Academic Profile of Dr. (Mrs). Veena Kumara Adi

https://scholar.google.co.in/citations?user=ZbSZm6cAAAAJ&hl=enhttps://bietdvg.irins.org/profile/220782

https://www.researchgate.net/profile/Veena_Adi

MSc - Environmental Science - Gold Medalist.

PhD- Biosciences, CFTRI, Mysore.

PostDoc - Biochemistry, IISc Bangalore.

PostDoc - Cancer Biology, IIT-Bombay.

IAS- Bioinformatics - Summer Training at NCBS-TIFR, Bangalore.



1. Professional track:

Teaching:

- **Associate Professor & HOD**: (August 2025- till date) Dept of Biotechnology, Bapuji Institute of Engg and Technology (BIET) Davangere, Karnataka. <u>www.biet.dvg.edu</u>
- **Associate Professor:** (April 2021 July 2025) Dept of Biotechnology, Bapuji Institute of Engg and Technology (BIET) Davangere, Karnataka. www.biet.dvg.edu
- Associate Professor & HOD: (Jan 2021 April 2021) Dept of Biotechnology, BIET.
- **Associate Professor** (Dec 2014- Dec 2000), PG Dept of Environmental Sciences, Civil Engineering Dept, BIET.
- Assistant Professor: (Aug 2012 Nov 2014) Civil engineering Dept, BIET.
- Assistant Professor: (Nov 2006 August 2012) Dept of Biotechnology, BIET.
- **Visiting Professor:** (August 2004 Nov 2006), Padmashree Dr. D Y Patil Institute of Biotechnology and Bioinformatics, CBD Belapur, Navi Mumbai.
- Senior Lecturer: (August 2003 August 2004) Padmashree Dr D Y Patil Institute of Biotechnology and Bioinformatics, Nerul, Navi Mumbai.
- Guest Lecturer: (Dec 1993-July 1994) for post graduates (M.Sc) of Department of Environmental Science & Department of Life Sciences, **Kuvempu University**, Karnataka

Research:

- IAS-Summer trainee (May 2011- July 2011), with **Dr. Sowdhamini**, NCBS-TIFR, Bangalore. http://web_japps.ias.ac.in:8080/srfp2011/SelectedList.jsp?col=First_Name&sub=Lif&searchtxt=veena
- **DBT- Post Doctoral Fellow:** (May 2001- July 2003), with **Prof. Dulal Panda**, Molecular cell biology lab, Center for biotechnology, **IIT Bombay, Mumbai.** Project work "Molecular mechanism of action of Antiangiogenic drug 2-methoxyestradiol" http://www.bio.iitb.ac.in
- **CSIR-Research Associate:** (June 1999 September 2000) with **Dr. Ram Rajasekharan**, Dept of Biochemistry, **IISc, Bangalore**. Project worked on 'Isolation of lysophophotydile acylcholine transferase by photo-radio labeling technique'. http://biochem.iisc.ernet.in/
- **CSIR-Senior Research fellow:** (Jan 1996 May1999) with Dr. **NGK Karanth**, Dept of Pesticide infestation and Control, **CFTRI**, **Mysore**. Project worked on 'Fermentation studies on the production of pesticide specific biosurfactant for residue contamination in food'. http://www.cftri.com/
- **DBT- Junior Research Fellow**: (June 1994- Jan 1996) with **Dr. NGK Karanth**, Dept of Pesticide infestation and Control, **CFTRI**, **Mysore**. Project worked on 'MIcrobial Biosurfactants'. http://www.cftri.com/

2. Awards and honors:

- **Dale Carnegie certification** (2012) on High impact teaching skills.
- Indian Academy of Science awarded Summer Research Fellowship (2011) programme for teachers (2011)
- **DBT-Post Doctoral Fellowship** awarded by Govt of India 2001.
- CSIR-Senior Research Fellowship (SRF) Awarded by Govt. of India
- **DBT- Junior Research Fellowship** award from National environmental Engineering research Institute NEERI (premier CSIR lab), Nagpur, but declined to join.
- Qualified **GATE** (Graduate Aptitude Test in Engineering) conducted by IIT, Bombay.
- First Rank in M.Sc (Environmental Sciences) Degree, Kuvempu University, Karnataka.
- University Gold Medal from Kuvempu University.
- Merit Scolarship for consecutive 2 years by Kuvempu University, Govt. of Karnataka.
- **DG- CSIR Dr. RA Mashelkar appreciation certificate** for an outstanding showcase on Biosurfactant during the CFTRI showcase 1997.

