

FACULTY PROFILE



Dr. V. Vasanth Kumar

Assistant Professor (Selection Grade)

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Academic/Research/Industrial Experience : 10 years

Research area: Wireless Sensors, Biosensors

Recent Publications (last 5 years)

Vasanth Kumar et al (2022). "Three-phase partitioning for the separation of proteins, enzymes, biopolymers, oils and pigments: a review." Environmental Chemistry Letters: 1-24. **(IF – 13.61)**

Saikia, K., Rathankumar, A. K., Kumar, P. S., Rangasamy, G., **Vaithyanathan, V. K., & Vaidyanathan, V. K.** (2022). "Evaluating the potential of engineered Trichodermaatroviride and its laccase-mediated system for the efficient bioconversion of 5-hydroxymethylfurfural". Chemosphere, 308, 136567. **(IF – 8.9)**

VasanthKumar et al (2022) 'An effective garbage monitoring system and metal detection for the welfare of the society using IoT', ICIECS 2022 conference 34 -36.

VasanthKumar et al (2022) "Effect of alkaline treatment on the removal of contaminants of emerging concern from municipal biosolids: Modelling and optimization of process parameters using RSM and ANN coupled GA", Chemosphere, 286, 131847. **(IF – 7.08)**

VasanthKumar et al (2021) "Laccase-driven transformation of pesticides: towards bioremediation of biosolids& contaminated wastewaters", Frontiers in Bioengineering and Biotechnology 9:770435. **(IF – 5.89)**

VasanthKumar et al (2021) “Remediation of trace organic contaminants from biosolids: Influence of different pretreatment methodologies prior to *Bacillus subtilis* aerobic digestion”, *Chemical Engineering Journal*,419,129966. (IF – 13.2)

VasanthKumar et al (2021) “Performance evaluation of biocatalytic and biostimulation approaches for the remediation of trace organic contaminants in municipal biosolids”, *Waste Management*, 120, 373-381. (IF – 7.1)

VasanthKumar et al (2021) “Preparation of highly diffusible porous cross-linked lipase B from *Candida antarctica* conjugates: Advances in mass transfer and application in transesterification of 5-Hydroxymethylfurfural”, *Journal of Biological Macromolecules*, 170, 583 – 592. (IF –6.9)

VasanthKumar et al (2021) *Integrated Biotechnology Management of Biosolids: Sustainable Ways to Produce Value—Added Products*, Book Title - *Decentralized Wastewater Treatment and Resources Recovery*, *Frontiers. Water* 3:729679

VasanthKumar et al (2020) “Utilization of biosolids for glucose oxidase production: A potential bio-Fenton reagent for advanced oxidation process for removal of pharmaceutically active compounds”, *Journal of Environmental Management*, 271, 110995. (IF – 6.7)

VasanthKumar et al (2020) *Immobilized Laccase: A Promising Bioremediation Tool for the Removal of Organic Contaminants in Wastewater*, Book Title - *Laccases in Bioremediation and Waste Valorisation*, *Microbiology Monographs*, 33, ISBN: 978-3-030-47905.

VasanthKumar et al (2020) “Development of efficient and sustainable added-value products from municipal biosolids through an industrially feasible process”, *Journal of Cleaner Production*, 266, 121749. (IF – 9.2)

VasanthKumar et al (2020) “Mycoremediation of phenols and polycyclic aromatic hydrocarbons from a biorefinery wastewater and concomitant production of lignin modifying enzymes”, *Journal of Cleaner Production*, 253, 119810. (IF – 9.2)