

## CURRICULUM VITAE

### HELVIN VINCENT

helvinjoby@yahoo.com

### Residential Address

Udayamcheril House  
Vaduthala P.O.  
Kochi - 682023  
Kerala, India

### PERSONAL PROFILE

Age : 35 years  
Date of Birth : 30-11-1983  
Sex : Female  
Nationality : Indian  
Religion : Christian (Anglo-Indian)  
Marital status : Married

### EDUCATIONAL QUALIFICATIONS

Qualification	University/ Institution	Total marks %/CGPA	Year of passing
Ph.D. (Biotechnology)	Cochin University of Science & Technology		2015
M.Sc. (Biotechnology)	Cochin University of Science & Technology	CGPA 7.95	2006
B.Sc. (Zoology)	St. Teresa's College, Mahatma Gandhi University	87.4%	2004
Pre-Degree	St. Teresa's College, Mahatma Gandhi University	79.6%	2001
S.S.L.C	Board of public examinations, Kerala state.	92.17%	1999
NET	CSIR-UGC		2016

### PROFESSIONAL MEMBERSHIP

Life Member, Society for Biotechnologists (India) - Since 2009

### PARTICIPATION IN NATURE CAMP

Participated in Three day Nature Education Camp organised at PampadumShola National Park, Idukki by Forest and Wildlife Department, Govt. of Kerala during 7<sup>th</sup> February to 9<sup>th</sup> February, 2016.

Participated in Three day Nature Education Camp organised at Parambikulam Tiger Reserve, Palakkad by Forest and Wildlife Department, Govt. of Kerala during 28<sup>th</sup> February to 2<sup>nd</sup> March, 2017.

## **PROJECTS/TRAININGS UNDERGONE**

M.Sc Dissertation work on “Evaluation of the biochemical properties of three different silages from Jew fish (*Otolithes ruber*)” under the guidance of Dr. P.T. Mathew (Principal Scientist, CIFT) at the Central Institute of Fisheries Technology, Kochi, Kerala during January- April, 2006.

Hands-On training on ‘Tools and Techniques in Microbiology and Biotechnology’ organized by the Department of Zoology, St. Teresa’s College, Ernakulam, in collaboration with Merit Biolabs, Palarivattom on 11<sup>th</sup> November, 2015.

Hands-On training on ‘SDS-PAGE, Cell Line and Viral Cultivation’ organized by the Department of Zoology, St. Teresa’s College, Ernakulam, in collaboration with Department of Marine Biology, Microbiology, Biochemistry, CUSAT on 7<sup>th</sup> March, 2017.

## **SEMINARS CONDUCTED**

Convener of one-day seminar in connection with the ‘International day for Preservation of Ozone layer – 2016’ conducted on 22<sup>nd</sup> September, 2016, at the Dept. of Zoology, St. Teresa’s College (Autonomous), Ernakulam, financially supported by Kerala State Council for Science, Technology and Environment (KSCSTE) (Sanction No. 142/E&E/16/KSCSTE).

Convener of one-day seminar in connection with the ‘National Science Day – 2019’ conducted on 15<sup>th</sup> February, 2019, at the Dept. of Zoology, St. Teresa’s College (Autonomous), Ernakulam, financially supported by Kerala State Council for Science, Technology and Environment (KSCSTE) and DST (Govt. of India) (Letter No. C-121/NSD/2019/KSCSTE dated 12.02.2019).

## **PROJECTS UNDERTAKEN**

Principal Investigator of the Student Project entitled ‘Isolation and characterization of keratin degrading fungi from soil’, sanctioned by Kerala State Council for Science, Technology and Environment (KSCSTE), vide Sanction No. 107/SPS 60/2016/KSCSTE dated 16.02.2017.

Principal Investigator of the B.Sc project entitled ‘Profiling of soil microorganisms for extracellular enzymes with industrial applications’ sanctioned by Kerala State Council for Science, Technology and Environment (KSCSTE) under SPYTiS-II scheme vide Letter No. 244/SPYTiS-II /2017/KSCSTE dated 30.10.2017.