3. Distinction and recognition:

- iGEM IIT Delhi (2023) is team of enthusiasts who want to disrupt technology through exploring and challenging their knowledge of synthetic biology. The team recognized Dr. Veena's Contribution to biosurfactants https://2023.igem.wiki/iit-delhi/ihp#prof-veena-kumar-adi IIT Delhi team's interaction with Prof. Veena (10-5-2023 to 30-9-2023) was aimed to explore the possibilities of introducing a bi-directional tunable promoter and to learn about its execution in the wet lab. Prof. Veena Kumar Adi's research on biosurfactants for addressing oil spills is highly promising. iGEM team was excited to learn from Dr. Veena's work and apply her feedback to their dry lab component of simulating the micelle formation around decane by biosurfactant.
- **Design your destiny (2018) competition:** Mentored a project on Bio-concrete which was shortlisted upto Zonal level (pre-final level) and own cash prize at state level competition co-organized by Skill India, National Skill Development Corporation, CADD Centre etc.
- Cardiopam that senses the heart: Mentored **a 3D design model project** which was short-listed for The Autodesk Inventor Student Design Competition (2011) co-organized by **Indian Institute of Technology** Madras in association with Autodesk, academic & industry partners from mechanical engineering & related disciplines to digitally design assistive and rehabilitation devices for people with any form of impairment.
- Convenor (2002-2004) during the inception of the UG and PG course), Board of studies for Design of curriculum and framing of syllabi and evaluation methods for B.Tech and M.Tech Biotechnology and Bioinformatics, DY Patil Deemed university, Navi Mumbai.

4. Academic credentials:

- Fellow Member, International Society of Biotechnology (FISBT).
- Life Member, Association of Microbiologist India.
- Life Member, Society of Biological Chemist.
- Life Member, ISTE.
- Member, Editorial Board "Research Journal of Biotechnology" Indore, INDIA.
- Referee for several national & international high indexed journal (Elsevier, Springer).
- Consultant Biotechnologies, Alaknanda Ghaati Shilpi Federation India http://aagaas.org

5. Academic - pedagogical exposure:

Courses offered to Postgraduates M Tech -Environmental Engg (2012 -2021) M Tech -Biotech & Bioinformatics (2003-2006)

Concepts of Biotech
Protein Purification
Biological techniques
Advanced Microbiology
Biological techniques
Applied chemistry
Advanced Microbiology
Environ. Impact Assessment
Air pollution & control
Non-Point Source pollution

Course offered to Undergraduates BE -Civil Engg (2012 to 2021)

BE -Biotechnology (2006-2012; 2021-Till date)

- Biomolecules - Agricultural Biotechnology - Regulatory affairs (BioIndustry) - Biochemistry - Downstream tech -Biokinetics & enzyme tech lab - Structural biology - Genetic Engg & application -Environmental Engg Lab - Enzyme technology - Cell biology and Genetics -Bioinformatics lab and - Upstream process tech - Lab to industrial scaling -Genetic Engg lab - Molecular biology - Microbial BT -Biochemistry lab - Microbiology - Solid waste management -Cell & molecular biology lab

- Environmental BT - Clinical & pharma biotech

Examiner ship of university / academic bodies: As paper setter and evaluator (both Theory and Practical exams) for UG / PG courses / Ph.D thesis for the following College / Universities.

- BVB Engineering College, Hubli.
- > BVV Sangha's Basaveshwara Engineering College (Autonomous), Bagalkot.
- > CSIR-CFTRI, Mysore.
- > MSRIT (Autonomous), Bangalore.
- Mysore University, Mysore.
- > NITTE, Mangalore.
- > Padmashree Dr DY Patil Vidyapeeth Deemed University, Mumbai. Maharashtra, India.
- > University of Horticultural Sciences, Bagalkot
- > Visvesvaraya Technical University (VTU), Belgaum, Karnataka, India

6. Area of expertise:

Extensive experience in rational/statistical design of experiments related to fermentation media optimization and process improvement - scale-up and scale-down experiments with regard to time management, strategic planning, decision making, standardizing, performing and troubleshooting - different techniques for the detection and remediation of environmental contaminants. Expertise in microbial production of metabolites with analytical techniques necessary for monitoring fermentation performance, downstream protein purification, protein analysis, HPLC and GC.

- **Protein chemistry:** Expression, analysis purification and, characterization.
- Molecular biology: DNA/plasmid extraction, analysis, cloning, PCR.
- **Microbiology:** Aseptic techniques, isolation & characterization of bacterial strains, enrichment studies, radiolabeling techniques.
- **Fermentation technology**: SSF, Smf, shake flasks; handling and troubleshooting of lab & pilot plant fermenters (stirred tank), packed column Bioreactors (– SSF)
- Environmental biotechnology: Biodegradation; bioremediation of xenobiotics.
- **Bioinformatics:** Homology modeling and drug docking.

7. Selected Workshops attended:

- ✓ "Training Program on VTU Consortium e-Resources" at UBDT college of Engineering, Davangere held on 23/10/2024.
- "Nanotechnological Applications in Food Packaging", Organized by DSLD College of Horticultural Engineering & Food Technology, Devihosur-Haveri, Karnataka (University of Horticultural Sciences, Bagalkot) on 16th July 2024.
- ✓ "Surfactants in Solution", 24th International symposium on hosted by BITS Pilani, KK Birla Goa Campus from 16th to 21st June 2024.
- ✓ "Implementation of NEP" organized by BIET in association with VTU between 10th Dec -12th Dec 2021.
- ✓ "Genome Engg and Technology" AICTE Training and Learning (ATAL) Academy, organized by MCA Dept and Dept of E and IE, UBDTCE, Davangere during 28th September to 2nd October 2020
- ✓ "Immunity enhancing Medicinal Plants to combat Covid-19 pandemic with special reference to Siddha System" Webinar conducted by Mount Carmel Autonomous College on June 4th 2020.
- ✓ "Laboratory and Ergonomic Safety for Engineers" CE & QIP short term course between 10th -14th June 2019 at IIT Bombay.
- ✓ "Recent Trends in Environmental Impact Assessment- Process and Procedures (RTEIA-PP)"FDP programme organized by BIET and KSPCB, Institution of Engineers, Davanagere between 17th Jan to 19th Jan 2019.
- ✓ "Human Body as a complex system" on 12th August 2014 at IISc Bangalore
- ✓ "Safeguarding of Intellectual Property Rights" in Oct 2012 at NAL, Bangalore.

