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### Overseas Experience

Totally Twelve years and four months both academic and industrial segments (till date).

### Total Experience

Twenty one years and ten months - Teaching, Research and Industry (Seventeen years and eight months research and teaching; industry alone 3 years).

### European Graduates

My Ph.D. has been officially recognized as an equivalent to European Ph.D. (<https://graduates.name/country-pt-1146>) on December 2017.

### FELLOWSHIPS RECEIVED

#### International Fellowships

- **National Science Council** (NSC 94-2752-B005-006 GC 94021) of Taiwan.
- **Brain Korea-21** of South Korea.
- **FCT** (Fundação para a Ciência ea Tecnologia # DFRH-Bolsa SFRH/BPD/63402/2009) fellowship awarded by the Ministerio Da Ciencia, Tecnologia E Ensino Superior of Portugal (2012 – 2018).
- **Best Researcher Award 2023** given by ScienceFather-SF (Not taken up)

#### National Fellowship

- **Divashri** (Association of Biotechnology Led Enterprises) (BIO/07-08/054/ALUM/HODX) at Department of Biotechnology, IIT Madras, Chennai, India.

### INDEXES AND TOTAL CITATIONS

- ***h*-index (Web of Science):** 18; Total Citations: 1446  
(<https://www.webofscience.com/wos/author/record/2459960>)
- ***h*-index (Scopus)** : 21; Total Citations: 2345  
(<https://www.scopus.com/authid/detail.uri?authorId=16029399900>)
- ***h*-index (Google Scholar):** 28; Total Citations: 3818  
(<https://scholar.google.com/citations?user=p70sgR0AAAAJ&hl=en>)

### Total Impact Factors

165.505

### Visiting Faculty

Faculty of Allied Health Sciences, Mahatma Gandhi Medical College, **Sri Balaji Vidyapeeth Deemed University**, Puducherry, India (Since 01.08.2018).

### Distinguished Adjunct Faculty

Department of Pharmacology, **Saveetha Institute of Medical and Technical Sciences**, Chennai, India (Since 31.08.2021).

### EDUCATION

- 2004-Ph.D. (Marine microalgae), Centre for Advanced Studies in Botany, University of Madras, Guindy Campus, Chennai, India
- 1998-M.Sc. (Botany), Kandasamy Kandar's College, P.Velur (Namakkal Dist.), University of Madras, Tamil Nadu, India
- 1996-DIPC. (Industrial Pollution & Control), DDE, Annamalai University, Chidambaram, India
- 1994 - B.Sc. (Botany), Govt. Arts College, Tiruvannamalai, University of Madras, India

### CAREER HISTORY

- ✓ June 2024 to till date: Professor and Director, Centre for Integrative Medical Research (CIMR), Sree Balaji Medical College and Hospital (SBMCH), Chennai, India (Nutraceutical and Medicinal Properties of Algae)
- ✓ October 21 to Jun' 2024: Professor, Department of Research & Development, Sree Balaji Medical College and Hospital (SBMCH), Chennai, India (Nutraceutical and Medicinal Properties of Algae)
- ✓ Oct'18 - Oct'21: Auxiliary Investigator, University of Algarve, Gambelas, Faro, **Portugal** (Macroalgae research on food and nutrition)
- ✓ May'13 - Sep'18: Research Scientist, University of Algarve, Gambelas, Faro, **Portugal** (Macroalgae research on food and nutrition)
- ✓ May'12 - Apr'13: Post Doctor, University of Algarve, Gambelas, Faro, **Portugal** (Microalgal research on food and nutrition)
- ✓ Aug'2010 - Oct'2011: Lead Scientist, Aquatic Energy LLC, Lake Charles, Louisiana, **USA** (Microalgae cultivation in open raceway ponds for biomass)
- ✓ Mar'2008 - Mar'2010: Post Doctoral Fellow, Department of Biotechnology, **Indian Institute of Technology Madras**, Chennai (Microalgae cultivation for biomass)
- ✓ Aug'2007- Jan'2008: Senior R&D Executive, Swiss Garnier Life Sciences, Chennai (Analysis of Probiotic Products)
- ✓ Mar'2006 – May'2007: Senior R&D Executive, Nutraville International Ltd., Chennai (Microalgae Based Biodiesel & Bioethanol)

- ✓ Aug'2004 – Dec'2005: Post Doctoral Fellow, Graduate Institute of Biotechnology, National Chung Hsing University, **Taiwan** (Identification of Tapetum-Specific Genes by Construction of a lily subtractive cDNA library)

Ph.D. Thesis (2003)

Studies on *Dunaliella salina* (Dunal) Teod. with special reference to its anticancer properties **Cited by 19** (<https://shodhganga.inflibnet.ac.in/handle/10603/184234>)

INTERNATIONAL PUBLICATIONS (44)

1. Balakrishna V, G Mohan, C. Kavungal Vishnu, D. Punjamgod, **Rathinam Raja** and Arunkumar Kulanthaiyesu 2025. Sulfate and Functional Groups Modified the Helical Conformation of Iota-Carrageenan Insight Difference in the Biological Activities. *ChemistrySelect*. (Accepted) IF 1.9
2. Babu Sarangam, Dhamodharan Prabhu, **Rathinam Raja**, Pugalendran Sangeetha, Jayappriyan KR, Sabariswaran Kandasamy and Mathiyazhagan Narayanan 2025. Experimental and *in silico* approaches to identify a sustainable source of bioplastics from seaweeds. *Biomass Conversion and Biorefinery*. IF 3.5
3. Prabhu N, **Rathinam Raja** and Christo Ananth 2025. Plant-based phytoconstituents /bioactive compounds as preventive and therapeutic agents for nephrolithiasis/ anti-nephrolithiasis properties. *Dubai Medical Journal*. (Accepted) IF 0.5
4. Vanitha K.G., N. Anandakumar Natarajan, N. Sudhakar, A.H. Hirad, A.A. Alarfaj, P.Arulselvan and **Rathinam Raja** 2024. Enhancing Therapeutic Potential: Investigating Traditional Detoxification Methods and Assessing their Influence on Anti-Microbial Efficacy, Phytochemical Composition, Heavy Metal Content and Anti-inflammatory Properties in *Trachyspermum ammi*. *Indian Journal of Pharmaceutical Education and Research*, 59(1): 1-12.
5. Nithya Rathinavel, James Obeth Ebenezer Samuel, Ananthi Veleeswaran, Sengottuvelan Nallathambi, Kumar Ponnuchamy, Govarthan Muthusamy, **Rathinam Raja**, Karthik Raja Ramalingam, Arun Alagarsamy 2024. Exploring the key factors enhancing the Microbial Fuel Cell performance. *Process Safety and Environmental Protection*, 193: 385-402. (Accepted) IF 7.8
6. Vijayakumar M, K.R. Jayappriyan and **Rathinam Raja** 2024. Beneficial impact of AgNPs on fucoxanthin production and evaluation of phytochemical variations in *Isochrysis* sp. *Algal Research*, 84: 103737 IF 4.5
7. Saranyadevi Subramaniam, Anitha Roy, K.E. Vivekanandan, A. Asrar Ahamed, C Bharathiraja, Suresh Kumarasamy, **Rathinam Raja**, Mohamad S. AlSalhi and

- Narayanan Mathiyazhagan 2024. An investigation on antidiabetic competence of *Ferula assafoetida* mediated AgNPs on diabetic (STZ) induced albino rats. *Biocatalysis and Agricultural Biotechnology*, 56: 103043 **IF 4.0**
8. Sabariswaran Kandasamy, Mathiyazhagan Narayanan, **Rathinam Raja**, Kesavan Devarayan, and R. Kavitha 2023. Current challenges and future perspectives on algae in wastewater treatment and energy conversion: waste to energy. *Current Opinion in Environmental Science & Health*, 33, 100469 **Cited by 2** **IF 8.1**
  9. Vijayakumar Maduraimuthu, Jayappriyan Kothilmozhian Ranishree, Raja Mohan Gopalakrishnan, Brabakaran Ayyadurai, **Rathinam Raja**, Klaus Heese 2023. Antioxidant Activities of Photoinduced Phycogenic Silver Nanoparticles and its Potential Applications. *Antioxidants*, 12(6), 1298 **Cited by 26** **IF 7.675**
  10. Arunkumar K, Madhuri Nalluri, Anjana P, Mohan G and **Rathinam Raja** 2023. Fucoxanthin as antioxidant, anti-hyaluronidase and cytotoxic agent: Potential of brown seaweeds decoction for tea supplement. *Journal of Food Measurement and Characterization*, 17, 3980-3989 **Cited by 3** **IF 3.006**
  11. Angelin Swetha T, Abhispa Bora, K. Mohanrasu, P. Balaji, **Rathinam Raja**, Kumar Ponnuchamy, Govarthanan Muthusamy, A. Arun 2022. A comprehensive review on Polylactic Acid (PLA)-Synthesis, Processing and Application in Food Packaging. *International Journal of Biological Macromolecules*, 234, 123715 **Cited by 315** **IF 8.025**
  12. **Rathinam Raja**, Shanmugam Hemaiswarya, Kulandaiyesu Arunkumar, Mathiyazhagan N, Sabariswaran K, A.Arun and P. Ramasamy 2022. Efficacy of *Eisenia bicyclis* phlorotannins in the treatment of diabetes and reducing inflammation. *Food Bioscience*, 52, 102381 **Cited by 12** **IF 5.318**
  13. Arunkumar K, K. Sreena, Muhsina Moosa, G. Mohan and **Rathinam Raja** 2022. Cytotoxic characterization of optically negative *Codium fragile* polysaccharide in HeLa and MCF cell lines. *Bioactive Carbohydrates and Dietary Fibre*, 23: 100341 **Cited by 2** **IF 3.62**
  14. Angelin Swetha T, Mohanrasu K, Sudhakar Muniyasamy, **Rathinam Raja**, Kumar Ponnuchamy, Govarthanan Muthusamy and A.Arun 2022. A Comprehensive Review on Techniques used in Conversion of Biomass into Bioeconomy. *Sustainable Energy Technologies and Assessments*, 53, 102682. **Cited by 27** **IF 7.632**
  15. Sathish Raam Ravichandran, Chitra Devi Venkatachalam, Mothil Sengottian, Sarath Sekar, Bhavya Shri Subramaniam Ramasamy, Mathiyazhagan Narayanan, Abilash

