

**Dr. H. VAJIHA BANU**  
M.Sc., M. Phil., DMLT, Ph.D.

**ASSISTANT PROFESSOR  
MICROBIOLOGY**

**Personal Profile**

Father's Name : K. Habeeb Mohamed  
Date Of Birth : 30th June 1979  
Nationality : Indian  
Sex : Female  
Marital Status : Married  
Passport Number : G9383714

**ADDRESS**

No. 17/76, Renga Nagar 2<sup>nd</sup> street,  
Near Sundar Nagar Bus Stop,  
Hostel Stop,  
Tiruchirappalli – 620 021

**MOBILE:**

097895 68224

**GOOGLE SCHOLAR ID :**

<https://scholar.google.com/citations?user=Ps40kIIAAA&hl=en>

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**SUMMARY**

Deft at conducting basic research and isolating and maintaining cultures of Microorganisms and Bioremediation. Dedicated to becoming a successful professional in the field of Research and Microbiology.

**EDUCATIONAL PROFILE**

**Ph.D (Microbiology)** from Sengamala Thaayar Educational Trust Women's College, Mannargudi, Tamil Nadu. Feb'18. Highly Commended.

**M.Phil., (Bio-Technology)**, from Bharathidasan University, 2005 – 2006, First Class (78%).

**M.Sc., (Microbiology)**, from Sengamala Thaayar Educational Trust Women's College, Mannargudi, Tamil Nadu, 1999 – 2001, First Class (77.3%).

**B.Sc., (Microbiology)**, from Shrimathi Indira Gandhi College, Trichy, Tamil Nadu, 1996 – 1999, First Class (60.3%).

**HSc** : St. Philomena's Girls Higher Secondary School (65.75%).

**SSLC** : St. Justin Girls Hr Sec School. Palakurichy, (73.8%).

**PROFESSIONAL EXPERIENCE**

- ✚ About 16 years of teaching experience as an Assistant Professor in the field of Microbiology.
- ✚ About 2 years of experience as Faculty in field of Software Testing and Bio-Tech- Pune.

**RESOURCE PERSON**

- ✚ Provided a Guest Lecture on 'Recent Trends in Bioscience' at Srinivasan College of Arts and Science, Perambalur on Jan'2018.

**BOOK PUBLISHED**

- Published 3 books at LAP LAMBERT Academic Publisher
- ✚ Microbiological Studies on Diabetic Wound (ISBN: 978-3-8456-9750-7)
  - ✚ Bacteriostatic Potential on *Oscillatoria limosa* from River (ISBN: 978-3-8465-2884)
  - ✚ Immunology (ISBN: 978-3-8484-0710-1)

**AWARDS**

- ✚ Received appreciations for NPL-Based Faculty Empowerment Programme organized by IQAC held on 17, 19 & 20 June-2017 at Jamal Mohamed College, Tiruchirappalli.
- ✚ Received appreciations and awards for the service in Exnora and Youth Exnora International held on Dec'15/2016 at Tiruchirappalli.

## **BOOK CHAPTERS**

- ✚ Published a book chapter title “Postbiotic Food Packaging Based on Organic Acids” in the edited book Springer Protocol Postbiotics (ISBN: 978-1-0716-3420-2) 2023
- ✚ Published a book chapter title “UHPLC- and MS/MS-Mediated Analysis and Quantification of Postbiotic Cobalamin (Vitamin B12) from *Propionibacterium freudenreichii*” in the edited book Springer Protocol Postbiotics (ISBN: 978-1-0716-3421-9) 2023
- ✚ Published a book chapter title “Degradation of Chlorpyrifos Pesticide Using a Postbiotic Enzyme of Lactic Acid Bacteria” in the edited book Springer Protocol Postbiotics (ISBN: 978-1-0716-3420-2) 2023.
- ✚ Mohamed, V.B.H., Pasumalaiarasu, S., Parangusadoss, K. (2023). Isolation of Toxins Producing Cyanobacteria from Aquatic Sample with Schizothrix. In: Thajuddin, N., Sankaranarayanan, A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin . Springer, Singapore. [https://doi.org/10.1007/978-981-99-4514-6\\_14](https://doi.org/10.1007/978-981-99-4514-6_14)
- ✚ Published a book chapter title “Modern-day medicine: An integration of technology and biomedical, presenting its future vision” in the edited book Futuristic Trends in Medical Sciences. (ISBN: 978-93-95632-92-8) 2022