8. Delivered invited talks as resource person in workshop / symposium / conference:

- 1. On "Riding the Green Tide: The Role of Biosurfactants in Environmental Restoration." to the Faculties and Students of Biomedical Engineering & Science Dept, Florida Institute of Technology, Melbourne, Florida USA, on 27th September 2024.
- 2. On "Surfing the Green Wave: Biosurfactants as key players in Environmental Restoration" during 24th International symposium on SURFACTANTS IN SOLUTION, hosted by BITS Pilani, KK Birla Goa Campus Goa on 19th June 2024.
- 3. On "My dinner plate!! Food fraud???" during the occasion of 'World Food Day' program celebrated at Danavir Sirasangi Sri Lingaraj Desai College of Hortl. Engg. & Food Technology (DSLD-CHEFT), Devihosur-Haveri-581 110 on 22nd Oct. 2022.
- 4. On "**Transposons the jumping genes**" during the one day special lecture organized by Department of Zoology on the occasion of 200th Birth Anniversary of GJ Mendel, at Government First Grade College, Davangere on 20th August 2022.
- 5. On "Role of Bioinformatics in Cancer Treatment" under AICTE Training and Learning (ATAL) Academy, AICTE sponsored five day workshop on "Bioinformatics for Engg and Medicos" organized by MCA Dept and Dept of E and IE, UBDTCE, Davangere during on 1st October 2020.
- 6. Invited by Dept of Biotechnology, MSRIT as subject expert to suggest/observe/comment and review it's BE Biotechnology curriculum March 2016.
- 7. On "Best Management Practices to handle water pollution", at Hamara Jal Hamara jeeva, a nation-wide programme, organized by Dept of Irrigation, at DC office Davangere on February 7th 2015.
- 8. On "**Bioinformatics aiding Health Care**" at a Faculty Development programme (FDA 2014) organized by Electronics & Instrumentation Department, University BDT college of Engineering, Davangere during 23rd -26th July 2014.

- 9. On "Homology Modelling of beta tubulin": At a National Seminar on "Intelligent computing in Biological Sciences (ICIBS 2012)" organized by Padmashree Dr. D Y Patil University, Navi Mumbai. 19th 20th March 2012.
- 10. On "Nurse-informatics" at Bapuji Institute of Nursing, Davangere on 2nd May 2012.
- 11. On **Molecular biology and Genetic Engineering:** A series of lectures at KLE Engineering College (M Tech Bioinformatics) during Dec 2011.
- 12. On **Modelling Biomolecules**": At 6th International conference on Hands-on science (HSCI 2009) Science for all (Hsci2009.org.in): Quest for excellence" held at Science city, Ahmedabad, (Gujarat) India.
- 13. On "Tubulin and their inhibitor": At a National conference on Diabetes and Cancer, at Annamalai University during Dec 2009. Tamilnadu, India.

9. R & D project:

Over the years, I have made several sincere and well-prepared attempts to secure research funding from various national agencies.

In 2012–13, my project proposal was considered for funding of ₹15 lakhs under the AICTE-RPS Scheme (F.No. 20/AICTE/RIFD/RPS (Policy-1)67/2012-13). However, the grant was not released as my host department, Biotechnology, did not offer a PG program at the time.

In 2013, my proposal (MRP-MAJOR-ENVI-2013-5535) was recommended for a research grant of ₹15.85 lakhs under the UGC-Major Research Project scheme. Unfortunately, in December 2015, the award was withdrawn as my institution, Bapuji Institute of Engineering and Technology, Davangere, was not then recognized under Sections 2(f) and 12(b) of the UGC Act. In the same spirit, I submitted a project to BRNS and was shortlisted for presentation at BARC, Mumbai, in 2015. Despite reaching the final stage, the proposal was not selected for funding.

Another proposal submitted in 2015–16 under the Environmental Research Programme (EnvRP) of the Ministry of Environment, Forest and Climate Change, with a budget of ₹37 lakhs, was considered but not funded, citing concerns over environmental contamination.

Most recently, in 2022, I submitted a ₹30 lakh project proposal to VGST and was invited for a presentation. While the proposal was appreciated, the committee suggested the inclusion of a specific pesticide, and the project was not recommended for funding.

As a dedicated researcher, I continue to pursue funding opportunities with commitment and optimism. I remain hopeful that my sustained efforts will eventually result in meaningful support for impactful research.