- Valsala Gopalakrishnan; **Rathinam Raja** 2022. A review on fabrication, characterization of membrane and the influence of various parameters on separation process. *Chemosphere*, 306. **Cited by 35** IF 7.086
16. Mathiyazhagan Narayanan, Mostafa El-sheekh, Ying Ma, Arivalagan Pugazhendhi, Devarajan Natarajan, Gajendiran Kandasamy, **Rathinam Raja**, Suresh Kumarasamy, Balaji Paulraj, Guanglong Liu, Sabariswaran Kandasamy 2021. Current status of microbes involved in the degradation of mixed contaminants of pharmaceuticals and personal care products (PPCPs) pollutants in the aquatic ecosystem. *Environmental Pollution*, 300, 118922. **Cited by 106** IF 8.071
17. Nadia Bahammou, **R. Raja**, Isabel S. Carvalho, Khalil Cherifi, Hafida Bouamama, Ouafa Cherifi 2021. Assessment of the Antifungal and Antioxidant Activities of the Seaweeds Collected from the Coast of Atlantic Ocean, Morocco. *Moroccan Journal of Chemistry*, 9(4), 639-648. **Cited by 3**
18. Sabariswaran Kandasamy, Mathiyazhagan Narayanan, Zhixia He, Guanglong Liu, Muthusamy Ramakrishnan, Palaniswamy Thangavel, Arivalagan Pugazhendhi, **Rathinam Raja** and Isabel S Carvalho 2021. Current strategies and prospects in algae for remediation and biofuels: An overview. *Biocatalysis and Agricultural Biotechnology*, 35, 102405 **Cited by 51** IF 4.0
19. Mathiyazhagan Narayanan, Murugan Prabhakaran, Devarajan Natarajan, Sabariswaran Kandasamy, **Rathinam Raja**, Isabel S. Carvalho, Veeramuthu Ashokkumar, Arunachalam Chinnathambi, Sulaiman Ali Alharbi, Kesavan Devarayan and Arivalagan Pugazhendhi 2021. Phycoremediation potential of *Chlorella* sp. on the polluted Thirumanimutharu river water. *Chemosphere*, 277, 130246 **Cited by 33** IF 7.08
20. Arunkumar K, Reeshma Raj, **Rathinam Raja** and Isabel S Carvalho 2021. Brown seaweeds as a source of anti-hyaluronidase compounds. *South African Journal of Botany*, 139, 470-477. **Cited by 28** IF 2.315
21. Ananthi V, **Rathinam Raja**, Isabel S Carvalho, P.Arivalagan and A.Arun 2021. A realistic scenario on microalgae based biodiesel production: Third generation biofuel. *Fuel*, 284: 15, 118965 **Cited by 148** IF 6.609
22. Arunkumar K, **Rathinam Raja**, VB Sameer Kumar, Ashna Joseph, Shilpa T and Isabel S Carvalho 2021. Antioxidant and cytotoxic activities of sulfated polysaccharides from five different edible seaweeds. *Journal of Food Measurement and Characterization*, 15, 567-576 IF 2.849 **Cited by 54**

23. Mathiyazhagan Narayanan, Natarajan Devarajan, Zhixia He, Sabariswaran Kandasamy, Veeramuthu Ashokkumar, **Rathinam Raja** and Isabel S Carvalho, 2020. Assessment of microbial diversity and enumeration of metal tolerant autochthonous bacteria from tailings of magnesite and bauxite mines. *Materials Today: Proceedings*, 33, 4391-4401  
**Cited by 34**
24. **Rathinam Raja**, Hemaiswarya Shanmugam, Sekaran Sridhar, Arun Alagarsamy, Venkatesan Ganesan, Sanniyasi Elumalai and Isabel S Carvalho 2020. Evaluation of proximate composition, antioxidant properties and phylogenetic analysis of two edible seaweeds. *Smart Science*, 8(3): 95-100. **Cited by 6**
25. Venkatesan Ganesan, **Rathinam Raja**, Shanmugam Hemaiswarya, Isabel S Carvalho and Narayanaswamy Anand, 2020. Isolation and characterization of two novel plasmids pCYM01 and pCYM02 of *Cylindrospermum stagnale*. *Saudi Journal of Biological Sciences*, 27(1): 535-542. IF 4.219 **Cited by 3**
26. **Raja R**, Ana Coelho, S. Hemaiswarya, K. Parkavi, Isabel S Carvalho and A. Arun 2018. Applications of Microalgal Paste and Powder as food and feed: An update using Text Mining Tool. *Beni-Suef University Journal of Basic and Applied Sciences*, 7(4): 740-747.  
**Cited by 121**
27. Ananthi V, G. Siva Prakash, K. Mohan Rasu, K. Gangadevi, T. Boobalan, **Rathinam Raja**, K. Anand, M. Sudhakar, Anil Chuturgoon, A. Arun 2018. Comparison of integrated sustainable biodiesel and antibacterial nano silver production by microalgal and yeast isolates. *Journal of Photochemistry & Photobiology B: Biology*, 186: 232-242.  
IF 6.252 **Cited by 42**
28. **Rathinam Raja**, Shanmugam Hemaiswarya, Venkatesan Ganesan, and Isabel S Carvalho, 2017. Internal Transcribed Sequence of *Halocafeteria seosinensis* (Bicosoecids). *Beni-Suef University Journal of Basic and Applied Sciences*, 6(3): 266-268. **Cited by 4**
29. **Rathinam Raja**, Shanmugam Hemaiswarya, K. Arunkumar and Isabel S Carvalho, 2016. Antioxidant activity and lipid profile of three seaweeds of Faro, Portugal. *Brazilian Journal of Botany*, 39(1): 9-17. IF 1.296 **Cited by 37**
30. **Rathinam Raja**, Hemaiswarya S, V. Ganesan and Isabel S Carvalho, 2016. Recent developments in therapeutic applications of cyanobacteria. *Critical Reviews in Microbiology*, 42(3): 394-405. IF 7.349 **Cited by 99**

31. **Raja R**, Hemaiswarya S, Isabel S. Carvalho and K. Arunkumar, 2015. Impact of salt effluent and seaweed liquid fertilizers on three microalgae. *Brazilian Journal of Botany*, 38(3): 547-553. IF 1.296 **Cited by 6**
32. Hemaiswarya S, **R. Raja**, R. Ravikumar and Isabel S.Carvalho, 2013. Mechanism of action of probiotics. *Brazilian Archives of Biology and Technology*, 56: 113-119. IF 0.546 **Cited by 191**
33. Hemaiswarya S, **R. Raja**, Isabel S Carvalho, R. Ravikumar, Vasudeo Zambare and Debmalya Barh, 2012. An Indian scenario on renewable and sustainable energy sources with emphasis on algae. *Applied Microbiology and Biotechnology*, 96: 1125-1135. IF 4.813 **Cited by 48**
34. Louise Teixeira Cerdeira, Maria Paula Cruz Schneider, Anne Cybelle Pinto, Sintia Silva de Almeida, Anderson Rodrigues dos Santos, Eudes Guilherme Vieira Barbosa, Amjad Ali, Flávia Figueira Abur jaile, Vinicius Augusto Car valho de Abreu, Luis Carlos Guimarães, Siomar de Castro Soares, Fernanda Alves Dorella, Flávia Souza Rocha, Erick Bol, Pablo Henrique Caracciolo Gomes de Sá, Thiago Souza Lopes, Maria Silvanira Barbosa, Adriana Ribeiro Carneiro, Rommel Thiago Jucá Ramos, Nilson Antônio da Rocha Coimbra, Alex Ranieri Jerônimo Lima, Debmalya Barh, Neha Jain, Sandeep Tiwari, **Rathinam Raja**, Vasudeo Zambare, Preetam Ghosh, Eva Trost, Andreas Tauch, Anderson Miyoshi, Vasco Azevedo and Artur Silva (2011). Complete Genome Sequence of *Corynebacterium pseudotuberculosis* strain-CIP 52.97 - isolated from horse in Kenya. *Journal of Bacteriology*, 193: 7025-7026. IF 3.219 **Cited by 26**
35. Hemaiswarya S, **R. Raja**, R. Ravi kumar, V. Ganesan and C. Anbazhagan, 2011. Microalgae: A sustainable source for feed in aquaculture. *World Journal of Microbiology and Biotechnology*, 27: 1737-1746. IF 3.312 **Cited by 581**
36. Hemaiswarya S, M. Poonkothai, **R. Raja** and C.Anbazhagan, 2009. Comparative study on the antimicrobial activities of three Indian medicinal plants. *Egyptian Journal of Biology*, 11: 52-57. IF 1.995 **Cited by 54**
37. Hemaiswarya S, **R. Raja**, C. Anbazhagan and V. Thiagarajan, 2009. Antimicrobial and mutagenic properties of the tubers of *Gloriosa superba* Linn. (*Kalihari*). *Pakistan Journal of Botany*, 41: 293-299. IF 0.972 **Cited by 42**
38. **Raja R**, S. Hemaiswarya, N. Ashok kumar, S. Sridhar and R. Rengasamy, 2008. A perspective on the biotechnological potential of microalgae. *Critical Reviews in Microbiology*, 34: 77-88. IF 7.349 **Cited by 569**

39. Hemaiswarya S and **R. Raja**, 2008. Effect of bark leachate of *Thespesia populnea* on *Amaranthus tricolor*. *Allelopathy Journal*, 22: 253-258.
40. **Raja R**, S. Hemaiswarya, D. Balasubramanyam and R. Rengasamy, 2007a. PCR-identification of *Dunaliella salina* (Volvocales, Chlorophyceae) and its growth characteristics. *Microbiological Research*, 162: 168-176. IF 5.415 **Cited by 61**
41. **Rathinam Raja**, Shanmugam Hemaiswarya, Dakshanamoorthy Balasubramanyam and Ramasamy Rengasamy, 2007b. Protective effect of *Dunaliella salina* (Volvocales, Chlorophyta) on experimentally induced fibrosarcoma on wistar rats. *Microbiological Research*, 162: 177-184. IF 5.415 **Cited by 78**
42. **Raja R**, S. Hemaiswarya and R. Rengasamy, 2007c. Exploitation of *Dunaliella* for  $\beta$ -carotene production. *Applied Microbiology and Biotechnology*, 74: 517-523. IF 3.53 **Cited by 397**
43. Yi feng Hsu, Co-shine Wang and **Rathinam Raja**, 2007. Gene expression pattern at desiccation in the anther of *Lilium longiflorum*. *Planta*, 226: 311-322. IF 4.116 **Cited by 18**
44. **Raja R**, C. Anbazhagan, V. Ganesan and R. Rengasamy, 2004b. Efficacy of *Dunaliella salina* (Volvocales, Chlorophyta) in salt refinery effluent treatment. *Asian Journal of Chemistry*, 16: 1081-1088. **Cited by 30**

#### NATIONAL PUBLICATIONS (02)

1. **Rathinam Raja**, Hemaiswarya S, Ganesan V and Isabel S Carvalho, 2014. Biomass from microalgae: An overview. *Oceanography*, 2: 1-7. **Cited by 82**
2. **Raja R**, C Anbazhagan, D Lakshmi, R Rengasamy 2004a. Nutritional studies on *Dunaliella salina* (Volvocales, Chlorophyta) under laboratory conditions. *Seaweed Research and Utilization*, 26: 127-146. **Cited by 38**

#### Manuscripts Submitted (04)

1. Dhanya P, Anjana, **Rathinam Raja**, Annamalai Muthusamy, Kulanthaiyesu Arunkumar 2024. Fucoidan for agriculture application; Review on structure diversity, extraction, biosynthesis and physiology of brown algae fucoidan, and bio-stimulant applications in crop improvement. *Critical Reviews in Biotechnology*.
2. Vijayakumar Maduraimuthu; Jayappriyan Kothilmozhian Ranishree, Shenbhagaraman Ramalingam; Thirunavukkarasu Chinnasamy; **Rathinam Raja** 2025. Sequential optimized cultivation conditions of *Isochrysis galbana* for sustainable biomass and fucoxanthin production. *Journal of Cleaner Production*.

3. Megharethnam Kaviraj; Jayappriyan Kothilmozhan Ranishree; **Rathinam Raja** 2025. Exploring the Antifungal Properties of Algal-Derived Compounds: A Review.
4. **Rathinam Raja**, J. Arutchelvi, K.R. Jayappriyan, Arunkumar K, A. Arun, N. Mathiyazhagan and K. Sabariswaran 2025. A Comprehensive Review on the Multifaceted Potential of *Gracilaria verrucosa*: From Nutrition to Bioethanol Production. Algal Research.

#### [Indian Patent Granted \(01\)](#)

- 1) Babu Sarangam, **Rathinam Raja**, Jayappriyan Kothilmozhan Ranishree and Ramasamy Palaniappan 2022. A process of preparation of Seaweed based biodegradable plastic film and product thereof. Appl. No. 202241004976.

