

Dr. Valsamma Joseph,

or



Born in Erattayar, Idukki District, Kerala on 25 May 1970, Graduation in Botany from Mahatma Gandhi

PROFESSIONAL QUALIFICATIONS

- **Associate Professor**, Cochin University of Science and Technology (CUSAT), Cochin, Kerala (September 2014 - Present)
- **Assistant Professor**, Marine Biotechnology, Cochin University of Science and Technology, National Centre for Aquaculture and Environment Management, Cochin, Kerala (August 2008 - Present)
- **Principal Investigator**, Department of Science and Technology, Government of Kerala, Women's Empowerment Cell, Cochin, Kerala (March 2008 to 2010)
- **Research Associate** (Department of Biotechnology, Government of India), 2005 to 2009 in University of California, USA
- **Postdoctoral Fellow**, Scripps Institution of Oceanography, University of California, USA (1st October 2002 to 31st March 2005)
- **Postdoctoral Fellow**, CUSAT, Cochin University of Science and Technology, Cochin, Kerala (1st October 2002 to 31st March 2005)
- **Postdoctoral Fellow**, National Centre for Aquaculture and Environment Management, Cochin, Kerala (1st October 2002 to 31st March 2005)
- **Postdoctoral Fellow**, School of Environmental Studies, Cochin University of Science and Technology, Cochin, Kerala (1st October 2002 to 31st March 2005)
- **Research Associate**, National Environmental Engineering Research Institute, Kanpur, India (1999 - 2002)

Teaching and academic activities

At M.Tech. Level (Marine Biotechnology)

1. Marine Genomics and Proteomics
2. Marine Microbiology
3. Advances in Molecular biology (Lab)
4. Marine Algal Biotechnology
5. Fish and Shellfish Immunology and Aquaculture Environment Management

Research Areas:

Marine biotechnology, Marine algal biotechnology, Aquatic environment health management

Research Projects:

Sl. No.	Title of Project and Duration	Funding Agency	Amount	Status
1	Development of photobioreactors for mass biotechnology	Central Board of Secondary Education, New Delhi	2,50,000	Completed
2.	Optimization of neutral lipid and biomass production by marine microalgae and expression pattern of	University Grants Commission, New Delhi	9,00,000	Completed
3	Metagenomics approaches to evaluate the diversity of microbial communities in the	Department of Science and Technology, Government of Kerala	7,50,000	Completed
4	Metagenomic approach to cloning and exogenous DNA insertion into	Department of Science and Technology, Government of Kerala	28,00,000	2010-2017

Awards/Fellowships/Scholarships

- 2014-Raman Postdoctoral Fellowship for Indian Scholars in USA by University Grants Commission
- 1999-Research Associateship, National Environmental Engineering Research, Institute, Nagpur
- 1998, 2001-Qualified National Eligibility Test for Lectureship in Environmental Sciences by Indian Council of Agricultural Research
- 1996-Senior Research Fellowship, Council of Scientific and Industrial Research
- 1991-1993-Merit Scholarship, Cochin University of Science and Technology during post graduation
- 1990-Mar Mathew Kavukatt Memorial Gold Medal for the best student in B.Sc Botany, Assumption College, Palakkad

- 1987-90-Merit Scholarship, Mahatma Gandhi University, during Bachelors degree
- 1985-87 Merit Scholarship, Mahatma Gandhi University during Pre-Degree
- 1983-85 National Merit Scholarship for Talented Children from Rural Areas

Doctoral works supervision (5)

1. Polyunsaturated Fatty Acid production in *Ulva lactuca* (Micro Algae)
2. Optimization of neutral lipid and biomass production by marine microalgae and expression pattern of
3. Diversity and abundance of key microbial functional groups involved in nitrogen biogeochemical cycling

4. Metagenomic approaches for cloning and expression of novel cellulases from forest top soil (Devassy)
5. Mass production of marine microalgae as live feed in aquaculture systems (Jisha Kumaran).

M. Tech Research Projects (1 year) Supervision

1. Isolation and identification of marine microalgae from West coast off India and screening for neutral lipids
2. A metagenomic approach for the characterization of bacterial and archaeal communities of zero water exchange shrimp ponds
3. Metagenomics approaches to elucidate nitrifying bacterial community in a zero water exchange shrimp pond
4. Marine microalga *Nannochloris* sp. as a potential source of polyunsaturated fatty acids
5. Polysaccharides from *Dicranella* microalga : Characterization and application (Ancy Varghese),
6. Metagenomic approach to understand the bacteria associated with marine diatoms (Gnanadhivya R.)
7. Cobalamin acquisition and utilization in marine microalgae (Vinaya K.K.),
8. Sulphated polysaccharides from *Dicranella* microalga : Screening for anti-white spot syndrome virus activity (L)
9. Diversity of bacterial communities associated with marine diatoms: Molecular characterization and phylogenetic analysis

Publications:

Research Papers in Peer Reviewed Journals

Books (Co-Edited) : 2

Papers In Conferences : 12

Book Chapters :2

GenBank Submissions (www.ncbi.nlm.nih.gov)

: 152

Training/Workshops attended

Invited lectures/talks: 6

Address:

Official :

Associate Professor, National Centre for Aquatic Animal Health (NCAAH), Cochin University of Science

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