10. Selected Research Publication:

A: In Peer reviewed international journals:

- 1. **Veena Kumara Adi*** and Rakesh (2024). "Freundlich Adsorption Conformance For The Adsorption Of Methylene Blue From Synthetic Textile Effluent Using Activated Carbon Derived From Parthenium Hysterophorus". *Journal of Technology*, (Scopus indexed) Vol 12, Issue 11, pp 875-899. https://DOI:18.15001/JOT.2024/V12I1.24.953.
- 2. **Veena Kumara Adi***, Shreyas S, Ojas Band Basavaraj RP (2024) "Unlocking the potential of Biosurfactant for sustainable agriculture: Reviving Mined Soil and Enhancing Plant Growth" *Journal of Technology*, (Scopus indexed) Vol 12, Issue 5, pp 115-134. https://DOI:18.15001/JOT.2024/V12I5.24.3254.
- 3. Jayalatha, Ashish P and **Veena Kumara** Adi* (2023). "Assessing the Potential of Biosurfactant Production by *Bacillus subtilis* MTCC 2423 to Remediate the Zinc Contaminated Soil: A Process Optimization Approach" in *Arabian Journal for Science and Engineering* Springer Nature publication, (Scopus indexed). https://doi.org/10.1007/s13369-023-07938-y.
- 4. **Veena Kumara Adi** (2023) Development of sustainable microbial coalesce bio-cement mortar blended with powdered seashells. *The Indian Concrete Journal*. (Scopus Indexed),

- ISSN: 00194565 Jan, Vol 97, No. 1. pp 21-30. www.icjonline.com/editionabstract_detail/012023
- 5. **Veena Kumara Adi*** and Swarnagouri Naganathanhalli (2022). Insights into HOX Genes and its effects on Sarcoma. Journal of Emerging Technologies and Innovative Research (JETIR) August, Volume 9, Issue 8 (ISSN-2349-5162). Pp d300-326. http://doi.one/10.1729/Journal.31314
- 6. Suchitra and **Veena Kumara Adi***(2021) Reclamation of Abandoned Mine Soil Using Biosurfactant. *International Journal for Research in Applied Science and Engineering Technology (IJRASET)*, ISSN: 2321-9653 Sep,Vol 9, pp 23-28. https://doi.org/10.22214/ijraset.2021.373
- 7. Suchitra, Shwetha. S and **Veena Kumara Adi*** (2021) Reclamation of Abandoned Mine Soil: A Review on Properties and Remediation Techniques. *International Journal for Research in Applied Science and Engineering Technology (IJRASET*), ISSN: 2321-9653, Sep Vol 9, pp 9-21 https://doi.org/10.22214/ijraset.2021.37394
- 8. Shwetha and **Veena Kumara Adi*** (2021) Utilization of Abandoned Mine Soil in Making Bricks to Be Used for Construction Activity. *International Journal for Research in Applied Science and Engineering Technology (IJRASET)*, ISSN: 2321-9653, Vol 9, Issue IX, Sep, pp 1-8, ISSN: 2321-9653, Vol 9, pp 1-8. https://doi.org/10.22214/ijraset.2021.37393
- 9. Shashikumar P M and **Veena-Kumara-Adi*** (2019). Adsorption & Statistical Analysis of Textile Effluent Contaminated with Congo red On Orange Peel. *International journal of innovative technology & exploring engineering (IJITEE)* ISSN: 2278-3075, Vol-8, Issue 10, Aug, pp 2607-17.
 - https://www.ijitee.org/wpcontent/uploads/papers/v8i10/J93440881019.pdf
- 10. Nayana KS and **Veena Kumara Adi*** (2019). Clarification of water using *Moringa oleifera* as a coagulant. *International Research Journal of Engineering and Technology (IRJET)*, Vol 6, Issue 7, July, ISSN: 2395-0056 pp3076-3083. https://www.irjet.net/archives/V6/i7/IRJET-V6I7467.pdf
- 11. **Veena-Kumara-Adi*** and B.K. Savitri (2019). Utilization of spent wash for optimum production of biosurfactant using response surface methodology, J. *Mater. Environ. Sci.*, ISSN: 2028-2508, Vol 10, issue 4, May, pp 298-304. http://www.jmaterenvironsci.com/Document/vol10/vol10_N4/31-JMES-Adi-2019.pdf
- 12. **Veena Kumara Adi***, B Keerti and Ashish Prabhu (2018) Sorption of copper on rice husk and coconut husk: a statistical optimization approach. *International Journal of Recent Scientific Research Research* **9**(5), pp. 26688-26692. ISSN: 0976-3031 DOI: http://dx.doi.org/10.24327/ijrsr.2018.0905.2104
- 13. **Veena Kumara Adi*** and Suhasini S (2018). "Evaluation and performance of sand packed column deploying bentonite clay for rapid adsorption of rhodamine b from aqueous solution", *Int J of Latest Trends in Engg and Tech*, ,Vol 10 Issue 3 May, ISSN: 2319-3778, pp. 215-220. https://www.ijltet.org/journal/152820362437.%202517.pdf
- 14. Jayalatha N. A and **Veena Kumara Adi*** (2017). Seasonal variations in physico Chemical Characteristics of water quality of gurupura River in mangalore, south coast of india) *International Journal of Applied Science & Technology Research Excellence*. Vol. 7 Issue 3, May-June 2017, ISSN NO.2250-2718. pp. 11-19. http://ijastre.org/images/stories/vol7is3/3.pdf
- 15. Jayalatha N. A and **Veena Kumara Adi*** (2017). "Restoration of Physico-Chemical Properties of Zinc Contaminated Soil by Bacterial Biosurfactant" in *International Journal of Current Trends in Science and Technology*, ISSN 0976-9730 Vol. 7, no. 10, pp. 20329-20335. https://doi.org/10.15520/ctst.v7i10.59
- 16. Shukla C and **Veena Kumara Adi*** (2017). "Modeling of Lead Adsorption on Low Cost Adsorbents By Response Surface Methodology"in *International journal of advanced scientific and technical research*, Vol 5, Issue 7, pp. 35-48. ISSN 2249-9954, https://doi.org/10.26808/rs.st.i7v5.03