#### [Indian Patents Filed \(09\)](#)

- 2) Kulanthaiyesu Arunkumar, Anjana P, Madhuri Nalluri and **Rathinam Raja** 2021. Anti-aging Brown Algae Tea and preparation method thereof. Appl. No. 202141054015.
- 3) **Rathinam Raja**, K. Arunkumar, Mathiyazhagan Narayanan and Sabariswaran Kandasamy, A. Arun, K.R. Jayappriyan, and Ramasamy Palaniappan 2022. A system for refining salt effluent. Appl. No. 202241020077.
- 4) **Rathinam Raja**, Munusamy Panneerselvam, Kanagasabi Shanthi and Ramasamy Palaniappan 2022. A method of extraction of an anti-obesity activity exhibiting compound from seeds of *Rhynchosia rufescens*. Appl. No. 202241061583 A
- 5) Hemaiswarya Shanmugam, **Rathinam Raja**, K. Arunkumar, Babu Sarangam, M.K. Kalaivani and S. Pujithaa 2023. A process of sewage water treatment by the seaweed *Grateloupia*. Appl. No. 202341055669 A
- 6) **Rathinam Raja**, Hemaiswarya S, K. Arunkumar, A. Arun, Sabariswaran Kandasamy and Mathiyazhagan N 2023. A Process of Extraction of  $\beta$ -carotene from *Dunaliella salina* grown in Pig Manure. Appl. No. 202441007010 A
- 7) **Rathinam Raja**, S. Pujithaa, B. Deepalakshmi, K.R. Jayappriyan and S. Mini Jacob 2023. A Novel and Simple Method for *Synechocystis* Biomass Mediated Iron Acquisition from Sewage Sludge. Appl. No. 202441004622 A
- 8) **Rathinam Raja**, B. Deepalakshmi, S. Pujithaa, W. Sofi Beaula, C.V. Karthikeyan and Natesan Sudhakar 2024. A Formulation for Inhibiting Bacterial Hyaluronidase and Disrupting Biofilm Formation in *Staphylococcus aureus*. Appl. No. 202441060528 A
- 9) **Rathinam Raja**, Shanmugam Hemaiswarya, K. Arunkumar, A. Arun, Kothilmozhan Ranishree Jayappriyan, K. Prabhu, J. Arutchelvi, Dillirani Nagarajan, Grasian Immanuel,

Singaravelu Pujithaa and Sasikumar Pattabi 2024. A bioactive Synergistic formulation for management of microbial dysbiosis and product thereof. Appl. No. 202441060529 A

- 10) **Rathinam Raja**, S. Hemaiswarya, B. Deepalakshmi, S. Pujithaa, K. Arunkumar, Jayappriyan K.R, S. Shyamala, and A. Arun 2025. A process of preparation of microencapsulated seaweed polysaccharides synbiotics for inflammation-induced metabolic syndrome. Appl. No. 202541017689 A

#### [Indian Patent to be Filled \(01\)](#)

- 11) Deepalakshmi B, Mohan Kumar G, Arun A, Jayappriyan K.R, K. Arunkumar, N.Sudhakar and **Rathinam Raja** 2025. Valorization of Organic Waste in Nutrient-Dense Mealworm Feed: Improved Biochemical Profiles, Immune Fortification, and Extended Shelf Life.

#### [International Book Editing \(01\)](#)

- ✓ **Rathinam Raja**, S. Hemaiswarya, Muthusamy Sanjivkumar, Tamil Selvan Silambarasan and Grasian Immanuel 2025. Algae in Diabetes Management: Therapeutic Properties and Applications. Springer Nature Publications Pvt. Ltd., Singapore.

#### [Books Published from India \(11\)](#)

- ✓ **Rathinam Raja**, Shanmugam Hemaiswarya, N. Ashok Kumar and S. Sridhar 2022. Nutraceuticals and Health Supplements of *Dunaliella*. Discovery Publications, Chennai, India, June 2022, ISBN 9789394762145.
- ✓ **Rathinam Raja**, R. Rajkumar and G. Immanuel 2023. Hand book of Algal Compounds. Gayathri Publications, Chennai, India ISBN 978-93-6122-543-7.
- ✓ **Rathinam Raja**, R. Rajkumar and K. Arunkumar 2023. Hand book of Exploring Algae for Medicinal Properties. Gayathri Publications, Chennai, India ISBN 9789361224195.
- ✓ **Rathinam Raja**, S. Pujithaa and S. Babu 2023. Hand book of Algae Derived Polysaccharides. Gayathri Publications, Chennai, India ISBN 978-93-6122-946-6.
- ✓ **Rathinam Raja**, K.R. Jayappriyan and A. Arun 2023. Algae for the formulation of Health food supplements. Gayathri Publications, Chennai, India, ISBN 978-93-6122-955-8.
- ✓ **Rathinam Raja**, N. Ashokkumar and S. Sridhar 2023. Perspectives of Algal Polysaccharides: A Novel Approach. Gayathri Publications, Chennai, India, ISBN 9789361225680
- ✓ **Rathinam Raja**, K. Sabariswaran and K.R. Jayappriyan 2024. The Role of Algae in Disease Management. Gayathri Publications, Chennai, India, ISBN 978-93-6122-613-7

- ✓ **Rathinam Raja**, K. Sabariswaran and N. Mathiyazhagan 2024. Properties of Algae Fucoidan. Gayathri Publications, Chennai, India, ISBN 978-93-6122-172-9
- ✓ **Rathinam Raja**, K. Vasumathi and S. Sridhar 2024. Algae Polysaccharides in Obesity Management. Gayathri Publications, Chennai, India, ISBN 9789361223150
- ✓ **Rathinam Raja**, S. Pujithaa and S. Mini Jacob 2024. Book on Algae and Cancer. Gayathri Publications, Chennai, India, ISBN 978-93-6122-370-9
- ✓ **Rathinam Raja**, S. Pujithaa and B. Deepalakshmi 2024. Perspectives of Algae against Cancer. Gayathri Publications, Chennai, India, ISBN 978-93-6122-155-2

#### Books Published from International Publishers (05)

- ✓ Arun A, Kunyu Zhang, Sudhakar Muniyasamy and **Rathinam Raja**, 2024. Biodegradable Polymers, Blends and Biocomposites: Trends and Applications. Taylor and Francis Books (India) Pvt. Ltd. ISBN 9781032302492.
- ✓ **Rathinam Raja**, Shanmugam Hemaiswarya, N. Mathiyazhagan, K Sabariswaran, and K.R. Jayappriyan 2023. *Haematococcus*: Biochemistry, Biotechnology and Biomedical Applications. **Springer Nature** Publishers Pvt. Ltd., Maldova. ISBN 978-981-99-2900-9
- ✓ Arunkumar K, A. Arun, **Rathinam Raja** and P. Ramasamy, 2023. Algae Materials: Applications Benefitting Health. **Elsevier Publications**, ISBN 9780443188169, Feb' 2023. (<https://www.elsevier.com/books/algae-materials/arunkumar/978-0-443-18816-9>)
- ✓ **Rathinam Raja**, S. Hemaiswarya, K. Arunkumar and P. Ramasamy 2022. *Dunaliella*: Antioxidant and Anticancer Perspectives. LAP **Lambert Academic Publishing**, Maldova. ISBN 9786205494011, Oct' 2022.
- ✓ **Rathinam Raja**, Shanmugam Hemaiswarya, K. Arunkumar and Isabel S. Carvalho, 2021. Algae for Food: Cultivation, Processing and Nutritional Benefits, CRC Press, **Taylor and Francis Group**, ISBN-13: 9780367762087. **Cited by 4**

#### Conference Book Proceedings

- ✓ **Rathinam Raja** et al., 2023. **1<sup>st</sup> National Conference on Biomaterials in Health Care**. Chennai, India. ISBN 978-93-5914-935-6.
- ✓ **Rathinam Raja** et al., 2024. **1<sup>st</sup> National Conference on Integrative Medical Sciences**. Chennai, India. ISBN 978-93-341-5151-0

#### Book chapters (17)

1. Karthikeyan CV, K.R. Jayappriyan, A. Arun, K. Arunkumar and **Rathinam Raja** 2025. Chapter 54. Recent discoveries on medicinal properties of microalgae. Part V. Handbook of Microalgae-Based Processes and Products, 2e. Eds. E. Jacob-Lopes, M.M. Maroneze, M.I. Queiroz, and L.Q. Zepka, Elsevier Publications Pvt. Ltd. (**Submitted**)

2. Karthikeyan CV, **Rathinam Raja**, K.R. Jayappriyan and A. Arun 2025. Recent Discoveries on Medicinal Properties of Microalgae. Chapter 38 in Handbook of Microalgae-Based Processes and Products - Second Edition (Elsevier), Eds. E. Jacob-Lopes, M.M. Maroneze, M.I. Queiroz, and L.Q. Zepka. (**Submitted**)
3. Umashree VR, **Rathinam Raja** and K. Arunkumar 2024. 'Seaweed culture and its food value' 8<sup>th</sup> Chapter in 'Climate Change Adaptations in Algae and It's Potential Implications as Alternative Food Source' 415 Oser Avenue, Suite N, Hauppauge NY 11788-3619, USA. (**Accepted**)
4. Vasumathi K, Kanmani Shanmugam, W. Sofi Beaula, **Rathinam Raja**, S. Pujithaa, K. R. Jayappriyan and Ouafa Cherifi 2024. Algal bioreactors for phycoprospecting: An emphasis on algae culturing. (Eds.) Eduardo Jacob-Lopes, Leila Queiroz Zepka and Mariany Costa Depira. Chapter 35: Algal Bioreactors: Vol 1: Science, Engineering and Technology of Upstream Processes, Series Editor Yves Gagnon, Woodhead Series in Bioenergy, Elsevier Publications Ltd., 549-566.
5. Ashokkumar N, S. Sridhar, K. R. Jayappriyan and **Rathinam Raja** 2023. Applications of microalgae in aquaculture feed (Chapter 33) in the book 'Handbook of Food and Feed from Microalgae: Production, Application, Regulation, and Sustainability' edited by Eduardo Jacob-Lopes published by Elsevier Publishers 2023, ISBN-9780323991964, 421-433. **Cited by 1**
6. Jayappriyan KR, Kurinjimalar C, M. Kaviraj A, M.Vijayakumar, R. Rajkumar and **Rathinam Raja** 2022. Bioactive compounds from algae: Potential applications, a chapter in Algal Functional Foods and Nutraceuticals: Benefits, Opportunity and Challenges. Edited by Avinash Mishra, Bentham Publishers Pvt. Ltd. Singapore, ISBN 9789815051872, 184-203.
7. Mathiyazhagan Narayanan, Sabariswaran Kandasamy, Zhixia He, Shanmugam Hemaiswarya, **Rathinam Raja** and Isabel S Carvalho 2022. 'Algal biotechnology for Nutritional and Pharmaceutical Applications (Chapter 10), in Marine micro and macroalgal technologies of Biotechnology in Healthcare: Technologies and Innovations, Vol I, Edited by Debmalya Barh, Academic Press, Elsevier Publications Pvt. Ltd. ISBN: 9780323898379, pp 177-194.
8. Parkavi K, **R. Raja**, K. Arunkumar, Ana Coelho, S. Hemaiswarya and Isabel S. Carvalho, 2020. Recent insights into algal biotechnology: An update using text mining tool. 19<sup>th</sup> chapter in 'Encyclopedia of Marine Biotechnology' Edited by Se Kweon Kim, Wiley-Blackwell Publishers, ISBN: 978-1-119-14377-2.