## **POSITION HELD**

Resource person for the Short term training programme on “Tools and Techniques in Molecular biology and Biotechnology” conducted by the Department of Biotechnology, CUSAT, from 14<sup>th</sup> to 19<sup>th</sup> February, 2011.

Served as resource person for the M.Sc Botany students of St. Teresa’s College, Ernakulam for the sessions on ‘Regulation of Protein Synthesis’ as part of the Botany Association activities in June, 2014.

Resource person for the two day workshop on Biotechnology, Biochemistry and Microbiology conducted by the Biotechnology Division of Union Christian Colloege, Aluva during 5-6 February, 2015.

### **RESEARCH EXPERIENCE**

Six years of research experience in the field of molecular biology, microbial genetics and protein purification as part of Ph.D research work entitled “Characterization and applications of two protease enzymes obtained by culture dependent and independent approaches from mangrove sediments”

### **TEACHING EXPERIENCE**

In partial fulfillment of the requirements of the UGC – Maulana Azad National Fellowship, many lectures were taken in Cell Biology and Molecular Biology and also conducted practical laboratory sessions for the M.Sc. Biotechnology students of CUSAT, Kochi, Kerala.

As part of the Ph.D. course work, several seminars were taken and participated in journal club discussions.

Worked as Assistant Professor in Zoology at the Department of Biotechnology of Union Christian College, Aluva from 20<sup>th</sup> September, 2014 to 30<sup>th</sup> June, 2015.

Currently working as Assistant Professor at the Department of Zoology, St. Teresa’s College (Autonomous), Ernakulam since 20<sup>th</sup> July, 2015.

### **PUBLICATIONS IN PEER REVIEWED JOURNALS**

1. **Helvin Vincent**, Harisree P Nair and Sarita G Bhat (2013) Community genomics involving culture independent approach for assessing the phylogenetic diversity of mangrove sediment. Indian Journal of Applied Research, Vol. 3(10), 29-32 (ISSN No. 2249-555X, Impact Factor: 4.894 (SJIF-2016), DOI : 10.15373/2249555X) UGC Sr.No.49333.
2. Harisree P Nair, **Helvin Vincent** and Sarita G Bhat (2013) Culture independent analysis of the soil microbiome to assess microbial diversity of mangrove soil. Bio-Genetics Journal, Vol. 1(1), 1-4 (ISSN: 2347-7407)
3. Harisree P Nair, **Helvin Vincent** and Sarita G Bhat (2014) Evaluation of five in situ lysis protocols for PCR amenable metagenomic DNA from mangrove soils. Biotechnology Reports, Vol. 4, 134–138 (ISSN: 2215-017X, Source Normalized Impact per Paper (SNIP): 1.229)
4. **Helvin Vincent**, Harisree P Nair and Sarita G Bhat (2016) Assessment Of The Effectiveness Of Three Different Protocols For The Isolation Of Metagenomic DNA From Mangrove Sediments. Xaverian Research Journal, Vol 4(2), 107-122 (ISSN: 2321-0214).
5. Harisree P. Nair, **Helvin Vincent**, Rinu M. Puthusseri and Sarita G. Bhat (2017) Molecular cloning and characterization of a halotolerant  $\alpha$ -amylase from marine metagenomic library derived from Arabian Sea sediments. Springer 3Biotech Vol 7(65) 1-9 (DOI:10.1007/s13205-017-0674-0, ISSN 2190-572X, Impact Factor (2016) – 1.49)

6. Harisree P. Nair, Rinu M. Puthusseri, **Helvin Vincent** and Sarita G. Bhat (2017) 16S rDNA-based bacterial diversity analysis of Arabian Sea sediments: A metagenomic approach. *Ecological Genetics and Genomics*, Vol 3(5), 47-51 (ISSN: 2405-9854)

### **BOOK PUBLICATIONS**

Author of the book chapter 'Metagenomics – An Overview' of the book 'Microbial Bioproducts' published by Directorate of Public Relations and Publications, Cochin University of Science and Technology, Cochin, India (ISBN No. 978-93-80095-51-6).