- 17. **Veena Kumara Adi***, Veena D.V and Jayalatha N. A (2016). "Physico-Chemical Analysis of Packaged Mineral Water Bottles Floating In and Around Central Karnataka" in *Journal of Applicable Chemistry*. ISSN: 2278-1862, Volume 5, Issue 5, pp.1191-1198. http://www.joac.info/ContentPaper/2016/4-20.pdf
- 18. **Veena Kumara Adi***, Meghana CV and Veena DV (2016). Bacteriological Quality Assessment of Street Vended Panipuri and Fruit Juices: A Case Study of Davangere City. *Research & Reviews: Journal of Food Science & Technology* ISSN: 2278-2249(online), ISSN: 2321-6468(print) Vol 5, Issue 2, pp.18-25.
- 19. Naveen Kumar MS, Nikhil B, Nikhil Patel AR, Nagaraja R and **Veena Kumara Adi*** (2016) "Experimental studies on clay tile powder as partial replacement of cement for sustainable concrete" in *International Journal of Engineering Trends and Technology*, ISSN: 2349-0918. Volume 36 No 1- (June) pp 50-53. http://www.ijettjournal.org/2016/volume-36/number-1/IJETT-V36P210.pdf
- 20. Veena D V, Jayalatha and **Veena Kumara Adi*** (2016) "Water quality index of Bangalore's Battrahalli Lake" in *World Journal of Pharmacy and Pharmaceutical Sciences* ISSN 2278-4357. Vol 5, (2), pp 491-506.
- 21. K G Adi, PV Rao, **Veena Kumara Adi*** (2015) "Analysis and detection of cholesterol by wavelets based and ANN classification" in *Procedia Materials Science*, ISSN: 2211-8128, Elsevier publications Vol 10, pp 409-418. https://doi.org/10.1016/j.mspro.2015.06.074
- 22. Mamatha Thakur and **Veena Kumar Adi*** (2015) "Ground water studies in and around shantisagar Lake Channagiri Taluka region, Karnataka, India" in *Pollution Research* ISSN: 0257-8050.Vol 34 (3); pp 527-534.
- 23. M.C.Shainy and **Veena Kumara Adi*** (2014) "Isolation of Endosulphan Metabolising bacteria from cashew plantations of Kannur district (Kerala)" in *International Review of Applied Biotechnology and Biochemistry*, ISSN: 2248-9886 Vol 2, No 1, pp 59-64.
- 24. **Veena Kumara Adi*** and Karnath NGK (2014) "Optimization of process conditions for pesticide specific bioemulsifier production in laboratory fermentor" in *World journal of environmental pollution*, ISSN: 2222-1360 Vol. 4, No 1, pp 01-06.
- 25. Ronak M, Sachith K, Jegarkal, Rashmi S, Ravi K.H. N, Veena Kumara Adi* (2014) "Effect of Marble Sludge Powder & Quarry Rock Dust as Partial Replacement for Fine Aggregates on Properties of Concrete" in *International Journal of Innovative Technology & Exploring Engineering*, ISSN: 2278-3075, Vol 4(1), June. pp 39-42.
- 26. Sushma Havanur and **Veena Kumara Adi***. (2014) "Spice based treatment to increase the shelf life of Paneer Clove a promising spice" in *The Journal of Microbiology, Biotechnology and Food Sciences*. ISSN: 1338-5178. Vol 3, no.6. pp 463-466.
- 27. Chellasamy Selvaakumar, Kirolikar Pravin Saurabh, Borgaonkar Swaranshu Pramod, and **Adi Kumara Veena*** (2010) "Mutational analysis of MLH1 protein in Hereditary Nonpolyposis Colorectal Cancer- 2" in *Research Journal of Biotechnology*. ISSN: 0973-6263 Vol 5 (4), Nov, pp. 26-29.
- 28. **Veena Kumara Adi NK*** and Karanth NGK (2008) "Scanning Electron Microscope studies on wheat bran fortified with Fenthion, An OP Pesticide". *Asian Journal of Microbiology Biotech & Environ Science*. ISSN: 0972-3005, Vol 10, no 3, pp.505-508.
- 29. **Veenandig NK***, Gowthaman MK and Karanth NGK (2000) "Scale up studies for the production of biosurfactant in packed column bioreactor". *Bioprocess Engineering*, Elsevier publication, ISSN:1369-703X Vol. 22, No 2 / Feb, pp. 95-99
- 30. Karanth, NGK and Deo, PG and **Veenanadig, NK*** (1999) Microbial production of biosurfactants and their importance. *Current Science* ISSN: 0011-3891 Vol. 77 No 1, July. pp. 116-126.
 - *Corresponding author