- (<https://www.wiley.com/en-us/Encyclopedia+of+Marine+Biotechnology-p-9781119143772>) **Cited by 3**
9. Mohanrasu K, RGR Rao, **R Raja** and A. Arun, 2020. Bioremediation Process by marine microorganisms. Encyclopedia of Marine Biotechnology. Wiley-Blackwell, Editor Se-Kwon Kim-Marine ISBN: 978-1-119-14377-2, Vol. 4, pp 2211-2228. **Cited by 6**
  10. Mohanrasu K, R. Guru Raj Rao, M. Sudhakar, **Rathinam Raja**, J. Jeyakanthan, A. Arun 2020. Marine Microbial Pharmacognosy: Prospects and Perspectives, Chapter 6 in Marine Niche: Applications in Pharmaceutical Sciences, (Eds.) Nathani N, Mootapally CS, Gadhvi IR, Maitreya B, Joshi CG, Springer Nature, ISBN: 978-981-15-5017-1 (<https://www.springer.com/in/book/9789811550164>) **Cited by 2**
  11. **Raja R**, Hemaiswarya S, Ravikumar R and Isabel S Carvalho, 2018. Chapter 4. 'Microalgae biomass production' from Marine macro and microalgae: An overview Edited by Xavier Malcata F, Isabel Sousa Pinto and Catarina Guedes A, CRC Press, Taylor & Francis Group, ISBN 9781498705332 (An Imprint of Edenbridge Ltd, British Channel Islands) Enfield, New Hampshire-03748, Portland, USA, Pages 63-77. (<https://www.crcpress.com/Marine-Macro--and-Microalgae-An-Overview/Malcata-Pinto-Guedes/p/book/9781498705332>)
  12. Hemaiswarya S, Ramaraj Sathasivam, **Rathinam Raja**, Arunkumar K and Isabel S. Carvalho, 2018. 'Algal biotechnology: An update from industrial and medical point of view' Chapter 3 in Part I: Microbial and Plant Technologies: Omics Technologies and Bioengineering: Towards improving quality of life. Edited by Debmalya Barh and Vasco Azevedo, Volume II, 1<sup>st</sup> Edition, Academic Press Imprint: Elsevier Publications, ISBN: 9780128046593, USA, pp 31-52. <https://doi.org/10.1016/B978-0-12-815870-8.00003-6> **Cited by 6**
  13. Ramaraj Sathasivam, S Hemaiswarya, **R Raja**, V Ganesan, C Anbazhagan, Isabel S Carvalho and Niranjana Juntawong, 2015. 'Microalgae as an attractive source for biofuel production' Chapter 8 in Environmental Sustainability-Role of green technologies, Edited by P. Thangavel and G. Sridevi, Springer Publishers, ISBN 9788 132 220 558 pp 129-157. **Cited by 21** <http://www.springer.com/gp/book/9788132220558>
  14. **Raja R**, Hemaiswarya S, Isabel S Carvalho and V. Ganesan, 2014. 'Therapeutic applications of cyanobacteria with emphasis on their economics' Chapter 6 in 'Cyanobacteria: An Economic Perspective' Edited by Naveen K Sharma, Lucas J Stal and Ashwani K. Rai, John Wiley Blackwell, Chichester, ISBN 9781119941279, pp 93-102. **Cited by 10** <https://doi.org/10.1002/9781118402238.ch6>

15. Hemaiswarya S, **R. Raja**, R. Ravikumar and Isabel S Carvalho, 2013. Chapter 3: 'Microalgae taxonomy and breeding in 'Biofuel Crops: Production, Physiology and Genetics' published by CABI, GA, UK. Edited by Bharat P.Singh, ISBN-13: 9781845938857, pp 44-53. **Cited by 32**  
[https://books.google.pt/books?id=Bp10AZ\\_g2IsC&printsec=copyright&hl=pt-PT#v=onepage&q&f=false](https://books.google.pt/books?id=Bp10AZ_g2IsC&printsec=copyright&hl=pt-PT#v=onepage&q&f=false)
16. Hemaiswarya S, **R. Raja**, R. Ravikumar, A. Yogesh kumar and Isabel S Carvalho, 2013. 'Microalgal omics and their applications' Chapter-18 (Part II) in 'OMICS: Applications in Biomedical, Agricultural and Environmental Sciences' published by CRC, Taylor and Francis group, USA, Edited by Debmalya Barh, Vasudeo Zambare and Vasco Azevedo, ISBN: 9781466562837, 439-451. **Cited by 3**
17. **Raja R** and S. Hemaiswarya, 2010. 'Microalgae and immune potential' a chapter in 'Dietary Components and Immune Function' edited by Ronald R. Watson, Sherma Zibadi and Victor R. Preedy, Humana Press/Springer, USA, ISBN: 978-1-60761-060-1, pp 515-527. ([http://link.springer.com/chapter/10.1007%2F978-1-60761-061-8\\_27](http://link.springer.com/chapter/10.1007%2F978-1-60761-061-8_27)). **Cited by 35**
18. **Raja R**, 2009. Microalgae [Pourriel probable] contributed a column in the II<sup>nd</sup> Chapter in 'Un monde invisible (Microbes)' edited by Laurence Bordenave, Published by Aubanel-La Martinière, La Martinière Group, ISBN: 9782700606706, France, pp 124-126 (**French Edition**) (<http://www.abebooks.com/monde-invisible-Microbes-French-Edition-Bordenave/8950151515/bd>).

### Typical Microalgae Collection

Travelled more than 1810 km's by surface along the stretch of **Western Sahara, Morocco** (the largest desert in the world) during March 2014.

### GenBank Deposition

GenBank Accession numbers

Hemaiswarya S, Ganesan V, **Raja R** and Isabel S Carvalho, 2013.

- KF573418 (*Dunaliella bardawil* RR17)  
<https://www.ncbi.nlm.nih.gov/nuccore/KF573418>
- KF573419 (*Dunaliella salina* RR101)  
<https://www.ncbi.nlm.nih.gov/nuccore/KF573419>
- KF573420 (*Dunaliella salina* RR102)  
<https://www.ncbi.nlm.nih.gov/nuccore/KF573420>

- KF548309 (*Halocafeteria seosinensis*)  
<https://www.ncbi.nlm.nih.gov/nucleotide/KF548309>
- KF545980 (*Halocafeteria seosinensis*)  
<https://www.ncbi.nlm.nih.gov/nucleotide/KF573418>

Ganesan V, Hemaiswarya S, Radhakrishnan N, **Raja R** and Isabel S Carvalho, 2016.

- KX817339 (*Hematococcus pluvialis*)  
<https://www.ncbi.nlm.nih.gov/nucleotide/KX817339>
- KX817340 (*Hematococcus pluvialis*)  
<https://www.ncbi.nlm.nih.gov/nucleotide/KX817340>
- KX817341 (*Hematococcus pluvialis*)  
<https://www.ncbi.nlm.nih.gov/nucleotide/KX817341>
- KX817342 (*Hematococcus pluvialis*)  
<https://www.ncbi.nlm.nih.gov/nucleotide/KX817342>
- KX817343 (*Hematococcus pluvialis*)  
<https://www.ncbi.nlm.nih.gov/nucleotide/KX817339>

**Raja R**, Sridhar S, Hemaiswarya S, Isabel S Carvalho and Ganesan V, 2018.

- MH469623.1 Unknown Diatom <https://www.ncbi.nlm.nih.gov/nucleotide/MH469623>

**Raja R**, Sridhar S, Hemaiswarya S, Isabel S Carvalho and Ganesan V, 2018.

- MH429839 (*Halimeda opuntia*) <https://www.ncbi.nlm.nih.gov/nucleotide/MH429839>

**Raja R**, Sridhar S, Hemaiswarya S, Ganesan V, Arunkumar and Isabel S Carvalho, 2018.

- MH569440 (*Gracilaria corticata*) <https://www.ncbi.nlm.nih.gov/nucleotide/MH569440>

**Raja R**, Pujithaa S, Deepalakshmi B, Jayappriyan KR, Arun A, Sabariswaran K, Mathiyazhagan N, Arutchelvi J and Dillirani N 2024.

- PQ559790 (*Enterobacter quasihormaechei*)
- PQ559789 (*Acinetobacter baumannii*)

**Raja R**, Arunkumar K, Deepalakshmi B, Shyamala S, Hemaiswarya S, Jayappriyan KR, Pujithaa S, Mathiyazhagan N, Arun A, Sabariswaran K, and Arutchelvi J 2025.

- PV172458 *Shigella flexneri*

**Raja R**, Arunkumar K, Deepalakshmi B, Hemaiswarya S, Jayappriyan KR, Pujithaa S, Arun A and N. Sudhakar 2025.

- PV172451 *Acinetobacter baumannii*

### Entrance Question Paper Setter

Malla Reddy Vishwavidhapeeth (Deemed to be University) 2025, Hyderabad, Telangana

### Supervisor: Allied Health Sciences (AHS) Dissertation

Ms. R. Harsha (B.Sc., Physician Assistant), Feb' 2024

### Ph.D., Supervisor (Bharath Institute of Higher Education and Research-BIHER)

#### Part-Time Research Scholars

- 1) Mrs. S. Shyamala (March 2024), Dept. of Research & Development, Sree Balaji Medical College and Hospital, Chennai
- 2) Mrs. K.N. Bhuvaneswari (Feb'2025), Associate Professor, College of Nursing, St. Martha's Hospital, Nerupathunga Road, Bengaluru
- 3) Mrs. C. Jotheeswari (Feb'2025), Associate Professor, Chennais Amirtha Nursing College, Athur, Chengalpattu
- 4) Mrs. Ahalya Jeniffer (Feb'2025), R-Shell Info Services, Nagercoil, Tamil Nadu
- 5) Mrs. Muneeswari. B, Dr. Achal Singh Yadav Institute of nursing and paramedical science, Lucknow, Utter Pradesh.
- 6) Mrs. P.B.Nishida (Jan' 2025), Atbott Solutions, 69/1854 A1, InnerSpace, SRM Road, Kochi, Kerala
- 7) Mrs. Raji Girijan (Jan' 2025), Atbott Solutions, 69/1854 A1, InnerSpace, SRM Road, Kochi, Kerala
- 8) Mrs. Merlin M (Jan' 2025), Assistant Professor, Padmashree College of Hospital Administration, Bangaluru
- 9) Nahana CA, Clinical Psychologist, Malappuram Dist., Kerala

### Ph.D., EXTERNAL (FOREIGN) EXAMINER

Alagappa University, Annamalai University, Bharathiar University, Bharathidasan University, Karunya University, Mangalore University, Periyar University, Pondicherry Central University, Tezpur University, Thiruvalluvar University, University of Madras and VIT University.

### Doctoral theses evaluated

- Mr. N. Senthilkumar 2013, P.Murugan 2014, M.G.Rajaram 2015, V.Shyamala, 2018 & S. Jayshree 2018. Centre for Advanced Studies in Botany, **University of Madras**, Guindy Campus, Chennai, India.