### **Full paper in proceedings of national/international symposium/conferences/seminars**

Harisree P Nair, **Helvin Vincent** and Sarita G Bhat (2012) Metagenomic approach for analysis of bacterial diversity of Mangalavanam mangrove soil. *Proceedings of National symposium: Emerging trends in Biotechnology*, 40-45 (ISBN-978-93-80095-39-4).

### **Posters/Abstracts in national/international symposia**

1. **Helvin Vincent** and Sarita G Bhat (2008) Novel amylolytic enzyme from soil metagenome. International Conference on Biodiversity Conservation and Management, BIOCAM 2008 organised by Rajiv Gandhi Chair in Contemporary studies, CUSAT, Cochin, India (3-6, February 2008).
2. **Helvin Vincent**, Smitha S and Sarita G Bhat (2009) Isolation of a novel protease gene using metagenomic approach. International Symposium on Marine Ecosystems: Challenges and opportunities (MECOS 2009), Cochin, India (9-12, February 2009)
3. **Helvin Vincent** and Sarita G Bhat (2010) Soil Metagenomic library for industrially important enzymes. National level Technical Symposium Bioconcorrenza'10 organised by Tamil Nadu Agricultural University, Coimbatore (1 & 2 March, 2010)
4. **Helvin Vincent**, Harisree P Nair and Sarita G Bhat (2010) Novel gelatinase gene from a metagenomic library of marine sediment. International Conference on Genomic sciences (ICGS 2010) organized by MKU, TamilNadu (12-14, November, 2010)
5. Harisree P Nair, **Helvin Vincent** and Sarita G Bhat (2014) Culture independent analysis of the soil microbiome to assess microbial diversity. 101st Indian Science Congress, University of Jammu, Jammu and Kashmir, India (3-7, February 2014)
6. Harisree P. Nair, **Helvin Vincent** and Sarita G. Bhat (2015) Fingerprinting of metagenomic clones using Amplified Ribosomal DNA Restriction Analysis (ARDRA) for assessment of bacterial diversity of Arabian Sea sediments. 102nd Indian Science Congress, University of Mumbai, Maharashtra (2-7, January, 2015)
7. Harisree P. Nair, Rinu M. Puthusseri, **Helvin Vincent** and Sarita G. Bhat (2015) Metagenomic analysis of bacterial diversity of marine sediments of Arabian Sea revealed proteobacterial dominance. World Ocean Science Congress, Kochi (5-8, February, 2015)

8. Harisree P. Nair, Rinu M. Puthusseri, **Helvin Vincent** and Sarita G. Bhat (2015) Analysis of microbial composition and diversity of the sediments of Arabian Sea by paired-end illumina reads. International Conference on Biodiversity, Ecology and Conservation of Marine Ecosystems 2015 at School of Biological Sciences, The University of Hong Kong, Hong Kong (1-4, June, 2015)
9. **Helvin Vincent**, Harisree P. Nair and Sarita G. Bhat (2015). Analysis of microbial biodiversity of mangrove sediment by metagenomic approach. International Conference on Biodiversity Evaluation – Perspectives and Paradigm Shifts at Department of Zoology, Sree Sankara College, Kalady (2-3, December, 2015)
10. Harisree P. Nair, Rinu Madhu Puthusserri, **Helvin Vincent** and Sarita G. Bhat (2016) Amplified Ribosomal DNA Restriction Analysis (ARDRA) as a fingerprinting method of metagenomic clones for assessment of bacterial diversity of Arabian Sea sediment. National Seminar on Recent Advances in Molecular medicine at MES College, Marampally, Aluva.
11. Harisree P. Nair, **Helvin Vincent**, Rinu M. Puthusseri and Sarita G. Bhat (2016) Microbial Community profiling of conserved mangrove ecosystem by Illumina sequencing: A metagenomic approach. CUSAT-NUS Joint International Conference on Biotechnology and Neuroscience organized by Department of Biotechnology and Department of Neuroscience, CUSAT, India (19–21, December, 2016)
12. Cynthia Mathew Thaliath and **Helvin Vincent** (2017) Isolation, Screening and Molecular Characterization of Soil Bacteria Possessing Antibacterial Property. International Conference on Frontiers in Bioscience -2017 organised by Department of Bioscience, SNGIST Arts and Science College (15-16, November, 2017)
13. Divya Ramesh and Helvin Vincent (2017) Isolation, screening and molecular characterization of keratinolytic bacteria from soil. International Conference on Frontiers in Bioscience -2017 organised by Department of Bioscience, SNGIST Arts and Science College (15-16, November, 2017)