B: In Peer reviewed Edited Book:

- 31. **Veena Kumara Adi** (2009) "Elucidating and Teaching the structure of DNA to biology students" Proceedings of the Proceedings of the 6th International Conference on Hands-on Science. Science for All. Quest for Excellence October 2009 Publisher: Science City Editor: M.F. Costa, B.V. Dorrío and M.K. Patairiya ISBN: 978-989-95095-5-9
- 32. **Veena Kumara Adi** (2009) "Cancer Perspective: Microtubulin and its inhibitors". In Diabetes Mellitus and Cancer, Excel India publishers. **ISBN: 978-93-80043-56-2.**
- 33. **Veena Nadig NK** (1998) "A Case study of an irrigational project- Impact of Upper Tunga Project" in Environmental Impact Assessment & Management Edited- Hosetti and Kumar, Daya Publishers, New Delhi **ISBN 10: 8170351820 / ISBN 13: 9788170351825.**

C. Abstracts in referred International conference (posters / proceedings):

- 34. Lavanya V A and **Veena Kumara Adi** (July 19 21, 2023). "Production of Biosurfactant on a typical carbon, distillery wash" at International Conference on Sustainable and Applied Nanotechnology for Agriculture and Health (SANTHA), IIT Madras, India. https://ge.iitm.ac.in/santah/
- 35. Priya S and **Veena Kumara Adi**. (July 19 21, 2023). "Revitalizing Mine Soil Properties through Biosurfactant-Assisted Restoration: A Sustainable Approach towards Ecosystem Rehabilitation". At International Conference on Sustainable and Applied Nanotechnology for Agriculture and Health (SANTHA), IIT Madras, India.
- 36. Vinay SP and **Veena Kumara Adi** (July 19 21, 2023). "Enhancing Plant Growth in Mine Soil through Biosurfactant formulation: A Promising Approach for soil Remediation" at International Conference on Sustainable and Applied Nanotechnology for Agriculture and Health (SANTHA), IIT Madras, India.
- 37. Shukla and **Veena Kumara Adi** (14-16 September 2017), "Modeling of Lead adsorption from aqueous solutions by coir pith and peanut shell using response surface methodology" ICETCS 2017, held at Manipal Institute of Technology, Manipal University -576104.
- 38. Keerthi and **Veena Kumara Adi** (14-16 September 2017), Application of Response surface methodology (Box-Behnken Design) for copper adsorption by agro waste" at ICETCS 2017, held at Manipal Institute of Technology, Manipal University -576104.
- 39. Meghana CV and **Veena Kumara Adi** (21st 24th Nov 2016). "Bacteriological quality assessment of street vended Panipuri A case study of Davangere city" at SBC meet held at CFTRI Mysore.
- 40. Veena D V., Jayalatha NA and **Veena Kumara Adi** (20th 22nd Dec 2015) "Water quality index of Bangalore's Bhattrahalli Lake" in ICACE 2015 at NITK Surathkal, Mangalore.
- 41. K G Adi, PV Rao, **Veena Kumara Adi** (17-18 Oct 2014) "Analysis and detection of cholesterol by wavelets based and ANN classification" at an International Conference on Nanomaterials and Nanotechnology, (CNT 2014) organized by Vardhaman College of Engineering, Shamshabad, Hyderabad, India
- 42. Shainy MC and **Veena Kumara Adi** (4 5 September 2014) "Isolation of endosulphan metabolizing bacteria from cashew plantations of Kannur district (Kerala") at an International Conference on Recent Advances in Engineering Sciences 2014 (ICRAES 2014) held at M.S. Ramaiah Institute of Technology, Bangalore
- 43. **Veena Kumara Adi** (Oct, 2009) "Elucidating and Teaching molecular biology to science graduates" at 6th International conference on Hands-on science (HSCI 2009) Science for all: Quest for excellence" held at Science city, Ahmedabad, (Gujarat) India.
- 44. K Saurabh P, Swaranshu B, Selvaa K C, **Veena Kumara Adi** (**19-20 December 2008**), Genomic and proteomic analysis of the MLH1 gene: Hereditary nonpolyposis colorectal cancer-2 at an International symposium on Novel strategies for targeted prevention and treatment of Cancer JNU, New Delhi, India
- 45. Veena Kumara Adi and Karanth NGK (15-19th Dec, 2008) "Sequential disintegration of