- Mr. S. Vino 2014 & Vijayaragavan Selvarangan 2014. School of Biosciences and Technology, **Vellore Institute of Technology (VIT)**, Vellore, Tamil Nadu, India.
- Mr. Rahul Chandran 2016, P.S.Sreeja 2018 & S.Saikumar 2019. Department of Botany, **Bharathiar University**, Coimbatore, India.
- Mr. S. Mukund 2016 & M.Palanisamy 2017. Department of Plant Science and Plant Biotechnology, Ramakrishna Mission **Vivekananda College**, Mylapore, University of Madras, Chennai, India.
- Mr. K. Gopinath 2016. Department of Bioinformatics, **Alagappa University**, Karaikudi, Tamil Nadu, India.
- Mr. S. Manikandaprabhu 2016. Department of Zoology, **Annamalai University**, Annamalai Nagar, Chidambaram, Tamil Nadu, India.
- Ms. W. Femina 2016 & Ms.Joshini 2016. Department of Biotechnology, **Karunya University**, Coimbatore, India.
- Mr. G. Dinesh Babu 2017. Department of Marine Biotechnology, NFMC, School of Marine Sciences, **Bharathidasan University**, Trichy, India.
- Mr. K. Arivoli 2017. **Institute of Forest Genetics and Tree Breeding** (Bharathiar University), Forest Campus, R.S.Puram, Coimbatore-641 002, India.
- Mr. N. Madhivanan 2017, Department of Civil Engineering, **Pondicherry Engineering College**, Pondicherry Central University, Pudhucherry, India.
- Ms. T. Vimala 2017, A.Eswari 2019 & N.Padmapriya 2020. Department of Plant Science and Plant Biotechnology, **Queen Mary's College** (University of Madras), Beach Road, Mylapore, Chennai, India.
- Mr. C. Kumar 2018. Department of Botany (Bharathiar University-Part time), **Government Arts College, Tiruvannamalai**, Tamil Nadu, India.
- Mr. S. Palanivel 2018. Department of Botany, **Guru Nanak College** (University of Madras), Velachery, Chennai, India.
- Ms. S. Priya 2019. Plant Biology and Plant Biotechnology (Bharathiar University-Part time), **Ethiraj College for Women**, Chennai, India.
- Mr.M.Prasanna 2019. Department of Botany, **Government Arts College** (Thiruvalluvar University), **Tiruvannamalai**, Tamil Nadu, India.
- Ms.S.Vijayalakshmi 2019 & M.I.Farheena 2019. Department of Botany, **Chikkanna Government Arts College** (Bharathiar University), Tirupur, Tamil Nadu, India.

- Mrs.G.Malathi 2019. Department of Botany, **Arignar Anna Government Arts College** (Periyar University), Namakkal, Tamil Nadu, India.
- Ms.D.Latha 2019. Department of Inorganic Chemistry, **University of Madras**, Guindy Campus, Chennai, India.
- Ms.M.Christhu Uthayam 2019. Department of Botany, **Annamalai University**, Annamalai Nagar, Chidambaram, Tamil Nadu, India.
- Ms.S.Valarmathi 2019. Department of Botany, **Kandasamy Kandar's College** (Periyar University), P.Velur, Namakkal District, Tamil Nadu, India.
- Mrs.V.Ananthi 2020, Mr.G. Sivaprakash 2020, Department of Microbiology, **Alagappa University**, Karaikudi, Tamil Nadu, India.
- Mr.Mohammed Shameer Cheriyaath 2020, Department of Botany, Sri Vyasa N.S.S. College, Wadakkanchery, Thrissur (Dt.), Kerala (**Bharathiar University**), India.
- Mrs.V.Sarumathi 2020. Department of Botany, Govt. Arts College (**Bharathiar University**), Cheyyar, Tamil Nadu, India.
- Ms.Severes Alifha Rosy 2020. Department of PG Studies and Research in Biotechnology, St. Aloysius College (**Mangalore University**), Mangaluru, Karnataka, India.
- Mr.W.Parveen 2021. Department of Plant Biology and Plant Biotechnology, Quaid-E-Millath Govt. College for Women (**University of Madras**), Chennai-600 002, India.
- Ms.R.C. Rency 2021. Department of Botany, Govt. Arts College, **Bharathiar University**, Coimbatore, India.
- Mr.Prathik Kulkarni 2021. Department of Civil Engineering, **Pondicherry Engineering College**, Pondicherry Central University, Pudhucherry, India.
- Mr. Pritam Bardhan 2021. Department of Molecular Biology and Biotechnology, **Tezpur University**, Tezpur, Assam, India.
- Mr. K.Lasitha 2021. Department of Botany, Nirmala College for Women, **Bharathiar University**, Coimbatore, India.
- Mr. A.Maruthasalam 2022. Department of Plant Science, Government Arts College, **Bharathiar University**, Coimbatore, India.
- Ms.R.Priya 2022. Department of Botany, Govt. Arts College for Men (Nandanam), **Bharathiar University**, Coimbatore, India.

#### [International R&D Project](#)

(<https://www.fct.pt/apoios/projectos/consulta/aavaliar.phtml.en?iep=18595&idconcurso=217>)

Raja Rathinam: EXPL/MAR-BIO/1456/2013. Diversity of microalgal strains from Portugal with respect to Long chain Omega 3 Fatty acids (LC  $\omega$ -3 FA), Universidade do Algarve (UAlg).

#### National Funded (R&D) Projects

- ✓ R.Raja: BIHER/RDF 2023/BRDF/23002 Dated: 03<sup>rd</sup> Nov' 2023. Efficacy of Novel microencapsulated seaweed polysaccharides synbiotics on inflammation induced metabolic syndrome. Rs.1,00,000 (**Awarded**)
- ✓ R.Raja: BIHER/BRDF/2024/1031 Dated: 1<sup>st</sup> Nov' 2024. Algal Xanthophylls: Novel Agents for Inhibiting Bacterial Hyaluronidase and Disrupting Biofilm Formation in *S. aureus*. Rs.1,00,000 (**Awarded**)

#### Co-Supervisor (UG dissertations @ FSLab, University of Algarve)

1. Ms.Beatriz Ponte, 2018. Antioxidant activity of medicinal plants with antidiabetic properties.
2. Ms.Vessa Kola, 2019. Antioxidant activity and phenolic contents of *Cistus ladanifer*, *Thymbra capitata* and *Mentha suaveolens*.

#### INTERNATIONAL TRAVEL GRANTS RECEIVED

##### 1. From Indian Agencies

- **Raja R**, R. Rengasamy and G.K.Suraishkumar, 'Vth Asian Pacific Phycological Forum- Algae in a changing world" held at Rutherford house, Pipitea campus, Wellington during 10<sup>th</sup>-14<sup>th</sup>, November 2008 conducted by Victoria University and NIWA, **New Zealand** (Poster presentation - Sponsored by DST and CCSTDS, India).
- **Rathinam Raja**, R. Rengasamy and G.K.Suraishkumar, 'III International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld 2009)' during 2-4, December 2009 organized by Formatex Research Centre held at University of Lisbon, Lisbon, **Portugal** (Oral presentation - Sponsored by DBT and IIT Madras Alumni, India).

##### 2. From foreign countries

- **Raja R** and Co-shine Wang 'Innovation in Plant Cell Biology' held between 13<sup>th</sup> and 14<sup>th</sup> Jul' 2005 at Activity centre, Institute of Academia Sinica, Nankang, Taipei, **Taiwan** (Sponsored by National Chung-Hsing University, Taichung).
- **Raja R** and Co-shine Wang 'Mini-Symposium on Cytokine Research' held between 25<sup>th</sup> and 26<sup>th</sup> Oct' 2005 at Activity centre, Institute of Academia Sinica, Nankang, Taipei, **Taiwan** (Sponsored by National Chung-Hsing University, Taichung).

- **Raja R** ‘Nutraceuticals and functional food for healthy aging’ held between 19<sup>th</sup> and 21<sup>st</sup> Oct’ 2006 conducted by The Korean Society of Food Science and Nutrition and Korea Food and Drug Administration at Geomungo-B Hall, TEMF hotel, Gyeong-ju, **South Korea** (Sponsored by Hallym University, Chuncheon).
- **Rathinam Raja** and G.K.Suraishkumar, ‘Wind, Sea, Algae-International Conference on Offshore Algae production cum Workshop on Biofuels and Beyond’ held at Maribo Sopark during 20<sup>th</sup>-22<sup>nd</sup>, Apr’ 2009 conducted by Baltic Sea Solutions, Maribo, Lolland, **Denmark** (Sponsored by Lolland Municipality), Poster presentation.
- **Rathinam Raja** and Isabel S Carvalho, ‘European Seaweed Industry: Current status and future perspectives’ conducted by Netalgae during 6<sup>th</sup>-7<sup>th</sup>, November 2012 at Palacio Miramar Jauregia, San Sebastian-Basque County, **Spain** (Sponsored by FCT, Portugal).
- **Rathinam Raja**, Hemaiswarya S, and Isabel S Carvalho, ‘International Algal Congress’ held at Rotterdam during 5-6 December 2012, **The Netherlands** (Poster presentation - Sponsored by FCT, Portugal).
- **Rathinam Raja** and Isabel S Carvalho, Workshop on ‘Bioenergies on 2<sup>nd</sup> Generation’ during 14<sup>th</sup> December 2012 held at Center of Marine Sciences (CCMAR), University of Algarve, Gambelas, Faro, **Portugal**.
- **Raja R** and Isabel S Carvalho, An invitee lecture entitled, ‘Microalgae: test tube to open raceway ponds’ on Mar’4<sup>th</sup> 2013 in the Department of Biology, Universite Hassan II, Casablanca, **Morocco** (Partially sponsored by Bio3Dakhla, Dakhla, Morocco).
- **Raja R** and Isabel S Carvalho, Keynote Speaker in ‘2<sup>nd</sup> International Congress on Plant biodiversity’ held at Hôtel Sémiramis, Marrakech’ during 27<sup>th</sup> to 29<sup>th</sup> Mar’2014 conducted by University of Hassan II, **Morocco** (Partially sponsored by Bio3Dakhla, Dakhla).
- **Raja R** an invitee lecture held at Seminar hall-2, Second Floor, Institute of MASCIR during 25<sup>th</sup> Mar’2014 at Rabat, **Morocco** (Partially sponsored by Bio3Dakhla, Dakhla).
- **Raja R** and Isabel S Carvalho, AEBIOM-Biomass Counts 4<sup>th</sup> Event ‘Bioenergy-Fueling Europe with jobs and innovations’ held on 20.10.2015 at Residence Palace, International Press Centre, Brussels, **Belgium**.
- **Raja R**, The cultural heritage of the Mediterranean diet’ held on 9<sup>th</sup> and 10<sup>th</sup> May 2017 at First floor, Grand Auditorium, Gambelas, University of Algarve, Faro, **Portugal**.
- **Raja R**, S. Hemaiswarya and Isabel S. Carvalho, 8<sup>th</sup> Symposium on ‘Microalgae and Seaweed products in Plant/Soil-Systems’ held in between 26<sup>th</sup> and 27<sup>th</sup> June 2017

organized by Department of Plant Sciences, Faculty of Agricultural and Food Sciences, Széchenyi István University at Mosonmagyaróvár, **Hungary**.

- **Raja R**, Training on ‘Microalgae processes: from fundamentals to industrial scale’ held on 13<sup>th</sup>-15<sup>th</sup> September 2017 at Department of Chemical Engineering, University of Almeria, **Spain**. (Financially supported by the EUALGAE Framework Programme from Horizon 2020; Grant award No.: ECOST-Training\_School-ES1408-130917-086875)
- **Raja R**, Meeting on ‘UK Microalgal Biotechnology: Creating a Unified Vision’ organized by Phyconet between 1<sup>st</sup> and 2<sup>nd</sup> February 2018 held at Aurora Cambridge, British Antarctic Survey, High Cross, Madingley Road, Cambridge, **England** (Registration and accommodation waived).
- **Rathinam Raja**, CCMAR Seminar series on ‘Commercial cultivation of microalgae-an industrial process update’ held at Room # 2.31, Building 7 on 27<sup>th</sup> Feb’ 2019 organized by CCMAR, University of Algarve, Gambelas, Faro, **Portugal** (<https://www.ccmar.ualg.pt/en/activities/seminario>)
- **Raja R**, Training School on ‘Analysis of Carotenoids’ held on 8-10 April 2019, organized by Prof. Paul D. Fraser, School of Biological Sciences, Royal Holloway University of London (RHUL), Egham Hill, **England** (Financially supported by EUCOST programme).
- **Raja R**, Training course on ‘Algal biotechnology techniques and opportunities for the sustainable bioeconomy’ organized by Fraunhofer-Institut für Grenzflächen-und Bioverfahrenstechnik IGB held between 12<sup>th</sup> and 13<sup>th</sup> of November 2019 at Stuttgart, **Germany** (Financially supported by Fraunhofer IGB).

