Dr. Kavita Verma

E-Mail: kavitavrm4@gmail.com, kavitaverma@iisc.ac.in

Contact: +91-9509293731

Scholastics

DBT-Research Associate (Research Title "Cultivation of *Chlorella vulgaris* along with Symbiotic Bacteria and Recovery of Value-Added Products from its Biomass Using Hydrothermal Process") under supervision of Prof. V. Himabindu, JNTU Hyderabad, 2018- July 2021.

Doctor of Philosophy (Research Title "Hybrid disinfection of sewage using chlorine and UV/ozone in series to optimize the process") under supervision of Prof. K.D. Gupta and Prof. A.B. Gupta, Malaviya National Institute of Technology, Jaipur, Rajasthan, 2016.

Masters of Technology (Environmental Management)

Jawaharlal Nehru Technological University Hyderabad, Telangana (Part time), 2022.

Masters of Science (Biotechnology)

Seth G.B. Podar College, Nawalgarh, Rajasthan with 73% (University of Rajasthan, Jaipur), 2009.

Bachelor of Science (Biotechnology, Chemistry, Zoology)

Seth G.B. Podar College, Nawalgarh, Rajasthan with 68% (University of Rajasthan, Jaipur), 2007.

Senior Secondary (XII- Biology, Physics, Chemistry)

Smt. Godavaribai Ramdeo Podar Senior Secondary School, Nawalgarh, Rajasthan with 60% (Board of Sn. Secondary Education, Rajasthan), 2004.

Secondary (X)

Smt. Godavaribai Ramdeo Podar Senior Secondary School, Nawalgarh, Rajasthan with 73% (Board of Secondary Education, Rajasthan), 2002.

Additional Qualifications

Studied six M.Tech courses (Water treatment, Wastewater treatment, Water and Health, EIA, RM and DOE, Env. Chemistry) during course work of PhD and secured 8.24 CGPA.

Bachelor of Education (B.Ed.), IGNOU, 2012. Secured 68% marks.

PG Diploma in Environment and Sustainable Development (PGDESD), Seth G.B. Podar College, Nawalgarh, Rajasthan in 2010.

Employment Track

Research Scientist at Indian Institute of Science and Technology (IISC) Bengaluru, Karnataka, September 2021 -till date.

