


<b>NAME</b>	Dr Vivek Kumar Gaur		
<b>DESIGNATION</b>	Assistant Professor		
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<b>CONTACT NUMBER</b>	9456820482		
<b>RESEARCH INTERESTS</b>	Environmental Biotechnology, Metabolic Engineering and Synthetic Biology		
<b>EDUCATIONAL QUALIFICATIONS:</b>			
<b>Name of College / University</b>	<b>Degree</b>	<b>Year</b>	
Dr Bhim Rao Ambedkar University	B. Sc Biotechnology	2010	
Hemwati Nandan Bahuguna Garhwal University	M. Sc Biotechnology	2013	
Amity University (Lucknow Campus)	Ph. D Biotechnology	2021	
<b>Title of Ph.D. thesis:</b> Genetic and functional characterization of microbial biosurfactant for human and environmental health application.			
<b>EXPERIENCE (in chronological order): Total 20 Years Research &amp; Teaching</b>			
<b>Designation</b>	<b>Type of post held (teaching/ research)</b>	<b>Name of the Institute</b>	<b>Year (From – To)</b>
Assistant Professor	Research and Teaching	Institute of Biotechnology, Amity University Uttar Pradesh,	Oct 2024 to till date
Research Assistant Professor	Research and Teaching	Energy and Chemical Engineering, UNIST, Ulsan, South Korea	Jan 2024 to Oct 2024
Post-Doctoral Researcher	Research and Teaching	Energy and Chemical Engineering, UNIST, Ulsan, South Korea	Dec 2021 to Dec 2023
CSIR-Senior Research Fellow	Research	Environmental Biotechnology, CSIR-IITR, Lucknow, UP, India	May 2018 to 30 April 2021
Project Fellow	Research	Environmental Biotechnology, CSIR-IITR, Lucknow, UP, India	July 2014 to March 2017
<b>No. of Ph.D. students supervised</b>	-		
<b>No. of Post-Doc</b>	-		
<b>No. of M.Tech. Students supervised:</b>	-		
<b>No. of B.Tech. Students supervised:</b>	-		
<b>PUBLICATIONS (60)</b>	<b>Details: Selected Publications</b> 1. <b>Gaur, V.K.</b> , Gaur, P., Telegin, A., Thakur, R.S., Sharma, P., Gupta, P., Dhakar, K., Raheja, Y., Srivastava, J.K., Varjani, S. and Wong, J.W., 2024. Unlocking the Potential of Food Waste Chemistry for Biodegradable Plastics Production: Recent Advancements, Perspectives,		

and Life-Cycle Assessment. *Trends in Food Science & Technology*, p.104836. (IF 15.1)

2. **Gaur, V.K.**, Nguyen-Vo, T.P., Islam, T., Bassey, B.F., Kim, M., Ainala, S.K., Shin, K. and Park, S., 2024. Efficient bioproduction of poly (3-hydroxypropionate) homopolymer using engineered *Escherichia coli* strains. *Bioresource Technology*, p.130469. (IF 9.7)
3. Regar, R.K., Kamthan, M., **Gaur, V.K.**, Singh, S., Mishra, S., Dwivedi, S., Mishra A., Manickam, N., Nautiyal, C.S., 2024. Microbiome divergence across four major Indian riverine water ecosystem impacted by anthropogenic contamination: A comparative metagenomic analysis. *Chemosphere*, 368, p.143672. (IF 8.1)
4. Naseem, M., Verma, P.C., Raghuwanshi, R., **Gaur, V.K.**, Singh, M., Seth, S. and Srivastava, P.K., 2024. Soil Microbiome and its Functional Attributes Under the Gradient of Arsenic Contamination in Paddy Soils. *Water, Air, & Soil Pollution*, 235(9), p.597. (IF 3.8)
5. Sharma, P., Gaur, P., Dwivedi, S., Kumari, K., Srivastava, J.K., Dhakar, K., **Gaur, V.K.\***, Varjani, S., Chang, J.S., Ngo, H.H. and Ng, H.Y., 2024. Harnessing microbial potentials by advancing bioremediation of PAHs through molecular insights and genetics. *International Biodeterioration & Biodegradation*, 194, p.105861. (IF 4.1)
6. Tripathi, V., **Gaur, V.K.**, Kaur, I., Srivastava, P.K. and Manickam, N., 2024. Unlocking bioremediation potential for site restoration: A comprehensive approach for crude oil degradation in agricultural soil and phytotoxicity assessment. *Journal of Environmental Management*, 355, p.120508. (IF 8.0)
7. Gautam, K., Sharma, P., **Gaur, V.K.**, Gupta, P., Pandey, U., Varjani, S., Pandey, A., Wong, J.W. and Chang, J.S., 2023. Oily waste to biosurfactant: A path towards carbon neutrality and environmental sustainability. *Environmental Technology & Innovation*, 30, p.103095. (IF 6.7)
8. **Gaur, V.K.**, Tripathi, V., Gupta, P., Thakur, R.S., Kaur, I., Regar, R.K., Srivastava, P.K., Manickam, N., 2023. Holistic approach to waste mobil oil bioremediation: Valorizing waste through biosurfactant production for soil restoration. *Journal of Environmental Management*, 348,