#### **GENBANK SUBMISSIONS - 247 Nos**

#### **SEMINARS/ CONFERENCES/ WORKSHOPS ATTENDED**

- Participated in International conference on “Biodiversity Conservation and Management” organised by Rajiv Gandhi chair in contemporary studies, CUSAT, Zoological society of Kerala and Sree Sankaracharya university of Sanskrit, February, 2008.
- Participated in National seminar on “Bioactive compounds from marine organisms” organised by Department of Marine biology, Microbiology and Biochemistry, CUSAT, March 2008.
- Attended one day seminar “Women in Science: A career in Science” organised by Indian Academy of Sciences: Women in Science, conducted in Cochin University of Science and Technology, April 2008.

- Participated in the International symposium “Marine Ecosystems: Challenges and opportunities”, organized by Marine Biological Association of India, February, 2009.
- Participated in the one day Workshop on “Ensuring quality in research publications” Jointly organized by School of Marine sciences, CUSAT and Kerala Library Association, March 2009.
- Participated in UGC sponsored National seminar on “Current Scenario in Molecular Biotechnology” organised by Department of Biotechnology, St. Peter’s College, Kolenchery, July, 2009.
- Participated in the National level technical symposium – Bioconcorrenza’10 held at Centre for Plant Molecular Biology, TNAU, Coimbatore, 1&2, March, 2010.
- Participated in the Seminar cum Workshop on “The Use of Alternatives to animals in life science Education” organized by Rajiv Gandhi Chair, School of Environmental Studies, CUSAT, 9<sup>th</sup> March, 2010.
- Attended the User Awareness Programme on Access to E-Resources under the UGC INFONET Digital Library Consortium organized by the INFLIBNET and the University Library, CUSAT, 29<sup>th</sup> October, 2010.
- Participated in International conference on Genomic Sciences organised by the School of Biological Sciences, Madurai Kamaraj University, Madurai, 12-14 November, 2010.
- Attended a Two day training programme in GNU/Linux Installation and configuration conducted by Department of Computer Applications, CUSAT, 12<sup>th</sup> and 13<sup>th</sup> January, 2011
- Participated in national symposium on Emerging trends in Biotechnology organized by Department of Biotechnology, CUSAT, 2<sup>nd</sup> September 2011.
- Participated in national symposium on Emerging trends in Biotechnology organized by Department of Biotechnology, CUSAT, December 2012.
- Participated in UGC sponsored National seminar on “Bioinformatics in Marine Biology: Next generation Sequencing Technologies and Applications” organised by Department of Marine Biology, Microbiology and Biochemistry, CUSAT, on 26<sup>th</sup> March, 2013.
- Participated in National seminar on Advances in Biotechnology 2014 organized by Department of Biotechnology, CUSAT, 15<sup>th</sup> & 16<sup>th</sup> December, 2014.
- Participated in UGC sponsored National seminar on Integrating Taxonomy to DNA Barcoding organised by the Department of Zoology, St. Xavier’s College for Women, Aluva, 10<sup>th</sup> & 11<sup>th</sup> September, 2015.
- Participated in International conference on Biodiversity Evaluation: Perspectives & Paradigm Shift held at Sree Sankara College, Kalady, 2<sup>nd</sup> & 3<sup>rd</sup> December, 2015.
- Participated in UGC sponsored National Workshop on Accreditation & Academic Audit organised by the Internal Quality Assurance Cell (IQAC) & Auditing Cell, St. Teresa’s College, Ernakulam, 11<sup>th</sup> June, 2016.
- Participated in UGC sponsored National Workshop on Fourth Cycle Accreditation in Autonomous Colleges organised by the Internal Quality Assurance Cell (IQAC) & The Audit Cell, St. Teresa’s College, Ernakulam, 22<sup>nd</sup> June, 2016.
- Participated in UGC sponsored Seminar on Biodiversity Conservation & Issues organised by the Department of Zoology, St. Teresa’s College, Ernakulam, 29<sup>th</sup> June, 2016.
- Participated in KSCSTE sponsored Seminar in connection with Ozone day 2016 organised by the Department of Zoology, St. Teresa’s College, Ernakulam, 22<sup>th</sup> September, 2016.
- Participated in CUSAT-NUS Joint International Conference on Biotechnology and Neuroscience organised by Dept. Of Biotechnology, CUSAT, on 19<sup>th</sup> to 21<sup>st</sup> December, 2016.

