



## Dr. G. Immanuel

### PROFILE

#### Associate Professor

Centre for Marine Science and Technology  
Manonmaniam Sundaranar University  
Rajakkamangalam  
&

Director of PG Extension Centre, M.S.  
University (Mar.2016- Aug.2022 & July  
2024- Till date)

### Additional Responsibilities

- Member, NAAC Committee,
- MSU Director: PG Extension Centre, MSU (2016- 2022 & 2024-Till date)
- Chairman in BOS of Biochemistry (UG/PG), M.S. University (2014-17)
- Chairman (Question paper setting- PG. Biochemistry Board, Annamalai University (Dec.2023 onwards)
- SCAA member- M.S. University (2016-22 & 2024-2025)
- Member in BOS of M.Sc. Industrial Microbiology, Microbiology, Biotechnology in affiliated colleges of M.S. University
- Alagappa University, P.G. Zoology board member
- Annamalai University, P.G. Zoology board member
- Gandhigram Rural University, P.G. Zoology board member
- RAC member-Gulf of Mannar Biosphere Reserve Trust (GOMBRT), Govt. of India
- Mentor-M.S. University constituency college, Thisayanvilai, Tamilnadu

### Academic Excellence

PDF	Dept., of Biology	University of South Pacific, Suva, Republic of Fiji	2001-2002	
Ph.D	Marine Biotechnology	Manonmaniam Sundaranar University, Tirunelveli	1997	Highly Commented
B.Ed	Biological Science	Annamalai University	1992	First class
M.Sc	Marine Science	Cochin University of Science and Technology	1989	First class

### Carrier Experiences – 30 years

Designation	Institution	Date of Joining	Date of Leaving	Experience in years
Associate Professor	CMST, Manonmaniam Sundaranar University	16-09-2017	Till date	7.5
Assistant Professor	CMST, Manonmaniam Sundaranar University	29.07.2007	15.9.2017	12
DST-Young Scientist Lecturer (T)	CMST, Manonmaniam Sundaranar University	16-09- 2005	28-07-2007	2
	CMST, Manonmaniam Sundaranar University	27-02-1998	15-09-2005	7.5

### Area of Specializations

Marine Biotechnology, Marine Food Processing and Marine Natural Products Production & Applications, Aquaculture Disease management

### Administrative Experiences-7 years

Director	Post graduate Extension Centre Manonmaniam Sundaranar University	Mar.2016 – A.ug.2022 & July 2024 – Till date
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### Research Experiences -28 years

Research Guide	Ph.D. Awarded / Submitted- 25/2 (In Progress -4) M.Phil. (Awarded-102)	Since 2007 Since 1998
Examiner	For Ph.D., M.Phil., P.G. & U.G. Courses in Marine Biotechnology & Marine Microbiology in 12 universities of Tamil Nadu, Kerala & Egypt	

### Research Publications & Patents

Scopus/Web of Science/UGC Care List	197 Research articles Published in Scopus/Web of Science/UGC Listed Journals
Research Publication Statistics	Cumulative Impact Factor of 252.24 and H-index of 30 & citation index of 3115 in Scopus, Google Scholar H index -35, Citation index -5506 and i10 index-89
Patent – 01 (Published: No. 202441060529A), Books-5 (Co-editor), Book chapter- 19, Conference Proceedings – 24	Momonograph-1, NCBI gene bank microbial accessions- 62

### Paper Presentations/Resource Person/Training, seminar & Conferences organized & attended

* Paper presentation	International-43 National-59
*Resource Person	120 Delivered Lectures, Keynote address & Chaired sessions on various topics
*Training Organized- 9	Training Attended- 17
* Seminar/Confer. organized	National-5; International-1(As convener)

### Countries Visited-13

Singapore, Malaysia Philippines Sri Lanka	Thailand, Indonesia China Australia	Saudi Arabia, Dubai, Qatar Fiji & Ethiopia	Participated and presented Papers in the Conference/Seminar/workshops/ Trainings related to academic visits in various universities
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### Projects

			Rs.in lakhs
1. Principal Investigator (2019-2022)	DST-SERB	Investigation on environmentally safe antifouling metabolites from mangroves as a source to control biofoulers	Rs. 49.65
2. Principal Investigator (2015-2018)	UGC	The effect of medicinal herb <i>Phyllanthus niruri</i> extracts on immunostimulatory activities and immune genes expression in shrimp <i>Penaeus monodon</i> .	Rs. 14.50

- M.S. University Representative, VTM, College, Arumanai, Kanyakumari District (2017-2019)
- M.S. University Representative, Scott Christian College, Nagercoil, Tamilnadu (2019-2021)
- M.S. University Representative, Holycross Home Science College, Thoothukudi (2021-2023)
- M.S. University Representative, Malankara Catholic College, Mariagiri (2023-2025)
- M.S. University Award Committee member, Scott Christian College, Nagercoil (2021-2024)
- Associate Editor in the Journal of Fisheries & Aquatic Sciences, Research Journal of Microbiology, Journal of Biological Sciences, Asian Journal of Biotechnology and Asian Journal of Biological Sciences
- Peer Reviewer in more than 25 Journals
- UGC-MOOCs Course: E. content (Marine Biotechnology) Developed through EMRC Pondicherry University

#### 1. Marine By-products:

Part 1.: <https://youtu.be/pMZIXp8B6IQ>.

