

Publications of Dr. Vipin Kumar

Dr. Vipin Kumar

Associate Professor

Department of Environmental Science and Engineering
Indian Institute of Technology (ISM) Dhanbad
Dhanbad - 826 004, Jharkhand, India

List of Research Publications in Refereed International and National Journals

*Corresponding author

SCI/SCIE

1. Singh A., **Kumar V***, Singh S. and Ray M. 2023. Electrochemical detection of copper(II) in environmental samples using *Penicillium* sp. IITISM_ANK1 based biosensor. *Chemosphere*. 313: 137294. (IF = 8.943). [Q1].
<https://doi.org/10.1016/j.chemosphere.2022.137294>.
2. Phukan D and **Kumar V***. 2023. Tracking drugged waters from various sources to drinking water—its persistence, environmental risk assessment, and removal techniques. *Environmental Science and Pollution Research*. (IF = 5.80) [Q1]. DOI : 10.1007/s11356-023-28421-z.
3. Anand S., **Kumar V***. and Singh A. 2023. Recent advancements in cadmium-microbe interactive relations and their application for environmental remediation: a mechanistic overview. *Environmental Science and Pollution Research*. 30 (17009–17038). (IF = 5.80) [Q1].
4. Singh S., **Kumar V***, Gupta P. and Ray M. 2022. Conjoint application of novel bacterial isolates on dynamic changes in oxidative stress responses of axenic *Brassica juncea* L. in Hg-stress soils. *Journal of Hazardous Materials*. 434(2022): 128854. <https://doi.org/10.1016/j.jhazmat.2022.128854>. (IF = 14.224) [Q1].
5. Singh S., **Kumar V***, Gupta P. and Ray M. 2022. The trafficking of HgII by alleviating its toxicity via *Citrobacter* sp. IIITISM25 in Batch and Pilot Scale Investigation. *Journal of Hazardous Materials*. 433(2022): 128711. <https://dx.doi.org/10.2139/ssrn.4001140> (IF = 14.224) [Q1]
6. Ray M., Kumar V*. and Banerjee C. 2022. Kinetic modelling, production optimization, functional characterization and phyto-toxicity evaluation of biosurfactant derived from crude oil biodegrading *Pseudomonas* sp. IITISM 19. *Journal of Environmental Chemical Engineering*. 10(2), 2022, 107190, ISSN 2213-3437.
<https://doi.org/10.1016/j.jece.2022.107190>. (IF = 7.968) [Q1]
7. Singh S., **Kumar V***, Gupta P., Ray M. and Kumar A. 2021. The synergy of mercury biosorption through *Brevundimonas* sp. IITISM22: Kinetics, isotherm, and thermodynamic modeling. *Journal of Hazardous Materials*. 415(2021):125653. <https://doi.org/10.1016/j.jhazmat.2021.125653> (IF = 14.224) [Q1]
8. Singh A. and **Kumar V***. 2021. Recent developments in monitoring devise for anaerobic digesters: A focus on bio-electrochemical systems. *Bioresource Technology*. 326 (2021) 124937. <https://doi.org/10.1016/j.biortech.2021.124937> (IF = 11.889) [Q1]