- wheat bran fortified with Fenthion by Bacillus subtilis" at 6th International food convention-Newer challenges in food science & tech Industrial Perspective - IFCON 2008, CFTRI, Mysore.
- 46. Aishwarya S, Deepa GB, Spurthi HG, **Veena Kumara Adi** (**Nov 6-8, 2008**) "Bioprocess development for Biosurfactant production. At 3rd International Congress on Bioprocesses in Food Industries (ICBF) & 5th Convention of Biotech Research Society of India (BRSI) at Osmania University, Hyderabad, INDIA.
- 47. **Veena Kumara Adi** (October 2008) "Pesticide Specific Biosurfactant from Wheat Bran", at the Industrial Applications of Renewable Resources: A Conference on Biobased Technologies held October 13–16, 2008, in Cincinnati, Ohio, USA.
- 48.**Veena Kumara Adi** (September 2008) "Biosurfactants production in Smf and SSF" at SIS 2008, 17th international symposium on surfactants in solution, at Max-Planck Institute of colloids and interfaces- Am Muhlenbeg 1, 14476 Golm, Germany.
- 49.**Veena Kumara Adi** (Nov 2007) "Biosurfactant a pesticide container cleaning agent" at 4th international conference on environmental education (ICEE) at Ahmedabad, India
- 50. **Veena Kumara Adi** (Nov 2007) "Scale up studies (Smf) on the production of pesticide specific biosurfactant" selected for presentation at II international conference in environmental industrial and applied microbiology "Biomicroworld 2007" Seville- Spain. However, **could** not attend due to lack for financial support for travel and registration.
- 51. **Veena Kumara Adi** & Karanth NGK (September 2007) "Biosurfactant- a novel tool for pesticide abatement" selected for presentation at 14th International symposium on Health-related water Microbiology "Watermicro 2007" at Tokyo, Japan. However, could not attend due to lack for financial support for travel and registration.
- 52. **Veenandig NK.,** Akmal Pasha and Karanth NGK* (Nov 1998) "Analysis of Carbofuran insecticide by derivatization using O,O-diethyl Chlorothiophosphate" at 4th international food convention (IFCon-98) held at CFTRI, Mysore, in 23-27, 1998 November.

D. Abstracts in referred National conference (poster / proceedings):

- 53. Lavanya KM and **Veena Kumara Adi** (23-4-2024) "Exploring Co-evolutionary Dynamics between Heliconia flowers & Sunbirds: A Phylogenetic Analysis" at BioChess 2024, National conference organized by Dept of Biotechnology and Chemical engineering, held at Siddaganga Institute of Engineering and Technology, Tumkuru.
- 54. Rudresh S U, Saathvi C S and **Veena Kumara Adi** (23-4-2024) "Bioinformatics insights of organic dyes binding to fibroin (silk) protein" at BioChess 2024, National conference organized by Dept of Biotechnology and Chemical engineering, held at Siddaganga Institute of Engineering and Technology, Tumkuru. **Bagged the best presentation award and cash prize award.**
- 55. Vinay S P, Priya S and **Veena Kumara Adi** (23-4-2024) Docking-based validation of selected pigments on annexin protein: bridging theory and practice" at BioChess 2024, National conference organized by Dept of Biotechnology and Chemical engineering, held at Siddaganga Institute of Engineering and Technology, Tumkuru.
- 56. Jayalatha N. A and **Veena Kumara Adi** (28 30th December 2016) "Seasonal variations in physico-chemical characteristics of water quality of Gurupura river in Mangalore, south coast of india" at Lake 2016:Conference on Conservation and Sustainable Management of Ecologically Sensitive Regions in Western Ghats the 10th Biennial lake conference Organized by IISc., http://ces.iisc.ernet.in/energy
- 57. Sandhya V and Veena Kumara Adi (15th 16 Oct 2015)" Biosurfactant enhanced bioremediation of soil artificially contaminated with spent engine oil" at UGC sponsored National conference on Recent trends in waste management" held at KLE Haveri. **Bagged the best presentation award.**
- 58. Aishwarya and Veena Kumara Adi (Oct 2009) "Coriander: Reasonably a rich source of

- catalase" at 78th Annual conference of, society of biological chemists (India) –Society of Biological chemist (India) held at NCBS, Pune 411007 Maharastra.
- 59. **Veena Kumara Adi** (2009) "Microtubulin and its inhibitors" in conference on Diabetes cancer (Dia-Can 2009) held at Annamalai University, Chidambaram.
- 60. Karanth NGK and **Veena Kumara Adi** (Dec 2007) "Wheat bran as an excellent substrate for biosurfactant production" in Annual conference of Association of Microbiologists of India (AMI) at IIT Madras, Chennai, India.
- 61.**Veena Kumara Adi** and Karanth NGK (Nov 2007) "Scanning electron microscope (SEM) studies of biosurfactant producing bacillus strain" presented at 76th Annual meeting of the society of biological chemists –SBC held at Sri Venkateshwara University Tirupati.
- 62. **Veenanadig NK** Gowthaman MK & Karanth NGK (Nov 1998) "Production of Fenthion dispersing biosurfactant in solid state fermentation using Packed column bioreactor" held at National Conference on "Role of Microbes for Bioremediation" organised by Punjab University, Chandigarh, India.
- 63. **Veenanadig NK** & Karanth NGK (Dec 1997) "Rapid and reliable methods for detection and determination of Emulsifier/surfactants in microbial cultures and fermentations" at Annual Conference of the Society of Biological Chemist (India), held at Andhra University, Vishakapatnam, Andhra Pradesh, India
- 64. **Veenanadig NK** & Karanth NGK* 1996) "Production of Biosurfactant through Solid State Fermentation by Fenthion degrading Bacillus subtilis sps" at Annual Conference of AMI, held at IIT Madras, Tamil Nadu, India
- 65. **Veenanadig NK**, Anu Appaiah KA & Karanth NGK* (March1995) "Kinetics of Surfactant from Bacillus subtilis" at the National symposium Relevance of Biotechnology", held at Dept of Biotechnology, Cochin, Cochin, Kerala, India.