## **ONLINE CERTIFICATION COURSE**

- ✚ Completed online certification course entitle Applied Environmental Microbiology at NPTEL portal by Govt. of india on **January 2020**

## **COMPUTER SKILLS**

- ✚ MS Office Softwares : Microsoft Word, MS Excel.
- ✚ Programming Softwares: C, C++

## **TECHNICAL PROFILE**

- ✚ Diploma in Medical Lab Technology (DMLT)
- ✚ Type Writing Lower (English) operating Systems: Windows 7 and 10

**PROFESSIONAL TEACHING WORK EXPERIENCE** : 16 years

**TECHNICAL WORK EXPERIENCE** : 2 years 6 months

- ✚ Dhanalakshmi Srinivasan Arts & Science College, Perambalur, Tamil Nadu Designation – Lecturer in Microbiology Period – July 2001 to June 2003 .
- ✚ M.I.E.T College of Arts & Science, Tiruchirappalli., Tamil Nadu, Designation – Lecturer in Microbiology Period – July 2005 to June 2007 and June 2011 to June 2017.
- ✚ Worked as a Faculty in Software Testing and Bio-Tech at Software Technology Group, Karve Nagar, Pune. Period – Dec 2008 to Dec 2010.

- ✚ Worked as a Customer Care Executive at Tata Business Support Solutions, Kalyani Nagar, Pune. Period – Dec 2010 to May 2011.
- ✚ Jamal Mohamed College (Autonomous) Tiruchirappalli, Tamil Nadu. Designation – Assistant Professor in Microbiology Period – July'17 to till datee.

### **EVENTS ORGANIZED IN LEADING ROLES**

#### **Seminars /Conferences/Workshop/Events Organized:**

- ✚ Organized Special Lecture Programme of Microbiology Association on 07.12.2021 at P.G. & Research Department of Microbiology.
- ✚ Organized A State Level Workshop on “ Production and Formulation of Bioinoculants” (An Entrepreneurship Programme) on 31st March 2022 at P.G. & Research Department of Microbiology in association with Internal Quality Assurance Cell (IQAC).
- ✚ Organizing Secretary of 2nd International Webinar on Microbes and Neoteric Research (IWMNR-2020) in association with Microbiologist Society, India held on 22 December 2020.

### **OTHER ACADEMIC RESPONSIBILITIES**

- ✚ Acted as a vice president of Microbiology Association from 2020 – 2022.
- ✚ Member, Board of Studies in Microbiology (B.Sc., M.Sc. and M.Phil) in Jamal Mohamed College, Tiruchirappalli.
- ✚ Department CDC Incharge.
- ✚ Department test Incharge.