Part 2: <https://youtu.be/9trh9GZsSMI> &

Part 3: <https://youtu.be/vhKxPFjyktI>

#### 2. Marine Natural Products and their Applications

Part 1:

<https://youtu.be/mQASDUaRcxY>

Part 2:

<https://youtu.be/82hUWxMr6gs>.

Part 3: <https://youtu.be/lBxi6Ky8Xus>

Part 4:

<https://youtu.be/XhmCNzMMZxg>.

Part 5: <https://youtu.be/zfAWUSMVYqg>

Part 6: <https://youtu.be/LwC5-fG4H8>

## CONTACT

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Google scholar ID: Q1GiDI8AAAAJ

ORCID ID: <https://orcid.org/0000-0003-4052-8240>

Vidwan ID: 174279

Scopus ID: 55902604800

Research gate link-

<https://www.researchgate.net/profile/Gra-sian-Immanuel>

3. Principal Investigator (2013-2018)	CMLRE, Ministry of Earth Science	Assessment of Marine Biodiversity along the South Tamilnadu Coast.	Rs 64.40
4. Principal Investigator (2012-2015)	DBT	Studies on Immunostimulatory activity of brown seaweeds in shrimp <i>Penaeus monodon</i>	Rs 25.88
5. Principal Investigator (2012-2013)	TECHNOFIRM Co. Ltd. France	Evaluation of TECNOFUCO on Shrimp ( <i>Penaeus monodon</i> ) disease resistance and immune activity	€ 7500/-
6. Principal Investigator (2009 – 2012)	UGC,	A comparative study on therapeutic efficacy of seaweed and terrestrial plant extracts in Shrimp <i>Penaeus monodon</i> culture system	Rs. 11.48
7. Principal Investigator (2005-2008)	DST	Technological innovation in marine pharmaceutical to use trash fish ( <i>Odonus niger</i> ) liver oil for income generation in rural community	Rs. 13.50
8. Principal Investigator (2007-2009)	Biotech Marine, PONTRIEUX France	Effect of Sea weed powder and algal substances on disease management in shrimp	€ 4000/year
9. Coordinator (2000-2001)	DRDA	Fattening of baby rock lobster <i>Panulirus homarus</i> , a technology demonstration for fisher women	Rs. 1.50
10. Principal Investigator (2014)	Sunshine Agro products Ltd.	Evaluation of Sunshine Aqua Plus on shrimp nutrition	Rs. 1.00
11. Co-investigator (2001-2004)	ICAR	Evolving Breeding and Larviculture Technology for Grouper <i>Epinephelus tauvina</i> by applying Heterospecific Insemination techniques and ayurvedic products,	Rs. 34.00
12. Co- Principal Investigator (2002-2005)	OSTC	Developing prediction model for quantifying artificial feed related waste output in the culture of shrimp <i>Penaeus monodon</i>	Rs. 9.90
13. Co- Principal Investigator (2006-2009)	DBT	Standardization and Training on the production of low cost quality Vitamin with HUFAs for human consumption and feed for poultry from marine trash fish <i>Odonus niger</i> , for income generation of SC/ST coastal population of Kanyakumari District,	Rs. 21.50
14. Co- Principal Investigator (2007– 2010)	TNSCST	Developing onshore broiler culture technology for fattening of baby rock lobster for export	Rs. 7.87
15. Co- Principal Investigator (2008-2011)	DRDO	Investigation on eco-friendly antifouling compounds from seaweeds and its symbiotic microbes,	Rs. 10.00
16. Co- Principal Investigator (2010-2013)	UGC	Diversity and molecular characterization of novel protease producing halophilic bacterial populations in marine environment	Rs. 10.74
17. Co- Principal Investigator (2012-2015)	DRDO	Evaluation of bioactive compounds using standard antifouling methods and characterization of potential metabolites	Rs. 19.95
18. Deputy-Coordinator (2012-2017)	UGC-SAP	Special assistant program by UGC	Rs. 64.50
19. Investigator/Co-Investigator	MECON	Marine Ecological- EIA studies at various Central Govt. project of India (Totally 11 Consultancy Projects during 1999-2022)	Rs. 21.69