Assistant Professor at JECRC University, Jaipur, Rajasthan, Aug'2016-nov'2016

Guest faculty at Seth G.B. Podar College, Nawalgarh, Rajasthan, Aug'09-Mar'12

Papers Published in Journals

- ⇒ **Verma K**, Kumar PK, Krishna SV, & Himabindu V. (2021). Phycoremediation of Sewage Contaminated Lake Water Using Microalgae-Bacteria Co-culture. Water, Air, and Soil pollution (Springer), 10.1007/s11270-020-04652-5, Impact factor: **2.52**.
- ⇒ Shekhawat, S. S., **Verma, K.**, & Gupta, A. B. Status. (2020). Challenges and Future Prospects of Wastewater Reuse for Agricultural Irrigation in Developing Countries: A Mini Review. ACTA SCIENTIFIC AGRICULTURE (ISSN: 2581-365X) Volume 4 Issue 6, Impact factor: **1.18**.
- ⇒ Kumar PK, Krishna SV, Naidu SS, **Verma K**, Bhagawan D, & Himabindu V. (2019). Biomass Production from Microalgae Chlorella grown in Sewage, Kitchen Wastewater using Industrial CO2 emissions: Comparative study. Carbon Resources Conversion, 2(2), 126-133, https://doi.org/10.1016/j.crcon.2019.06.002.
- ⇒ Krishna SV, Kumar PK, **Verma K**, Bhagawan D, Himabindu V, Narasu ML, & Singh R. (2019). Enhancement of Biohydrogen Production from Distillery Spent Wash Effluent using Electrocoagulation Process. Energy, Ecology and Environment (Springer), 4(4), 160-165, https://doi.org/10.1007/s40974-019-00122-9, Impact Factor: **1.75**.
- ⇒ Saranga VK, Kumar PK, **Verma K**, Bhagawan D, Himabindu V, & Narasu ML. (2019). Effect of Biohythane Production from Distillery Spent Wash with Addition of Landfill Leachate and Sewage Wastewater. Applied biochemistry and biotechnology (Springer), 190(1), 30-43, doi:10.1007/s/2010-019-03087-x, Impact Factor: **2.9.**
- ⇒ Kumar PK, Krishna SV, **Verma K**, Pooja K, Bhagawan D, Srilatha K & Himabindu V. (2018). Bio-oil production from microalgae via hydrothermal liquefaction technology under subcritical water conditions. Journal of Microbiological Methods (Elsevier), 153, 108-117, doi:10.1016/j.mimet.2018.09,014, Impact Factor: **2.28.**
- ⇒ Kumar PK, Krishna SV, **Verma K**, Pooja K, & Himabindu V. Phycoremediation of Sewage Wastewater and Industrial Flue Gases for Biomass Generation from Microalgae. South African Journal of Chemical Engineering (Elsevier), 25, 133-146, doi:10.1016/j.space.2018.04.006, 2018, Impact Factor: **5.5.**
- ⇒ **K. Verma**, A.B. Gupta, Amit Singh "Optimization of Chlorination Process and analysis of THMs." *Journal Environmental Chemical Engineering (Elsevier)*, 10.1016/j.jece.2017.07.022, 2017, Impact Factor: **5.8**.
- ⇒ **K.** Verma, D. Gupta, A.B. Gupta, "Optimization of ozone disinfection and its effect on trihalomethanes." *Journal Environmental Chemical Engineering (Elsevier)*, Vol. 4(3), 3021-3032, 10.1016/j.jecc.2016.06.017, 2016, Impact Factor: **5.8**.
- ⇒ **K. Verma**, P. Shukla, A.B. Gupta, K.D. Gupta, "Hybrid disinfection of sewage effluent a comparative study of three secondary treatment plants of Jaipur, India." *Desalin. Water*

- *Treat.* (*Taylor & Francis*), Vol. 57(44), 20758-20765, 10.1080/19443994.2015.1110729, 2015, Impact Factor: **1.2**.
- ⇒ **K. Verma**, K.D. Gupta, A.B. Gupta, "A review on sewage disinfection and need of improvement." *Desalin. Water Treat.* (*Taylor & Francis*), 56(11), 2867-2871, doi:10.1080/19443994.9673, 2014 Impact Factor: **1.2**.
- ⇒ **K. Verma**, K.D. Gupta, A.B. Gupta, "Disinfection using chlorine with step doses", Res. Rev. J. Eng. Technol. 2 (2013) 282–286, ICE-WWISH, ISSN 23199873

Papers Published in Conferences

- ⇒ Kavita Verma*, Panga Kiran Kumar, S. Vijaya Krishna, Dr. V. Himabindu, and S. Rahul Kumar "Microalgae Biomass to Recover Value Added Products from Sewage (Review)" in "InDACON 2020, International Conference on Sustainable Technologies for Desalination & National Water Mission and Annual Congress of InDA" on 13-15 Feb, 2020, Indus University, Ahmadabad.
- ⇒ Kavita Verma*, Panga Kiran Kumar, S. Vijaya Krishna, Dr. V. Himabindu, "Microalgae Biomass to Recover Value Added Products from Sewage (Review)" in "9th International Colloids Conference" from June 16, 2019 to June 19, 2019 at Barcelona, Spain.
- ⇒ V. Tanwar, H. Mangla, M. Goyal and K. Verma, "Review on Drug Designing-Cannabinoids." *International Seminar on Recent Trends in Chemical Sciences: Global Prospective and Progress*, S.G.G. Govt. College, Banswara, Rajasthan, 28-29th Nov, 2016. ISBN: 978-93-5265-436-9.
- ⇒ D. Phagiwala and K. Verma, "A Review on Occupational Related Hazards" ICSSR Sponsored *National Conference on Environmental Pollution: Consequences and Control in Association with IAAPC*, ICG, Jaipur, Rajasthan, 7 to 8th Oct 2016.
- ⇒ K. Verma, P. Shukla, A.B. Gupta, K.D. Gupta, "Biological analysis and effect of disinfection on secondary treated effluent of RBC (MNIT), Jaipur." *The 3rd Environment Asia International Conference on "Towards International Collaboration for an Environmentally Sustainable World*", Thai Society of Higher Education Institutes on Environment, Thailand, 17-19 June, 2015.
- ⇒ K. Verma, P. Shukla, K.D. Gupta, A.B. Gupta "Comparative Study of U.V. and Chlorine Disinfection of Secondary Treated Sewage from Three Different STP of Jaipur, India." 47th Annual Convention of Indian Water Works Association, Kolkata, West Bengal, 30 1st Feb 20151.
- ⇒ K. Verma, K.D. Gupta, A.B. Gupta, "Development of advanced strategy to disinfect wastewater and its effect on THMs." *International Conference on Current Challenges in Drug Discovery Research (CCDDR)*, Jaipur, India, 30 Jan-1 Feb, 2015.
- ⇒ K. Verma, K.D. Gupta, A.B. Gupta "Hybrid Disinfection Technology for Secondary Treated effluent of STP" *National conference on Water and Sustainable Development*, World Water Day organized by IWWA, Jaipur and Department of Civil Engineering and Chemistry, VIT, Jaipur, 21st March 2015.
- ⇒ K. Verma, K.D. Gupta, A.B. Gupta, "An Advanced Disinfection Technology Using Chlorine as Step Dosing." *International Conference on Water Desalination, Treatment & Management*, INDACON, Jaipur, India, 21-22 Feb, 2013.