### **PAPER PUBLISHED**

- ✚ **Vajiha Banu Habeeb Mohamed**<sup>1</sup>, Sumithra Pasumalarasu<sup>2</sup>, Kavitha Parangusadoss<sup>3</sup>, Kannahi Manoharan<sup>4</sup>, Vidya Sankarapandain<sup>5</sup>, Emmanuel Ifeanyi Obeagu<sup>6</sup>, Sunil Kumar<sup>7</sup> and Wilson Mathembele<sup>8</sup> (2022) Chromium (cr) Biosorption, from High Energy Battery (HEB) effluent using fungi. Journal of Biomedical Sciences (2022)2254-609X
- ✚ K. Chitra devi , **H. Vajiha Banu** (2020) Phycoremediation and Bioremediation- Combined effects on dairy effluent treatment with cyanobacteria and Pseudomonas Sp. CLIO An Annual Interdisciplinary Journal of History Vol-06 Issue-2 April 2020. ISSN: 0976-075X
- ✚ **Vajiha Banu Habeeb Mohamed**, Raja Arunprasath, Gajalakshmi Purusothaman. Biological treatment of azo dyes on effluent by Neurospora sp isolated and adopted from dye contaminated site. The Journal of the Textile Institute (2019) ISSN:0040-5000
- ✚ G. Manigandan, A.Raja, **H. Vajiha Banu**, P. Gajalakshmi Isolation of pesticide degrading bacteria from Paddy fields and evaluation of its bioremediation potential efficiency. Malaysian Journal of Soil Science (2019) ISSN: 1394-7990
- ✚ **Dr. H. Vajiha Banu** , Dr. A. Raja and Ayisha Chithika N (2019) Utilization of paddy straw extract as cellulose substrate for the production of bioethanol using cellulolytic A.niger. The Indian Journal of Basic and Applied Research 4(2):181-185
- ✚ Dr. A. Raja, Dr. **H. Vajiha Banu** & A. Parveen. (2019) Isolation and Testing of Sulphate Reducing Bacteria and Its iron Bioleaching Efficiency on Pyrite. International Journal of Research and Analytical Reviews. 6(2):510-514
- ✚ H.M. Nilofer Nisha, P. Kavitha, **H. Vajiha Banu** (2019) Study On Heavy Metal Tolerance Microbial Diversity Among Leather Industry Sludge. International Journal of Research and Analytical Reviews (IJRAR),.6(2): 863-869

- ✚ **H.Vajiha Banu** , A.Raja and Gajalakshmi P (2019). Antibacterial Property of Protein and Lipid from *Pleurotus ostreatus* against *Ornithobacterium* sp infection on poultry. Mushroom society of India. Volume 28., Issue 1 Pages 47-51.
- ✚ **H. Vajihabanu** , M. Kannahi and D. Angelin Mary. Fungal Diversity of High energy Battery effluents soil samples of Avoor Thiruchirappali. International Journal of Recent Scientific Research 7( 1):. 8369-8372 (2016) .
- ✚ **H. Vajihabanu** , M. Kannahi and D. Angelin Mary. Analysis of Physico-Chemical Parameter, Heavy Metal Content and microbial load in Battery Industry Effluent. Int. J. Pure App. Biosci. 3 (6): 81-86 (2015).
- ✚ **Vajihabanu, H** and Kannahi, M. (2016) Tolerance and biosorption studies on heavy metal by filamentous fungi from battery effluent soil. International Journal of Current Research. 8,(02):.26376-26378.