## Special Credits

- \* DST Young Scientist Fellowship award-2005
- \* Academic Excellence award of M.S. University – 2009
- \* TNSCST-Best student project award (2010)
- \* Shri. P.K. Dhas Memorial Best faculty award (2011-12)
- \* Best paper presentation award- International Conference on disease in Asian Aquaculture (2011)
- \* Best Research Supervisor award-2015 Grabs educational Society
- \* Received "Certificate of Appreciation" in honor and recognition in the International conference on Sea Food Safety, Quality and Traceability systems, Ministry of Agriculture and Fisheries, Muscat, Sultanate of Oman (March, 2014)
- \* Recognized as Top 2 % position of World Ranking Scientist List in Fisheries/Biotechnology/Agriculture during 2020-21; 2021-22, 2022-23 & 2023-2024 by Stanford University (<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/1>)
- \* Recognized as rank # 1 in M.S. University; # 5 in India; # 88 in Asia and # 574 in world ranking Scientist in the specializing subject "Fisheries" during 2023 (<https://www.adsscientificindex.com/scientist.php?id=479423>)
- \* Received Eminent Scientist award-2023, presented by Society for Advancement of Biological Sciences, Bangalore in ICER-NARM-2023
- \* Academic Excellence award of M.S. University – 2024

## Recant Best publications

1. R. Ramasubburayan, S. Prakash, **G. Immanuel** D. Mubarakali, G. Rajakumar, D. Thirumurugan, A. Palavesam 2025. The transformative role of Prebiotics, Probiotics, and Microbiomes in Biofloc systems for sustainable Aquaculture: A comprehensive Review. *Reviews in Aquaculture*17:e13000 <http://doi.org/10.1111/raq.13000> (IF.8.80)
2. S. Prakash, V. Pattukumar, D. Thirumurugan, R. Saravanan, C. Ravinder Singh, **G. Immanuel** and R. Rmasubburayan, 2023. Exploring Biotechnological approaches on *in vitro* callus induction and evaluation of biomedical properties of Cleome gynandra L. *Process Biochemistry*, Vol.134, 316-328. (IF.4.88)
3. D. Rameshbabu, K.Sarojini, M. Sanjiv Kumar, R.Ramasubburayan, S.Prakash, M.J.Punitha and **G. Immanuel**, 2022. Investigation on characterization, antifouling and cytotoxic properties of Zinc oxide nanoparticles biosynthesized by a mangrove associated actinobacterium *Streptomyces olivaceus* (MSU3). *Archives of Microbiology*, Vol.204 (7), 386 (IF.2.667).
4. M. Sanjivkumar, M.Deivakumari and **G. Immanuel**, 2021. Investigation of spectral and Biomedical characterization of rhamnolipid from a marine associated bacterium *Pseudomonas aeruginosa* (DKB1). *Archives of Microbiology*, 203 (5) 2297-2314 (IF.2.667)
5. K.Sarojini, S.Soja, R. Ramasubburayan, A. Palavesam and **G. Immanuel**. 2020. Studies on the adhesion, aggregative properties and the probiotic efficiency of a potent bacteriocin producing shrimp gut isolate *Bacillus subtilis* subsp. *inaquosorum* V<sub>1</sub> against *Carassius auratus* *Aquaculture International*, 28 (4), 1639-1656 (IF.2.953).
6. J. Ruben Prabakaran, R. Ravinesh, A. Vibin, R. Ramasubburayan, A. Palavesam and **G. Immanuel**. 2020. New Record of *Pseudoliotia reeviana* (Hinds, 1843) (Truncatelloidea:Vitrinellidae) from Indian coast. *Regional studies in Marine Science*, Vol.39., DOI. 101440 (IF.2.166)
7. M. Sanjiv Kumar, M. Navin Chandran, A.M. Suganya and **G. Immanuel**. 2020. Investigation on bio-properties and *in-vivo* antioxidant potential of Carrageenans against alloxan induced oxidative stress in Wistar albino rats. *International Journal of Biological Macromolecules*, Vol.151, 650-662. (IF.8.025).
8. M. Deivakumari, M.Sanjivkumar, A.M. Suganya, J.Ruban Prabakaran, A. Palavesam, and **G, Immanuel**. 2020. Studies on reclamation of crude oil polluted soil by biosurfactant producing *Pseudomonas aeruginosa* (DKB1) *Biocatalysis and Agriculture Biotechnology*, Vol.29, DOI. 101773 (IF.4.0).
9. M. Sanjiv Kumar, T. Silambarasan, E.N. Sholkamy, A.A. Mostafa and **G. Immanuel**. 2020. Statistical optimization of Biobleaching efficacy of endo-b-1,4-xylanase from an actinobacterium *Streptomyces olivaceus* (MSU3) in comparison with Zinc oxide pretreated sugarcane bagasse pulp using Box-Bhenken design. *Smart Science*, DOI.1769977 (IF.2.60).
- 10.M. Sanjiv Kumar, K. Vijayalakshmi, T. Silambarasan, E.N. Sholkamy and **G. Immanuel**. 2020. Biosynthesis, statistical optimization and molecular modeling of chitinase from crab shell wastes by a mangrove associated actinobacterium *Streptomyces olivaceus* (MSU3) using Box-Bhenken design and its antifungal effects. *Bioresource Technology Reports*, Vol.11, DOI.100493.