#### [Algae Workshop @ Ualg](#)

- Attended an ‘Algae workshop on Investigation, innovation sustainability and stimulating circular bioeconomics’ organized by CCMAR, University of Algarve held on 22<sup>nd</sup> November 2019 at Faculty of Economics Auditorium, Building 8, Gambelas, Faro, **Portugal**.

#### [VAIBHAV SUMMIT 2020 - INDIA](#)

- Vertical: V13 - Earth Sciences; H2: Ocean Science and Technology; S6: Marine and Deep Sea Biotechnology (Web seminar as a Panelist in Vaishwik Bharatiya Vaigyanik Summit) held on 07<sup>th</sup> October 2020 at 02:00 pm organized by **DRDO, Government of India**, New Delhi, India (<https://vaibhav.gov.in/v11.php>) (Delivered Lecture)

### Collaborators

- ACME Progen Biotech (India) Pvt. Ltd., Salem, Tamil Nadu, India
- Department of Plant Science, Central University of Kerala, Kerala, India
- Department of Microbiology, Alagappa University, Karaikudi, Tamil Nadu, India
- Research and Innovation, Saveetha Deemed to be University, Chennai, India
- PSG Krishnammal Arts and Science College, Coimbatore, India

### Industrial Consultations

- ✓ Bio3Dakhla, Dakhla, Morocco (since Nov' 2012)
- ✓ AcmeProgen (India) Pvt. Ltd., Salem, Tamil Nadu, India (since Jun'2010)

### Virtual Seminars Attended – International (06)

- Understanding Food Safety: Concepts and Challenges in a Changing World is organized by the UNIMED Sub-Network Food & Water held on 14<sup>th</sup> October 2020, University of Evora, **Portugal**.
- New developments in the cultivation of seaweed and microalgae – 22<sup>nd</sup> January 2021, from 10 to 12 am, organized by EATiP (European Aquaculture Technology & Innovation Platform) Forum, **Belgium**.
- Digitalisation in Aquaculture – 26<sup>th</sup> March 2021 from 10 to 12 am, organized by EATiP (European Aquaculture Technology & Innovation Platform) Forum, **Belgium**.
- Clean microalgae as a base for complete nutrition lecture delivered by Jagjit S Kaurah, CEO - Algae International Bhd., Sembilan, Malaysia held on Apr 22, 2021 8:00 AM - 8:40 AM BST organized by GIRACT, Geneva, **Switzerland**.
- Participated in a webinar 'Think Algae out of water' held on January 17<sup>th</sup>, 2022 organized by the Portuguese Association of Applied Algology, Lisbon, **Portugal**.
- Participated in a International conference 'Seaweed Around The Clock' held on 2<sup>nd</sup> June 2022, Virtual Event organized by **BioMarine Organization, UK**.

### Indian Virtual Conferences - Invited Lectures (16)

- ✓ Invitee lecture in an International Webinar on 'Recent Trends in Ethnomedicine (Herbal Medicine-2020)', held on 06.06.2020 organized by PG & Research Department of Botany, **Kandasamy Kandar's College** (Periyar University), Velur, Namakkal District, India.
- ✓ Invited Speaker in an International Virtual Conference on 'Natural products and Synthetic Biology', held in between 4<sup>th</sup> & 5<sup>th</sup> Jul'2020 organized by SBST & Society of

- Chemical and Synthetic Biology, **Vellore Institute of Technology** (VIT), Katpadi, Vellore District, India. <https://vit.ac.in/files/Session-Schedule.pdf>
- ✓ Special lecture in an International Webinar Conference on ‘Applications of Algae’ held on 18<sup>th</sup> July 2020 organized by Department of Microbiology, **K.R. College of Arts and Science** (Manonmaniam Sundaranar University), Kovilpatti, Tamil Nadu, India.
  - ✓ Plenary lecture in an International Webinar on ‘Modern biology and future perspectives’ held in between 5<sup>th</sup> and 6<sup>th</sup> August 2020 organized by PG and Research Department of Botany and Microbiology, **AVVM Sri Pushpam College** (Bharathidasan University), Poondi-613503, Thanjavur, Tamil Nadu, India.
  - ✓ Resource person in an International Webinar on ‘Living capsules in Aquaculture (LICA 2020)’ held on 13<sup>th</sup> - 17<sup>th</sup> October 2020 organized by Department of Marine Science, **Bharathidasan University**, Tiruchy-620 024, Tamil Nadu, India.
  - ✓ Invited Speaker in an International webinar on ‘Recent and Emerging Trends in Biotechnology’ held on 27<sup>th</sup> February 2020 @ 02.30 pm organized by the Department of Botany and Bioinformatics, **Nirmala College for Women** (Autonomous) (Bharathiyar University, Coimbatore-641 018, India.
  - ✓ Resource person in an International Webinar on ‘Advanced Zoological Research Approaches’ held in between 21<sup>st</sup> and 22<sup>nd</sup> February 2021 organized by PG Department of Zoology, **Syed Ammal Arts and Science College** (Alagappa University), Kootampuli, Ramanathapuram-623 513, Tamil Nadu, India. (<https://easychair.org/cfp/icee2021>)
  - ✓ Speaker in a Virtual International Conference on Materials for Food, Energy, Environment, and Health organized by Aufau Science Forum, Salem, India held on 26<sup>th</sup> & 27<sup>th</sup> June 2021.
  - ✓ As a ‘**Resource Person**’ in a Virtual workshop on ‘How to Publish Research Articles in SCI Journals’ held on 18<sup>th</sup> Nov’2021 organized by the Department of Botany, **Nirmala College for Women** (Autonomous), Bharathiyar University, Coimbatore-641 018, India.
  - ✓ **Invited Speaker & Co-chair** in a 28<sup>th</sup> National Convention of Food Scientists and Technologists (ICFoST) of Emerging and Adoptable Technologies for Sustainable Agro-Food industries and Economy (EAT-SAFE) held from 20 to 22 Jan’2022 organized in association with Association of Food Scientists and Technologists (AFST), Mumbai & Aurangabad Chapters, Co-organized by CSIR-CFTRI, Mysuru, DRDO-DFRL, Mysuru and Institute of Chemical Technology, Mumbai, India.

- ✓ **Presented** a paper in a Virtual International Conference on ‘Recent innovation of Biomaterials in Current Scenario (RICBCS-2022) held on 7<sup>th</sup> and 8<sup>th</sup> April 2022 organized by PG & Research Department of Physics & Zoology, **DG Govt. Arts College (W), Mayiladuthurai**, Tamil Nadu, India.
- ✓ Participated in a one day webinar on ‘To protect the Universe from toxic organic pollutants’ held on 10<sup>th</sup> June 2022, organized by the Department of Research and Innovation, Institute of Electronics and Communication Engineering, **SIMATS School of Engineering**, Thandalam, Chennai, India.
- ✓ Attended an international webinar on ‘BioElectroChemical Cell in Toxic Wastewater Treatment’ hosted by TechnoBiz (Environmental Technology NewsHour) a **Thailand based TV Channel** on 19<sup>th</sup> July 2022.
- ✓ Participated in a Magistrate lecture on ‘Physiology and Pathophysiology of Astroglia with some Emphasis on Neurodegenerative Diseases’ on 28<sup>th</sup> September 2022, conducted by the Department of Physiology, **Sree Balaji Medical College and Hospital (SBMCH)**, Chennai, India.
- ✓ Participated in ‘Two days State Level Technical Workshop on Intellectual Property Rights (IPR)’ held in between 9<sup>th</sup> and 10<sup>th</sup> January 2023, conducted by IQAC, **Sree Balaji Medical College and Hospital (SBMCH)**, Chennai, India.
- ✓ Guest Lecture on ‘Innovative Algal Solutions for Sustainable Wastewater Treatment’ held on 02<sup>nd</sup> May 2025 organized by the Department of Mechanical Engineering, **IIMT University, Meerut**, Uttar Pradesh, India

#### Motivational lectures given in Higher Secondary Schools (02)

- ✓ Municipal Higher Secondary School, Tiruvannamalai & District, Tamil Nadu delivered on 14<sup>th</sup> August 2018.
- ✓ Municipal Boys Higher Secondary School, Kilpennathur, Tiruvannamalai District, Tamil Nadu delivered on 14<sup>th</sup> August 2017.

#### National Conferences/Workshops organized at India (08)

- Served as a ‘**Local Organizing Committee**’ member in the National conference on, ‘Recent developments in cultured Algae’ held at OASTC between 4<sup>th</sup> and 5<sup>th</sup> Apr’ 2009 conducted by Department of Botany, Andhra University, Vishakapatnam, Andhra Pradesh.

- As an **‘Organizing Secretary’** in a State level workshop on, ‘Microbial Biotechnology’ between 07<sup>th</sup> and 08<sup>th</sup> Nov’ 2009 held at ACME Progen Biotech (India) Pvt. Ltd., Salem, Tamil Nadu.
- As a **‘Co-Organizing Secretary’** in a National level workshop on, ‘Microbial Biotechnology’ between 06<sup>th</sup> and 07<sup>th</sup> Jan’ 2012 held at ACME Progen Biotech (India) Pvt. Ltd., Salem, Tamil Nadu.
- As a **‘Guest Speaker’** in a Virtual workshop on ‘Art of Research Article Writing’ held on 23<sup>rd</sup> Jan’2021 organized by the School of Allied Health Sciences, Vinayaka Mission’s Research Foundation, Salem, Tamil Nadu.
- **Chaired a session and Organizing committee member** in the 1<sup>st</sup> National Conference on ‘Sports Medicine and Yoga Therapy’ held between 28<sup>th</sup> and 29<sup>th</sup> Jan’2022, organized by Research & Development, Sree Balaji Medical College and Hospital (SBMCH)-BIHER, Chromepet, Chennai, Tamil Nadu.
- **Organizing committee member** in the National Science Day-2022 celebration on ‘Integrated approach in S&T for sustainable future’ held on 28<sup>th</sup> Feb’2022, organized by Research & Development, Sree Balaji Medical College and Hospital (SBMCH)-BIHER, Chromepet, Chennai, Tamil Nadu.
- **Organizing Secretary** in a DST Sponsored ‘1<sup>st</sup> National Conference on Biomaterials in Health Care 2023’ held on 18<sup>th</sup> - 19<sup>th</sup> August 2023 at Sree Balaji Medical College and Hospital-BIHER, Chennai, Sponsored by CSIR (SYM/12121/23-HRD).
- **Organizing Secretary** in a TNSCST sponsored ‘1<sup>st</sup> National Conference on Integrative Medical Sciences 2024’ held on 19<sup>th</sup> - 20<sup>th</sup> December 2024 at Sree Balaji Medical College and Hospital, Chennai, India. (Ref. 17310/TNSCST/SSW-2024-25-039/VM/2025)

#### Coordinator

TNSCST sponsored ‘1<sup>st</sup> **Summer Camp on Medical and Health Sciences for Talented School Children 2025**’ held from 29<sup>th</sup> to 31<sup>st</sup> May 2025 at Hippocrates Hall, Sree Balaji Medical College and Hospital, Chromepet, Chennai, India. (Ref. TNSCST/Pop.Sci/2024-25/VR/Batch-II/36/2025)

#### National Level Workshops participated (03)

- National level workshop on ‘*Gracilaria* species from Indian shores’ between 14<sup>th</sup> and 19<sup>th</sup> May’ 2001 organized by Krishnamurthy Institute of Algology held at Ramakrishna Mission Arts and Science college, Mylapore, Chennai, India.