### **WORKSHOP/SEMINAR/CONFERENCE ATTENDED**

#### **PAPER PRESENTED**

- ✚ Presented a paper entitled “ Enrichment of fermented coconut water with *Bacillus* Sp. in International conference on ‘Converging Research Approaches in Life Science for Future Advancement’ held at PG & Research Department of Microbiology, Sengamala Thayaar Educational Trust Women’s College (Autonomous), Mannargudi, Thiruvarur District, Tamil Nadu, India on 15th February 2023.
- ✚ Presented a paper entitled “ Spoilage of bread by fungi and their biocontrol measures by using citrus limon” in National level seminar on ‘Innovative Research Approaches in Biological Sciences’ held at PG & Research Department of Botany, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamil Nadu, India on 25th & 26th May 2022.
- ✚ Presented a paper entitled “ Chromium biosorption from high energy effluent” in International conference on ‘Emerging Outlook and Recent Trends in Microbiology’ held at Department of Microbiology, Shrimati Indira Gandhi College, Tiruchirappalli, Tamil Nadu, India on 26th August 2022.
- ✚ Presented a paper entitled “Remediation: Applications of green and sustainable technologies “in National conference on ‘Post Covid-19 Complications-A Biotechnological Approach’ held at PG & Research Department of Biotechnology, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamil Nadu, India during 07th & 08th September 2022.
- ✚ Presented a paper entitled Biosorption of heavy metals by fungi belongs to Ascomycota. International conference on challenges to environment and health. Held on 30-01-2020 at Department of Zoology, JMC, Tiruchirappalli -620 020.
- ✚ Presented a paper entitled Removal of chromium by Biosorption process using fungi isolated from energy battery effluent soil in “National Seminar on Human Microbiota. An Ecological Approach” held on 22-01-2020 at St. Joseph’s College (Autonomous), Trichy 620 002.
- ✚ Presented a paper entitled Testing of Plant Growth Promotion by Rhizobacteria on Hydroponics System in International Seminar on “Microbial Interventions for the Welfare of the Human Beings (MIWHB -2019)” at Sengamala Thayaar Educational Trust Women’s College. 09-08-2019

- ✚ Presented a paper entitled Biosynthesis of CaCo<sub>3</sub> nanoparticle by *B.megatarium* and its crack healing property in International Seminar on Recent trends in Biological science during 15 Feb' -2019 at Dhanalakshmi Srinivasan College of Arts and Science, Perambalur.
- ✚ Presented a paper entitled "Effect of Hydrogen Ion Concentration on Heavy Metal Degradation" in International Seminar held on Feb' 9-2018 at Dhanalakshmi Srinivasan College of Arts and Science, Perambalur.
- ✚ Presented a paper entitled "Studies on biodegradation of heavy metals' in International Seminar held on 12th September 2017 at Sengamala Thayaar Education Trust Women's College, Mannargudi, Tamilnadu, India.
- ✚ Presented a paper entitled Bacteriostatic Potential of *Ocillatoria limosa* from uyyakondan river National Seminar at Sengamala Thayaar Education Trust Women's College, Mannargudi.2013.
- ✚ Presented a paper entitled at the International Seminar on Heavy Metal Degradation at Sengamala Thayaar Education Trust Women's College, Mannargudi.- 21st Jan 2012.

## **PARTICIPATION**

- ✚ Participated in one day workshop on "Writing Winnable Project Proposals" by Internal Quality Assurance Cell on 23rd June 2018 at Jamal Mohamed College, Tiruchirappalli, Tamilnadu, India.
- ✚ Staff enrichment Programme on ownership culture on 14-06-2019 organized by IQAC, Jamal Mohamed College, Tiruchirappalli.
- ✚ Participated at "UGC CPE Sponsered Two-Day Workshop on professional Development for Academic Leadership in Curriculum Design organized by Curriculum Development Cell " on 18th & 19th January 2019 at Jamal Mohamed College, Tiruchirappalli.
- ✚ Participated at "Lecture Workshop on Innovations and Challenges in Bio sciences" held on 18th to 20th sep' 2018 at J.J. College of Arts Science , Pudukkottai, Tamilnadu, India.
- ✚ Participated at the International Seminar for Emerging Trends in Biological Research held on 3rd Mar'2018 at Jamal Mohamed College, Tiruchirappalli.
- ✚ Participated online faculty enrichment programme from 21.06.2021-25.06.21 organized by IQAC, Jamal Mohamed College, Tiruchirappalli.
- ✚ Participated in the Webinar on "Bacterial Virulence: Perceptive and Pragmatic approach" held on 5th May 2020 organized by Department of Microbiology, Indian Academy Degree College-Autonomous, Bangalore, India.
- ✚ Participated in the International Webinar on Art of writing Research Review/Articles for Publishing in Peer Reviewed Journals organized by IQAC MES College Erumely on 25 May 2020.
- ✚ Participated in the Online International Faculty Development Programme on Establishing Research Beyond The Horizon organized from 26th to 30th May, 2020 by the Research and Development Centre, N.K.T. National College of Education for Women, Chennai, Tamil Nadu, India.
- ✚ Participated in a live webinar session on 9 th May 2020, hosted by the Dept of Microbiology, SBDCH, Chennai-600100.
- ✚ Participated the International webinar on 'Researching and Writing a Masters Dissertation' Organised By PG Department of Chemistry and Microbiology, Seth Kesarimal Porwal College

of Arts and Science and Commerce, Kamptee Nagpur, Maharashtra India held on 25th May 2020.