- ⇒ K. Verma, S. Shekhawat, K.D. Gupta, A.B. Gupta, "Disinfection using chlorine with step doses." *International Conference on Water, Wastewater and Isotope Hydrology*, Bangalore, India, 25-27 July, 2013
- ⇒ K. Verma, K.D. Gupta, A.B. Gupta, "Disinfection Using Chlorine Some Directions for Future," *National Conference on "Water Quality Management"*, NCWQM-12, Jaipur, India, 20-22 Dec, 2012.

Achievements and Accolades

- ⇒ Participated in several Webinars on Waste to Energy- 2020.
- ⇒ Received "International Travel Support from SERB-DST" to attend the International conference, 9th International Colloids Conference, 16-19 June, Sitges, Spain 2019.
- ⇒ Selected for participation in "3rd National Post Doc Symposium 2019, which was held from 10th to 13th December 2019, at IISER Pune, Maharashtra.
- ⇒ Research Ratna Awards 2019 for co-authored paper "Bio oil production from microalgae via hydrothermal liquefaction technology under subcritical water conditions", held at Trichy Tamilnadu, 2019.
- ⇒ Invited to present a paper in 9thIndo-German Frontiers of Engineering Symposium (INDOGFOE 2016) sponsored by the Department of Science and Technology, India, and the Alexander von Humboldt Foundation, Germany Humboldt Foundation, Germany, 2017.
- ⇒ Selected for a training program on "Proteomics Approaches for Women Scientists in Life Sciences" sponsored by DST, Government of India, New Delhi and organized by Banaras Hindu University, Varanasi, 2017.
- ⇒ Life member of Indian Desalination Association and BRSI.
- ⇒ Participated in Indo- Japan International Symposium on "Facilitating Interdisciplinary Biotech for Future Entrepreneurship" Aug 11-12, 2008 at Biyani Girls College, Jaipur.
- ⇒ Participated in U.G.C. sponsored state level seminar on "Recent trends in biotechnology in crop improvement and its Indian perspective".
- ⇒ Volunteer in NSS from 2005 to 2007 at Seth G. B. Podar College, Nawalgarh, Jhunjhunu.

Personal Details

Name: Dr. Kavita Verma

Nationality: Indian
Gender: Female
DOB: 27-09-1986
Status: Married

Father's Name: Mr. R.P. Verma Mother's Name: Mrs. Manju Verma Husband's Name: Mr. Alok Soni

Correspondence Address: Flat no 4077, Prestige Kensington, HMT Road, Jalhalli,

Bengaluru, Karnataka 560013

Permanent Address: 24, Dayal Nagar, Gopalpura Byepass, Jaipur, Rajasthan, 302015

References:

- 1. Dr. A. B. Gupta (Professor at Department of Civil Engineering, MNIT Jaipur, Rajasthan), abgupta.ce@mnit.ac.in.
- 2. Dr. V. Himabindu (Professor at Centre for Environment, JNTUH, Hyderabad), drvhimabindu@jntuh.ac.in