11. Selected List of M Tech Projects guided

- A study on reclamation of abandoned mine soil using biosurfactant.
- Feasibility study on utilization of abandoned mine soil in brick preparation.
- Adsorption optimization of methylene blue dye by acid activated Parthenium carbon
- Statistical analysis of congo red dye adsorption on orange peel.
- Clarification of water using Moriga olifera as a coagulant.
- Evaluation and performance of sand packed column deploying bentonite clay for rapid adsorption of Rhodamine b from aqueous solution.
- Adsorption of fluoride by different leaf powder.
- Modeling of Lead adsorption from aqueous solutions by coir pith and peanut shell using response surface methodology.
- Application of Response surface methodology (Box-Behnken Design) for copper adsorption by agro waste.
- Efficiency of Biosurfactant in the bioremediation of copper contaminated soil.
- A study on the application of Box-Behnken Design for bioremediation of Zinc Contaminated soil using Biosurfactant.
- · Bioremediation of oil contaminated soil.
- Production and optimization of a biosurfactant on spent wash using design expert software.
- Study on the quality of groundwater in and around Shanthisagar Lake.
- Study of non-point source pollution of Avaragere Lake, Davangere.
- Bacteriological quality assessment of street vended panipuri and fruit juices-a case study of Davangere city.
- Performance evaluation of ETP in rayon grade pulp mill Grasim Harihara a case study.

12. References:

Dr. Gowthaman, (Retd Senior Principal Scientist, CFTRI, Mysore and CLRI, Chennai) 5, Bhatia Palace II Flr, Ranjit Road, Kotturpuram, Chennai 600085 TN

Phone number: 9840264014, mkgowthaman@yahoo.com

Dr Anu Appaiah KA, (Rtd Scientist CSIR- CFTRI, Mysore).

1286, 15th A cross Roopanagar Mysore 570026.

Phone: 9342674407, anuapps@yahoo.com

Dr. Amitha Rani, (Rtd Scientist CSIR-NAL, Bangalore.) #003, Ferns city Rd, Marathalli ORR, Bangalore-560037. Phone number: 9481025441, amitharani@yahoo.com

13. Hobbies and Passion

Flair for Sports:

Actively participated in several state-level sports meets during college, earning multiple awards in both individual and team events.

Accomplished Carnatic Musician – Veena Artist:

Trained in classical Carnatic music, both vocal and instrumental (Veena). Regular performer with a deep commitment to the art. Watch Performance

Passionate Gardener:

Dedicated to nurturing a vibrant home garden featuring over 250 plant species—ranging from ornamental and flowering to aquatic, terrestrial, and medicinal varieties. <u>View Garden</u>

Dr. Veena Kumara Adi is the proud daughter of the Late Smt. Seetha Lakshmi and the Late Er. N. S. Krishna Murthy, Retired Divisional Engineer, P&T Department, Government of India. Raised in a family rooted in Indian values and culture, she carries forward those traditions in both her personal and professional life.

She is happily married to **Dr. Kumara Ganapathi Adi**, Professor in the Department of Electronics and Instrumentation at UBDTCE, Davangere. Together, they are proud parents of two talented sons.

Yashas Kumara Adi (born in 2002) graduated in July 2024 from the Electronics and Communication Engineering program at PES University, RR Campus, Bangalore. He qualified the GATE examination and is currently pursuing his Master's in VLSI. Alongside his academic excellence, Yashas is an accomplished sportsperson and musician. He has been the Shuttle Badminton Champion at PESU and also won the Bangalore Amateur League. Currently, he plays for the VIT University team. A trained Carnatic vocalist under Vid. Sri Dwarkish and Mridangam artist under Vid. Sri Ravishankar Sharma, Yashas also enjoys playing the keyboard and flute. He has delivered several stage performances and earned numerous accolades. Additionally, he is an enthusiastic and skilled home chef.

Shreyas Kumara Adi (born in 2005) is an aspiring computer technologist with a strong passion for cybersecurity. He actively participates in "Capture the Flag" (CTF) competitions—prestigious global cybersecurity contests—and has achieved commendable national and international rankings. As a school student, he ranked among the top 50 in the 2020 Amrita InCTF Junior Contest. He is currently pursuing Computer Science Engineering at KLE Technological University (BVB), Hubli, and has been selected

for the prestigious "Samsung Prism" internship program. A badminton player and a Carnatic violinist, Shreyas has represented BVB Hubli as a violinist at "Mood Indigo," the renowned cultural fest of IIT Bombay. He remains deeply committed to continuing his musical journey.