- ✚ Participated in the International Webinar on Biodiversity and Climate Change: An Intimate Dynamic Relationship organised by the PG & Research Department of Botany, V.O.Chidambaram College on 24.06.2020.
- ✚ Participated in the WEBINAR titled “Metal Complexes to Metal Nanoparticles For Efficient Catalysis” presented by Dr. D. Suresh on 28-05-2020 organised by School of Chemical and Biotechnology, SASTRA Deemed to be University.
- ✚ Participated in the WEBINAR titled “Career Opportunities in Science” presented by Dr. D. Suresh and Dr. Y. B. R. D. Rajesh on 20-05-2020 organised by School of Chemical and Biotechnology, SASTRA Deemed to be University.
- ✚ Participated in two days international webinar organized by Department of Computer Science, Baba Farid College, Bathinda. Held through the Microsoft Teams on 7th July – 8th July, 2020
- ✚ Participated in the webinar titled "Entrepreneurship Development" held on 18/05/2020 organized by Department of Management Studies, Department of Commerce and Entrepreneurship Development Cell with Chennai Softech - Technical Partner.
- ✚ Participated in the National Level Online Faculty Development Program on “Innovation and Research Opportunities for Faculty in the New Normal” organized by the Research & Development Cell in association with Internal Quality Assurance Cell (IQAC), held on 5th June 2020.
- ✚ Participated in the Three days Faculty Development Programme on Digital Tools For Active Teaching, Evaluation and Research organized by Department of Chemistry from 28.06.2021 to 30.06.2021 SRI GVG VISALAKSHI COLLEGE FOR WOMEN (Autonomous) Udumalpet, Tamil Nadu.
- ✚ Participated in the International Faculty Development Programme on Current Technology in Chemistry (23.08.2021 to 27.08.2021) organized by Department of Chemistry Easwari Engineering College (Autonomous) Ramapuram.
- ✚ Participated in one day National workshop on “Bio-Informatics: future role of computing in Biology (FRCB-2020)” on 13th February 2020 at Srinivasan College of Arts and Science, Perambalur, Tamilnadu, India.
- ✚ Participated in a National Webinar on “E-Waste Management” Organised by Leo Club, Cauvery College for Women (Autonomous), Trichy-18 held on 28th October, 2021.
- ✚ Participated in the Two Day International Webinar on New Interventions in Therapeutics (IWNIT) organized by Department of Biochemistry, Srimad Andavan Arts and Science College (Autonomous), Tiruchirappalli - 620005, held from 27th to 28th March 2023.
- ✚ Participated in the Faculty Development Programme on “preparation of winning Research Proposal” organized by PG and Research Department of Chemistry, under DBT Star College Scheme, on 08.02.2023.
- ✚ Participated in the Five Day International Online Faculty Development Programme on ‘Outcome Based Education’ from 05-06-2023 to 09-06-2023 jointly organized by Tamil Nadu Teachers Education University & Dr.M.G.R. Educational and Research Institute, Faculty of Education & Academic Staff College, Chennai.