- National level workshop on ‘Recent techniques in Marine Biotechnology’ between 2<sup>nd</sup> and 3<sup>rd</sup> Feb’ 2004 conducted by Centre for Advanced Studies in Marine Biology, Annamalai University, Annamalai Nagar, India.
- Summer Training Programme on ‘Molecular, Immunological, Cytological, PCR and Embryological techniques’ held at Department of Biotechnology, Veterinary college, Vepery from 17<sup>th</sup> May to 16<sup>th</sup> Jun’ 2004 conducted by Tamil Nadu Veterinary and Animal Sciences University, Chennai, India.

#### Scientific Committee Member in International Conferences (03)

- ‘2<sup>nd</sup> International Congress on Plant biodiversity on Morocco’ held at Hôtel LE Sémiramis-BP 525 Quartier Semlalia Route de during 27<sup>th</sup> to 29<sup>th</sup> March 2014 organized by University of Hassan II, **Marrakech**.
- ‘3<sup>rd</sup> International Congress on Plant biodiversity’ at Hôtel LE Sémiramis-BP 525 Quartier Semlalia Route de during 9<sup>th</sup> to 11<sup>th</sup> Oct 2015 conducted by University of Hassan II, **Marrakech**.
- ‘7<sup>th</sup> International Conference of Biodiversity and Biotechnology’ online from 29<sup>th</sup> to 30<sup>th</sup> May 2022 will be conducted by Kuwait Institute for Scientific Research, **Kuwait**.

#### Advisory Committee Member in International Conferences (India)

- ‘2<sup>nd</sup> International on Recent Trends in Microbiology (RTM-2018)’ held in between 11 and 12 January 2018 at Conference Hall, 4<sup>th</sup> Floor, Science Campus organized by Department of Microbiology, **Alagappa University**, Karaikudi, India.
- ‘3<sup>rd</sup> International Conference on Recent Trends in Microbiology (RTM-2019)’ held in between 24<sup>th</sup> and 25<sup>th</sup> January 2019 at Conference Hall, 4<sup>th</sup> Floor, Science Campus organized by Department of Microbiology, **Alagappa University**, Karaikudi, India.

#### Teaching experience

- Subjects: Economic importance of microalgae, algae culture maintenance for food industry, commercial cultivation of microalgae for biodiesel, aquaculture and CO<sub>2</sub> accumulation for Graduate and Post-Graduate students.
- More than eight years of teaching experience (including practical classes)

#### Invitee / Guest Lectures / Plenary Speaker / Keynote address / Chief Guest (52)

- ✓ Special lecture on, ‘Recent developments in cultured Algae’ held at OASTC between 4<sup>th</sup> and 5<sup>th</sup> Apr’ 2009 conducted by Department of Botany, **Andhra University**, Vishakapatnam, India. (<https://sites.google.com/site/algaeconfau/Home/Conference-Home>)

- ✓ Invitee lecture in the International conference on 'Eco-conservation for sustainable development' held from 1<sup>st</sup> to 3<sup>rd</sup> February 2012 conducted by the Department of Plant Biology and Plant Biotechnology, **Quaid-E-Millath Govt. College for Women** (Autonomous), Chennai-600 002, India.
- ✓ State level Seminar on, 'Biomass and bioenergy for future perspectives' organized by PG Research Department of Botany held on 21<sup>st</sup> August 2014 at Umayal Arangam, **Government Arts College** (Alagappa University), Karaikudi, India. (**Chief Guest**)
- ✓ Invitee lecture in an International conference on 'Bio-prospecting of natural resources for human health' organized by PG and Research, Department of Zoology, **Dr.Zakir Husain College** (Alagappa University), Ilayankudi, Tamil Nadu, India held on 10<sup>th</sup> September, 2014. (**Chief Guest**)
- ✓ Plenary Speaker in an International Workshop on 'Green Initiatives in Energy and Environment (GIEE-2014)' organized by the Department of Environmental Science, **Periyar University**, Salem, Tamil Nadu, India held on 11<sup>th</sup> September, 2014.
- ✓ Guest lecture on 'Algal biomass and downstream processing for biofuel production' held on 17<sup>th</sup> July 2015 organized by the Department of Civil Engineering, **Dr.MGR Educational and Research Institute**, Chennai, India.  
(<http://www.drmgrdu.ac.in/Engineering/DeptOfcivil/Events/2015.htm>)
- ✓ National seminar on Advances in Toxicology and Serinanotechnology (ATS-2015) held on 23<sup>rd</sup> and 24<sup>th</sup> July 2015 organized by the Department of Zoology, **Annamalai University**, Chidambaram, India. (**Keynote address and Chief Guest**)
- ✓ Guest lecture on 'Recent trends in Algal research' held on 23<sup>rd</sup> July 2015 organized by the Department of Botany, **Annamalai University**, Chidambaram, India.  
([https://annamalaiuniversity.ac.in/download/NAAC/Annual\\_report/ANNUAL\\_REPORT/\\_2015.pdf](https://annamalaiuniversity.ac.in/download/NAAC/Annual_report/ANNUAL_REPORT/_2015.pdf))
- ✓ Invitee lecture on 'Algal biomass and downstream processing for biofuel production' in the International Seminar on Recent Research Trends in Biosciences held in between 21 and 22<sup>nd</sup> July 2016 organized by the Department of Biochemistry and Chemistry, **Idhaya College for Women** (Alagappa University), Sarugani, Devakottai, India.  
(<http://www.idhayasarugani.in/biochemistry.php>)
- ✓ Guest lecture on 'Algae for biofuel production' held on 22<sup>nd</sup> July 2016 organized by Research and Development, **Muthayammal College of Arts and Science** (Periyar University), Rasipuram, Salem Dist., Tamil Nadu, India.

(<http://www.thehindu.com/news/national/tamil-nadu/engagements/article14501769.ece>)

[http://muthayammal.in/news\\_letters/News\\_Letter\\_2016\\_2017.pdf](http://muthayammal.in/news_letters/News_Letter_2016_2017.pdf)

- ✓ Guest lecture on ‘Algae cultivation for biofuel production’ held on 4<sup>th</sup> August 2016 organized by Department of Biotechnology, **KSR Arts and Science College** (Autonomous), KSR Kalvi Nagar, Erode Dist., Tamil Nadu, India.
- ✓ Invitee lecture on ‘Algae for sustainable biofuel’ in an International Conference in Algal Biotechnology held between 10<sup>th</sup> and 12<sup>th</sup> August 2016 at VOC Hall, jointly organized by SBST, **VIT University**, Vellore and Seaweed Research and Utilization Association, Parangipettai-608 502, India. (<http://www.vit.ac.in/files/icaab2016/speakers.html>)
- ✓ Guest lecture on ‘Algae cultivation for biofuel’ held on 22<sup>nd</sup> August 2016 organized by the Department of Botany, **Bharathiar University**, Coimbatore, Tamil Nadu, India.
- ✓ ‘National Seminar on recent innovations in Biosciences’ held on 26<sup>th</sup> August 2016 organized by the Department of Biotechnology, **Dr.R.V. College of Arts and Sciences**, Karamadai, Coimbatore Dist., Tamil Nadu, India. (**Keynote address and Chief Guest**)
- ✓ Invitee lecture in an ‘International Conference on Microalgal and Cyanobacterial biotechnology’ held on 29<sup>th</sup>, 30<sup>th</sup> and 31<sup>st</sup> August 2016 organized by NFMC, **Bharathidasan University**, Tiruchy, Tamil Nadu, India.
- ✓ Plenary lecture in a ‘National Conference on New frontiers and innovative trends in Biosciences’ held between 2<sup>nd</sup> and 3<sup>rd</sup> September 2016 organized by PG & Resaerch Departments of Microbiology, Biotechnology and Biochemistry, **JJ College of Arts and Science** (Bharathidasan University), Pudukkottai-622 422, India.
- ✓ Invitee lecture in a ‘Seminar on Ozone Day’ held at Mini Auditorium on 15<sup>th</sup> September 2016 organized by Vaishnav Environ Club, **SDNB Vaishnav College for Women** (University of Madras), Chrompet, Chennai-600 044, India.
- ✓ Invitee lecture in a ‘National seminar on Phytochemicals as therapeutics’ held at Homi Bhabha seminar hall, on 16<sup>th</sup> and 17<sup>th</sup> September 2016 organized by Department of Plant Biology and Plant Biotechnology, **Meenakshi College for Women** (University of Madras), Chennai-600 024, India. (<http://www.meenakshicollege.com/events/seminars-workshops>)
- ✓ Invitee lecture held at Seminar hall on 22<sup>nd</sup> September 2016 organized by Department of Plant Biology and Plant Biotechnology, **Madras Christian College** (University of Madras), Chennai-600 059, India.

<https://www.mcc.edu.in/images/IQAC/NAAC/Criteria2/Graduation-report.pdf>

- ✓ International conference on ‘Aquatic science, Biodiversity conservation and Management strategies (InABC-2016)’ held on 26<sup>th</sup> and 28<sup>th</sup> September 2016 organized by the Department of Zoology, **Annamalai University**, Chidambaram, India.
- ✓ Invitee lecture in a National Conference on Science and Technology for National Development from 5<sup>th</sup> to 7<sup>th</sup> October 2016 organized by Department of Biotechnology, **Jain University**, Bengaluru and Indian Science Congress Bengaluru Chapter held at Jayanagar, 9<sup>th</sup> Block Campus, Bengaluru, Karnataka, India.  
(<https://www.jainuniversity.ac.in/Jain-University-organized-a-National-Conference-in-Science-and-Technology-in-Bangalore.php>)
- ✓ International Conference on ‘Algal biotechnology: an ecofriendly solution for food, fuel and health’ held on 14.10.2016 organized by Research Centre for Plant Science, Department of Botany, **St. Mary’s College** (Autonomous), **Manonmaniam Sundaranar University**, Thoothukudi, India. (**Keynote address**)  
(<http://stmaryscollege.edu.in/naac/Seminars%20and%20Workshops%20Report.pdf>)
- ✓ Invitee lecture on 25<sup>th</sup> October 2016 held at Conference hall, first floor, Centre for Ocean Research, **Sathyabama University**, Chennai, India.
- ✓ Invitee lecture on 26<sup>th</sup> September 2017 held at M.B.A Conference hall, First floor organized by the Department of Botany, **JJ College of Arts and Science** (Bharathidasan University), Pudukkottai, India. ([jjc.kvet.in/admin/admin/production/activities/84641-3.3.2-Bot-Conference-Guest%20Lectures-2015-2016-Photos\\_compressed.pdf](http://jjc.kvet.in/admin/admin/production/activities/84641-3.3.2-Bot-Conference-Guest%20Lectures-2015-2016-Photos_compressed.pdf))
- ✓ National Conference on ‘Trends in Microbiology’ on 27<sup>th</sup> September 2017 held at Conference hall, 4<sup>th</sup> Floor, Science Campus organized by the Department of Microbiology, **Alagappa University**, Karaikudi, India. (**Plenary lecture and Valedictory address**) ([http://alagappauniversity.ac.in/uploads/news\\_events/1506330981\\_National\\_Conference\\_Trends.pdf](http://alagappauniversity.ac.in/uploads/news_events/1506330981_National_Conference_Trends.pdf))
- ✓ Invitee lecture on 10<sup>th</sup> April 2018 organized by the Department of Nutrition and Dietetics at Room # 34, **Government Arts College** (Periyar University), Rasipuram, India. (<https://www.tgacraasi.org/image/IQAC%202017-18.pdf>)
- ✓ Invitee lecture on 13<sup>th</sup> April 2018 held at Botany PG laboratory, First floor organized by the Department of Botany, **Government Arts College** (Thiruvalluvar University), Tiruvannamalai, India. (**Chief Guest**)
- ✓ Inaugural lecture of Microbiology Association meet ‘Microcosm’ held on 04<sup>th</sup> July 2018 at the College Auditorium, organized by the Department of Microbiology, **Dr.MGR**