119207. (IF 8.0)

9. **Gaur, V.K.**, Sirohi, R., Bhat, M.I., Gautam, K., Sharma, P., Srivastava, J.K. and Pandey, A., 2023. A review on the effect of micro-and nano-plastics pollution on the emergence of antimicrobial resistance. *Chemosphere*, 311, p.136877. (IF 8.0)
10. Islam, T., Nguyen-Vo, T.P., Cho, S., Lee, J. **Gaur, V.K.**, and Park, S., 2023. Metabolic engineering of *Escherichia coli* for enhanced production of 1,3-Butanediol from Glucose. *Bioresource Technology*, 389, 129814. (IF 9.7)
11. Bokade, P.<sup>¶</sup>, **Gaur, V.K.**<sup>¶</sup>, Tripathi, V., Bobate, S., Manickam, N. and Bajaj, A., 2023. Bacterial remediation of pesticide polluted soils: Exploring the feasibility of site restoration. *Journal of Hazardous Materials*, 441, p.129906. (IF 12.2)
12. Kaur, I., **Gaur, V.K.**, Rishi, S., Anand, V., Mishra, S.K., Gaur, R., Patel, A., Srivastava, S., Verma, P.C. and Srivastava, P.K., 2023. Deciphering the kinetics and pathway of lindane biodegradation by novel soil ascomycete fungi for its implication in bioremediation. *Bioresource Technology*, 387, p.129581. (IF 9.7)
13. Tripathi, V., **Gaur, V.K.**, Thakur, R.S., Patel, D.K. and Manickam, N., 2023. Assessing the half-life and degradation kinetics of aliphatic and aromatic hydrocarbons by bacteria isolated from crude oil contaminated soil. *Chemosphere*, 337, p.139264. (IF 8.0)
14. Islam, T., Nguyen-Vo, T.P., **Gaur, V.K.**, Lee, J. and Park, S., 2023. Metabolic engineering of *Escherichia coli* for biological production of 1, 3-Butanediol. *Bioresource Technology*, 376, p.128911. (IF 9.7)

**Details:**

1. **Gaur, V.K.**, Park, S., 2023. Recombinant *Escherichia coli* strain producing 3-hydroxypropionate homopolymer polymer with high efficiency and method for producing 3-hydroxypropionate homopolymer biodegradable polymer using the same.
2. **Gaur, V.K.**, Park, S., 2023. Recombinant *Escherichia coli* strain producing biodegradable polymer p(3-hydroxypropionate-co-3-hydroxybutyrate) with high efficiency and method for producing p(3-hydroxypropionate-co-3-hydroxybutyrate) using the same.

**PATENTS (3)**

	3. Sharma, P., Younis, K., Sharma, S., Vimal, A., Vishvakarma, R., <b>Gaur, V.K.</b> , Farooqui, A., 2023. Langenaria Siceraria based low fat functional mayonnaise.
<b>RESEARCH PROJECTS</b> Completed: <i>(total no.)</i> Ongoing: <i>(total no.)</i>	<i>Details: Nil</i>
<b>AWARDS &amp; HONOURS/ DISTINCTIONS</b>	<p><i>Details:</i></p> <ul style="list-style-type: none"> <li>• <b>A.P.J Abdul Kalam Best Ph.D. Thesis Award</b>, 2022 from International Society for Energy, Environment and Sustainability.</li> <li>• <b>Best Oral Presentation Award</b>, 2021 from Centre for Energy and Environmental Sustainability in BRE3CH-2021.</li> <li>• <b>Best Flash Presentation and Poster Award</b>, 2021 International Conference on Biotechnology for Sustainable Agriculture, Environment and Health (BSAEH-2021).</li> <li>• <b>Young Researcher Award</b>, 2019 for oral presentation in NHBT-2019: International Conference on New Horizons in Biotechnology</li> <li>• <b>International Travel Grant</b>, 2019 from the Department of Science and Technology- Science and Engineering Research Board (DST-SERB), Government of India</li> <li>• <b>Senior Research Fellowship</b>, 2018 from the Council of Scientific and Industrial Research, Delhi, India, April 2018.</li> </ul>
<b>MEMBERSHIP</b> with Professional/ Academic bodies	<p><i>Details:</i></p> <ol style="list-style-type: none"> <li>1. Member of International Society for Energy, Environment and Sustainability.</li> <li>2. Member of Biotech Research Society of India.</li> <li>3. Member of Association of Microbiologists of India.</li> </ol>