- Participated in UGC sponsored Workshop on Educational Leadership and Teacher Wellness organised by Community College and Internal Quality Assurance Cell (IQAC), St. Teresa's College on 27<sup>th</sup> February, 2017.
- Participated in UGC sponsored National Workshop on Capacity Building in Academic Writing and Publishing organised by Golden Jubilee Memorial Library, St. Teresa's College, on 15<sup>th</sup> March, 2017.
- Participated in the seminar on Ente Haritha Bhavanam organised by the Dept. Of Zoology and Bhoomithra Sena Club, St. Teresa's College, in connection with the observance of World Environment Day – 2017, supported by the Kerala State Council for Science, Technology and Environment (KSCSTE), on 16<sup>th</sup> June, 2017.
- Participated in the Interdisciplinary Lecture on 'Nanomaterials Based Biosensors for Cancer Detection' organised by the Department of Chemistry & Department of Botany, St. Teresa's College, on 17<sup>th</sup> January, 2018.

### **SKILLS AND TECHNIQUES**

- Basic practicals in Zoology and Biotechnology as per M.G. University syllabus
- Basic microbiological techniques
- Characterization and identification of microbes- Phenotypic and Genotypic methods
- Screening and characterization of bioactives like enzymes, antimicrobials etc. from microbes
- Basic Molecular Biology techniques
- Nucleic acid isolation and plasmid isolation from microbes
- Agarose, Native and SDS Polyacrylamide Gel Electrophoresis
- Molecular cloning techniques
- Metagenomic library construction and screening
- Multiple sequence alignment and Phylogenetic tree analysis
- Experienced in using various Bioinformatics tools like BLASTn, BLASTp, ClustalW, MEGA5, BioEdit, Sequin, Sigmaplot, and Endnote
- Antibiotic susceptibility testing
- Protein extraction and purification techniques
- Usage of Chromatographic techniques like Paper Chromatography, Thin Layer Chromatography, GC, FPLC and HPLC

### **COMPUTER KNOWLEDGE**

Operating Systems	Windows XP, Windows 7, Windows 10
MS Office	Word, Excel and Powerpoint
Internet browsers	Explorer, Opera, Google Chrome and Mozilla Firefox

### **DECLARATION**

I hereby declare that all the information provided by me in this resume is true and correct to the best of my knowledge and belief and if I am given an opportunity I promise that I would serve as a dedicated employee with utmost sincerity and commitment for whatever I am entrusted.

### **REFERENCES**

**Dr. Sarita G. Bhat**

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Department of Biotechnology,  
Cochin University of Science and Technology,  
Kalamassery, Cochin - 682 022,  
Kerala, India.  
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**Smt. Gladys Francis**

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St. Teresa's College,  
Ernakulam, Kerala, India.  
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14. 09. 2017  
Vaduthala

Helvin Vincent