154, 105080 (IF= 4.907).

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7. Yadav, K., **Jagadevan, S**[*]. 2020. Effect of Pyrolysis of Rice Husk–Derived Biochar on the Fuel Characteristics and Adsorption of Fluoride from Aqueous Solution, BioEnergy Research, https://doi.org/10.1007/s12155-020-10189-6 (IF= 3.852).

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1. Kumari, N., Rana, A., **Jagadevan, S**[*]. 2019. Arsenite biotransformation by *Rhodococcus* sp.: Characterization, optimization using response surface methodology and mechanistic studies. *Science of the Total Environment*, 687: 577-589 (IF= 10.754).

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1. Rana, A., Kumari, N., Tyagi, M., **Jagadevan, S***. 2018. Leaf-extract mediated zero-valent iron for oxidation of Arsenic (III): Preparation, characterization and kinetics. *Chemical Engineering Journal***,** 347, 91–100 (IF= 16.744).

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1. Vorobev, A., **Jagadevan, S.,** Jain, S., Anantharaman, K., Dick, G., Vuilleumier, S., Semrau, J.D. 2014. Genomic and transcriptomic analyses of the facultative methanotroph *Methylocystis* sp. Strain SB2 grown on methane or ethanol. *Applied and Environmental Microbiology*. 80 (10), 3044-3052 (IF= 5.005).

2. Seixas, F., Fukuda, D., Turbiani, F., Garcia, P.S., Petkowicz, C., **Jagadevan**, **S**., Gimenes, M. 2014. Extraction of pectin from passion fruit peel (*Passiflora edulis* f. *flavicarpa*) by microwave-induced heating. *Food Hydrocolloids*. 38, 186-192 (IF= 11.504).

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1. **Jagadevan, S.,** Graham, N., Thompson, I. 2013. Treatment of waste metalworking fluid by a hybrid ozone-biological process. *Journal of Hazardous Materials*. 244-245, 394-402 (IF= 14.224).

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Book Chapters

1. Soni Kumari, **Sheeja Jagadevan**, 2023. Recovery of phosphorus from industrial wastewater through struvite crystallization. In: Resource Recovery in Industrial Waste Waters. Elsevier. DOI: https://doi.org/10.1016/B978-0-323-95327-6.00015-4

2. Soni Kumari, Krishna Yadav, **Sheeja Jagadevan**, 2022. Wastewater Treatment and Resource Recovery via Struvite Precipitation from High Strength Industrial Wastewater. In: Environmental Degradation: Monitoring, Assessment and Treatment Technologies. Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-94148-2_6

3. Parmita Chawley and **Sheeja Jagadevan**, 2021. Interaction effects of nanoparticles with microorganisms employed in the remediation of nitrogen rich wastewater. In: Microbial Interactions at Nanobiotechnology Interfaces: Molecular mechanisms and applications. John Wiley & Sons Inc., DOI: 10.1002/9781119617181.ch7. ISBN: 978-1-119-61717-4.

4. Krishna Yadav and **Sheeja Jagadevan,** 2021. Adsorbents for removal of fluoride from water. In: Green Technologies for the Defluoridation of water, Elsevier. (DOI:10.1016/B978-0-323-85768-0.00005-1).

5. Parmita Chawley, Krishna Yadav, **Sheeja Jagadevan**, 2021. Nitrogenous wastes and its efficient treatment in wastewater, In: Water Pollution and Management Practices, Springer Singapore, ISBN 978-981-15-8358-2.

6. Krishna Yadav and **Sheeja Jagadevan**, 2019, Influence of Process Parameters on Synthesis of Biochar by Pyrolysis of Biomass: An Alternative Source of Energy, In: Recent Advances in Pyrolysis, IntechOpen Limited, London, UK. DOI: 10.5772/intechopen.88204.

Conference Papers

K. Yadav and S. Jagadevan, "Effect of pyrolytic conditions on fuel ratio of rice husk derived biochar: An optimization through response surface methodology", International Conference on Water, Energy and Environmental Sustainability, NIT Durgapur, India held on 13-15 January, 2020.

P. Chawley and S. Jagadevan, "Protein-protein interaction between nitrogen, sulfur and methane metabolism pathways of *Nitrosospira multiformis* – A potential biofuel producing microorganism", RECYCLE 2020, 3rd International Conference on waste management organised by Indian Institute of Technology, Guwahati, India held on 13-14 February, 2020.

S. Kumari and S. Jagadevan, "Wastewater Treatment and Resource Recovery via Struvite Crystallization from high strength industrial wastewater", RECYCLE 2020, 3rd International Conference on waste management organised by Indian Institute of Technology, Guwahati, India held on 13-14 February, 2020.

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K. Yadav, S. Jagadevan, "Optimization of rice-husk derived biochar through response surface methodology for removal of fluoride from groundwater", IBI Biochar World Congress 2019, Korea University, South Korea held on 10-14 November 2019.

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S. Jagadevan, A. Vorobev, J. Im, J. Semrau "Pollutant degradation by the facultative methanotroph *Methylocystis* strain SB2 grown on ethanol" Gordon Research Conference, Molecular basis of microbial one-carbon metabolism, Bates College, Lewiston, Maine, USA, held on August 5-10, 2012.

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