- ✚ Participated in A TWO DAY NAAC COLLABORATED NATIONAL VIRTUAL SEMINAR on “HOLISTIC AND MULTIDISCIPLINARY APPROACH TOWARDS NATIONAL HIGHER EDUCATION QUALITY FRAMEWORK” on 05.07.2023 & 06.07.2023
- ✚ Participated in the One Week Faculty Development Programme on the topic “UPSKILL YOUR RESOURCES”(Under UGC Autonomy Grant) organized by the Department of Business Administration (SF), Ayya Nadar Janaki Ammal College, Sivakasi from 07.07.2023 to 13.07.2023.
- ✚ Participation in the II International Conference on Engineering, Social Sciences and Management (ICESM-2023) organized by Department of Applied Sciences and Department of Master of Computer Application held at Sri Balaji College of Engineering and Technology, Jaipur, India.
- ✚ Participated in one day NET orientation programme (paper -I) by Arcot Sri Mahalakshmi Women's College of education ,Vilapakkam, Arcot on 03 November 2023.

### **WORKSHOPS AND TRAINING ATTENDED**

- ✚ Successfully completed training on the Food Safety supervisor course Advance Manufacturing & COVID held at PG and Research Department of Microbiology Jamal Mohamed College (Autonomous) Tiruchirappalli Tamil Nadu Conducted by EP Infoways Pvt Ltd. 2023
- ✚ Participated on Online WorkShop on RT-PCR in association with Thermo Fisher Scientific on 11 May 2020.
- ✚ Attended one-day Workshop on PCR and Electroporation at Metrohm Private Limited, Adayar, Chennai.
- ✚ Workshop on ‘Improving teaching practices- A strategic approach’ during 23-06-2018, IQAC, Jamal Mohamed College, Tiruchirappalli.

### **WEBINAR ATTENDED**

- ✚ Participated Two Day International Webinar on New Interventions in Therapeutics (IWNIT) organized by Department of Biochemistry, Srimad Andavan Arts and Science College (Autonomous), Tiruchirappalli - 620005, held from 27th to 28th March 2023.
- ✚ Participated one day Webinar on National Level Workshop on “Cyber Security During Covid-19” held on 03-05-2020 , organized by K.G.Mittal College & IAA –TB, Thane.
- ✚ Participated one day Webinar on "Bacterial Virulence: Perceptive and Pragmatic approach". held on 05-05-2020, organized by IndianAcademy Degree College- Autonomous, Bangalore, India.
- ✚ Participated in the Live webinar on “Application of Statistics in Research” hosted by the Research Department of Microbiology, Sadakathullah Appa College, Tirunelveli, Tamil Nadu on 27th May, 2020.
- ✚ Participated one day Webinar on How to be a Successful Instructional Designer in e Learning.at PSG college of Arts &Science. Coimbatore. held on 06-5-2020.

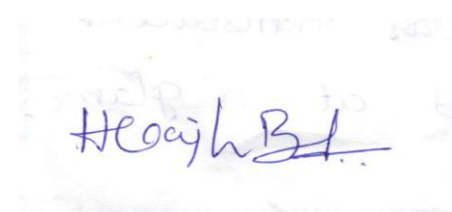
- ✚ Participated one day Webinar on “Metal complexes to metal nanoparticles for efficient catalysis” held on May 28th, 2020 organized by School of Chemical and Biotechnology, SASTRA Deemed to be University.
- ✚ Participated one day International Webinar on “COVID-19 Vaccine Development” held on May 15th, 2020 organized by Department of Microbiology, Ayya Nadar Janaki Ammal College (Autonomus), Sivakasi.
- ✚ Has successfully completed the course “Defeat COVID-19 be a champion” on April 29, 2020 organized by Gulf Medical University, Academic Health Center.

**THE FASTA SEQUENCE PROVIDED BELOW (AFTER ALIGNMENT AND EDITING) OF  
16S GENE SUBMITTED TO NCBI ACCESSION NUMBER WERE PROVIDED  
ORGANISM AND ACCESSION NO OF NCBI**

✚ *Enterococcus faecalis* OQ780874

✚ *Enterococcus innesii* OQ780882

**DATE:** 18/12/23



**(Dr. H. VAJIHA BANU)**