9. Rani R., **Kumar V***, Gupta P., and Chandra A. 2021. Potential use of Solanum lycopersicum and plant growth promoting rhizobacterial (PGPR) strains for the phytoremediation of endosulfan stressed soil. *Chemosphere* .279 (2021) 1305892
<https://doi.org/10.1016/j.chemosphere>. 2021.130589. (**IF = 8.943**). [Q1]
10. Ray M., **Kumar V***, Banerjee C., Gupta P., Singh S., Singh A. 2021. Investigation of biosurfactants produced by three indigenous bacterial strains, their growth kinetics and their anthracene and fluorene tolerance. *Ecotoxicology and Environmental Safety* 208(2021): 111621 . <https://doi.org/10.1016/j.ecoenv.2020.111621> (**IF = 7.129**) [Q1]
11. Singh A. and **Kumar V***. 2021. Recent advances in synthetic biology-enabled and natural whole-cell optical biosensing of heavy metals. *Analytical and Bioanalytical Chemistry*. 413:73–82. <https://doi.org/10.1007/s00216-020-02953-6>. (**IF = 4.478**) [Q2]
12. Singh S., **Kumar V***, Gupta P., Ray M. and Singh A. 2021. An implication of biotransformation in detoxification of mercury contamination by *Morganella* sp. strain IITISM23. *Environmental Science and Pollution Research*. 28(27):35661-35677. doi: 10.1007/s11356-021-13176-2. (**IF = 5.80**) [Q1]
13. Gupta P., **Kumar V***, Usmani Z., Rani R., Chandra A., Gupta V.K. 2020. Implications of plant growth promoting *Klebsiella* sp. CPSB4 and *Enterobacter* sp. CPSB49 in luxuriant growth of tomato plant under chromium stress. *Chemosphere* 240: 124944. doi: 10.1016/j.chemosphere.2019.124944 (**IF = 8.943**) [Q1]
14. Singh S. and **Kumar V***. 2020. Mercury detoxification by absorption, mercuric ion reductase, and exopolysaccharides: A Comprehensive study. *Environmental Science and Pollution Research* 27: 27181-27201. DOI: 10.1007/s11356-019-04974-w (**IF = 5.80**) [Q1]
15. Pandey V, Ray M, **Kumar V***. 2020. Assessment of water-quality parameters of groundwater contaminated by fly ash leachate near Koradi Thermal Power Plant, Nagpur. *Environmental Science Pollution Research*. 27: 27422-27434 doi:10.1007/s11356-019-06167-x. (**IF = 5.80**) [Q1]
16. Neha., Tarafdar, A., Sinha, A*. and **Kumar, V.** (2020). Effect of glucose co-metabolism on biodegradation of Gabapentin (an anticonvulsant drug) by gram-positive bacteria *Micrococcus luteus* N.JSM.1". *Applied Biochemistry and Microbiology*. 56(4):433-440 (**IF = 1.065**) [Q4].
17. Gupta P., **Kumar V***, Usmani Z., Rani R., Chandra A., and Gupta V.K. 2019. A comparative evaluation towards the potential of *Klebsiella* sp. and *Enterobacter* sp. in plant growth promotion, oxidative stress tolerance and chromium uptake in *Helianthus annuus* (L.). *Journal of Hazardous Materials* 377:391-398. DOI:10.1016/j.jhazmat.2019.05.054 (**IF = 14.224**) [Q1]
18. Usmani Z., **Kumar V***, Gupta G., Gupta P., Rani R., Chandra V. 2019. Efficacy of vermicomposted fly ash with enhanced plant growth promoting and microbial enzymatic activities on soil fertility, plant growth and yield of vegetable plants. *Nature Scientific Reports*, 9, 10455. <https://doi.org/10.1038/s41598-019-46821-5>. (**IF = 5.516**) [Q1]

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20. Kushwaha B. K., Singh S., Tripathi D. K., Sharma S., Prasad S. M., Chauhan D K., **Kumar V**. and Singh V. P*. 2019. New adventitious root formation and primary root biomass accumulation are regulated by nitric oxide and reactive oxygen species in rice seedlings under arsenate stress. *Journal of Hazardous Materials*. 361: 134-140. DOI: 10.1016/j.jhazmat.2018.08.035. (**IF = 14.228**) [Q1].
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26. Gupta P., **Kumar V***, Usmani Z., Rani R. and Chandra A. 2018. Phosphate solubilization and chromium (VI) remediation potential of *Klebsiella* sp. strain CPSB4 isolated from the chromium contaminated agricultural soil. *Chemosphere*. 192: 318-327. DOI: 10.1016/j.chemosphere.2017.10.164. (**IF = 8.943**). ISSN: 0045-6535 [Q1]
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Environmental Science and Technology. 16 (8), 4647-4664. DOI: 10.1007/s13762-018-1893-6. (**IF = 3.519**) [Q2]

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42. Usmani Z. and **Kumar V***. 2017. Vermicomposting of Coal Fly ash using Epigeic and Epi-endogeic Earthworm Species: Nutrient Dynamics and Metal Remediation. *RSC Advances.* 2017(7): 4876-4890. DOI: 10.1039c6ra329g. (**IF = 4.036**) [Q2]

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56. **Kumar V***, Chandra A. and Usmani Z. 2017. Impact of coal mining on soil properties and their efficient eco-restoration. *International Journal of Energy Technology and Policy*. DOI: 10.1504/IJETP.2017.10000607. 13(1-2): 158-165. (**H Index =11**).
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Dr. Vipin Kumar

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