**Janaki College of Arts and Science for Women** (University of Madras), Adyar, Chennai, India.

- ✓ Resource Person for the Green Skill Development Programme (GSDP)-Master training course on ‘Waste management’ held on July-August 2018 by ENVIS Centre, Department of Zoology, **University of Madras**, Guindy Campus, Chennai-600 025, India.
- ✓ Invitee lecture held on 19<sup>th</sup> August 2018 at GNR Auditorium, Guindy Campus organized by the Department of Biotechnology, **University of Madras**, Chennai-600 025, India.
- ✓ Guest lecture held on 27<sup>th</sup> August 2018 at Seminar hall organized by the Department of Biotechnology, **Rajalakshmi Engineering College** (Anna University), Thandalam Chennai-602 105, India. (<https://www.facebook.com/myrecchennai/photos/drrathinam-raja-researcher-university-of-algarve-portugal-delivered-a-guest-lect/2096908866995192/>)
- ✓ Invited Speaker in a National Symposium on ‘Health and Natural Products in Indian System of Medicine-Natura’19’, held on 21<sup>st</sup> July 2019 at Sarojini Naidu Hall, College Block-III Floor, SBV Campus, **Mahatma Gandhi Medical College and Research Institute**, Pillayarkuppam, Pudhucherry-607 402, India.
- ✓ Invited Speaker held at Seminar Hall, First Floor, **Mother Teresa Post Graduate and Research Institute of Health Sciences** on 22<sup>nd</sup> July 2019, Gorimedu, Pudhucherry-605 006, India.
- ✓ Invitee lecture held on 26<sup>th</sup> July 2019 at Seminar Hall, 3<sup>rd</sup> Floor, organized by Department of Biochemistry, **Bharathidasan University**, Trichy-620 024, India.
- ✓ Invitee lecture held on 29<sup>th</sup> July 2019, Ground floor, Seminar room, organized by the Department of Botany, **Annamalai University**, Chidambaram-608 002, India.
- ✓ Guest Lecture about Research delivered on 11 am, 05<sup>th</sup> August 2019, First floor, Seminar hall, organized by Department of Civil Engineering, **Pondicherry Engineering College** (Pondicherry Central University), Pudhucherry-605 014, India. (<https://www.facebook.com/PEC.Pondicherry/photos/a.692357410948399/1129665540550915/?type=3>)
- ✓ Invitee lecture held on 2.30 pm, 05<sup>th</sup> August 2019, Ground floor, Seminar hall, organized by Department of Biotechnology, **Pondicherry Central University**, Pudhucherry-605 014, India.
- ✓ Resource Person for the Green Skill Development Programme (GSDP)-Master training course on ‘Waste management’ held on 09<sup>th</sup> August 2019 by ENVIS Centre, Department of Zoology, **University of Madras**, Guindy Campus, Chennai-600 025, India.

- ✓ Special lecture on 13<sup>th</sup> April 2023 held at Pavendar Auditorium organized by the Department of Botany, **Government Arts College** (Thiruvalluvar University), Tiruvannamalai, India. (**Chief Guest**)
- ✓ Lecture given at CAS in Botany, **University of Madras** in a ‘Skill Based Internship Programme (SBIP)’ entitled on ‘Algae and its commercial products’ under RUSA 2.0 (Phase III) on 11.08.2023.
- ✓ Inaugural address on the ‘MEDARZT 23’-A National Level Technical Symposium held on 28<sup>th</sup> October 2023 at 3<sup>rd</sup> Floor-Seminar Hall, New Building, SRM VEC organized by the Department of Medical Electronics, **Valliammai Engineering College**, Kattankulathur, Chengalpattu Dist., India. (**Chief Guest**)
- ✓ Guest Speaker in a DBT sponsored ‘National Conference on Disease Diagnosis and Drug Development against Human Pathogens’ held on 15<sup>th</sup>-17<sup>th</sup> Nov’ 2023 at B-Block Conference Hall organized by Research and Development Cell, **Muthayammal College of Arts & Science**, Rasipuram, Tamil Nadu, India.
- ✓ Invited Speaker in a ‘National Conference on Sustainable wellness through Noni, Medicinal plants, microbes and biomolecules’ held on 27<sup>th</sup>-28<sup>th</sup> Nov’ 2023 organized by Department of Microbial Technology, **Madurai Kamaraj University**, Madurai, India.
- ✓ Invited Speaker in a ‘National Seminar on Recent Advances in Biomedical Technology’ held on 6<sup>th</sup> Feb’ 2024 at SAIL Auditorium, Arrupe Library Building organized by Department of Biotechnology, **St. Joseph’s College**, Trichy, India.
- ✓ Invited Speaker in an ‘International Conference on Innovations in Life Sciences’ held on 12<sup>th</sup>-13<sup>th</sup> Feb’ 2024 organized by Department of Biochemistry, **SRM Institute of Science and Technology**, Kattankulathur, Tamil Nadu, India.
- ✓ Special lecture on 13<sup>th</sup> March 2024 held at Pavendar Auditorium organized by the Department of Botany, **Government Arts College** (Thiruvalluvar University), Tiruvannamalai, India.
- ✓ Chairperson in a National Conference on ‘Recent Approaches in Exploring Indigenous Plant Diversity Involving Local Communities’ held on 21<sup>st</sup> March’ 2024 organized by PG & Research Department of Plant Biology and Plant Biotechnology, **Quaid-E-Millath Govt. College for Women**, Chennai, India.
- ✓ Participated in a Science Academies Refresher Course on ‘Bioprospection of Bioresources: Present Scenario’ from 27<sup>th</sup> March 2024 to 10<sup>th</sup> April 2024 organized by the Department of Environmental Sciences, **Bharathiar University**, Coimbatore-641 046, supported by INSA, India.

- ✓ Resource Person in an 'International e-Conference on Research Novelities in Pharmaceutical Delegation in Academics' held from 15<sup>th</sup> to 22<sup>nd</sup> April 2024 organized by the Faculty of Pharmacy, **Sree Balaji Medical College and Hospital**, Chromepet, Chennai-600 044, India.
- ✓ Delegate in a Food Pro Conference held on 9, 10 & 11<sup>th</sup> August 2024 at **Chennai Trade Centre**, Nandambakkam, Chennai.
- ✓ As an Invited Teacher, during the 90<sup>th</sup> Annual Meeting of the Academy held at **National Institute of Science Education & Research (NISER)** and **IIT Bhubaneswar** on 07<sup>th</sup>-10<sup>th</sup> November 2024 (Funded by Indian Academy of Sciences, Bengaluru).
- ✓ Invited Speaker in Watman 2025 International Conference on Sustainable & Innovative Water Technologies for Chemical Industry to be held at Chennai Trade Centre, Nandambakkam organized by **Indian Institute of Chemical Engineers** (Chennai Regional Centre), Chennai on 27<sup>th</sup> February 2025.
- ✓ Chief Guest to the National Level Technical Symposium 'OMICS 25' organized by the Students' Biotech Forum and the Department of Biotechnology on 19<sup>th</sup> March 2025 at the Biotech Conference Hall, **Sri Venkateswara College of Engineering**, Sriperumbudur, Kancheepuram District, Tamil Nadu.

#### Memorandum Of Understanding (MOU)

- Department of Plant Science, Central University of Kerala, Periyar, Kasaragod, Kerala
- Department of Medical Electronics, SRM Valliammai Engineering College, Potheri, Chengalpattu District, Tamil Nadu.

#### Coordinator – One day Students visit to SBMCH

- Department of Medical Electronics, SRM Valliammai Engineering College, Potheri, Chengalpattu District on 26.04.2024.
- Department of Medical Electronics, SRM Valliammai Engineering College, Potheri, Chengalpattu District on 14.03.2025.

#### Coordinator – One day Students visit to R&D, SBMCH

- Department of Biotechnology, Rajalakshmi Engineering College, Thandalam, Chennai, Kancheepuram District, Tamil Nadu. (23.05.2024)
- Department of Biotechnology, Rajalakshmi Engineering College, Thandalam, Chennai, Kancheepuram District, Tamil Nadu. (16.08.2024)

## PROFESSIONAL SERVICES

### Reviewer in Peer Reviewed International Journals

- Biomolecular Engineering
- Bioresource Technology
- Cell Biology International
- Asian Fisheries Society
- Journal of Food Biochemistry
- Foods
- Cells
- Desalination and Water treatment
- Environmental Research
- Fuel
- Bioinorganic Chemistry and Applications
- Environmental Technology
- International Research Journal of Biotechnology
- Journal of Biology
- Journal of Cell and Animal Biology
- Journal of Chinese Integrative Medicine
- Marine Biotechnology
- Marine Drugs
- Spectrochimica Acta Part-A
- Archives of Microbiology
- Journal of Photochemistry and Photobiology B: Biology
- Journal of Physical and Natural Sciences
- Turkish Journal of Fisheries and Aquatic Sciences
- Arabian Journal of Chemistry
- International Journal of Tropical Insect Science
- Critical Reviews in Biotechnology
- Plasmid
- Journal of Food Biochemistry
- Aquatic Biosystems
- Smart Science
- Jordan Journal of Biological Sciences
- Journal of Food Science and Technology
- Applied Energy
- Journal of Medical and Biological Sciences
- 3 Biotech
- Molecular Biology Reports
- Bioprocess and Biosystems Engineering
- Applied Nanoscience
- Biocatalysis and Agricultural Biotechnology

### Editorial Board Member in International Journals

1. Agriculture and Biology Journal of North America (<https://scihub.org/abjna/editorial-board/>)
2. IIOAB Letters (<http://iioablett.pitt.edu/ojs/index.php/iioablett/about/editorialTeam>)
3. European Journal of Bioinformatics ([www.whitesscience.com/journal/ejb-european-journal-of-bioinformatics/editorial-board-ejb/](http://www.whitesscience.com/journal/ejb-european-journal-of-bioinformatics/editorial-board-ejb/))
4. International Journal of Zoology and Applied Biosciences (<https://www.ijzab.com/editorial/>)
5. Food Biology ([updatepublishing.com/journal/index.php/fb/editorial-board](http://updatepublishing.com/journal/index.php/fb/editorial-board))

### Editor

- Whites Science Journal (<https://www.whitesscience.com/raja-rathinam/>)
- Open Journal of Nutrition and Food Sciences (<http://www.medtextpublications.com/open-journal-of-nutrition-and-food-sciences-editorial-board.php>)

### Editor-in-Chief

- International Journal of Current Science (Nov'2011-May'2015)

### E-Book Series Reviewer

- Bentham Science - Advances in Microalgae Biotechnology (2019)
- Springer Book Series - Grand Challenges in Algae Biotechnology (2019)

### Book Reviewer

Elsevier S&T Books-Cultured microalgae in the food industry: Current and potential applications (2019)

CRC Press - Taylor and Francis Group Book-Phytomedicine (2019)

### Board of Directors

GreenBubble, Algal works Pvt. Ltd., Basaveswaranagar, Bengaluru-560010, India  
(<http://www.greenbubble.co.in/company.html#horizontalTab1>)

### Professional Membership in Scientific International Societies

- Phyconet, London, UK (24.11.2016 to till date)
- Netalgae Network, Portugal (01.12.2012 to till date)
- ARCH-UK (Aquaculture **R**esearch **C**ollaborative **H**ub-**UK**)
- Asian Fisheries Society
- World Economic Forum, Cologny, Switzerland (21.10.2022 to till date)

### International Life Member in the European Union Scientific Societies

1. NPRONET (Natural products discovery and bioengineering network, a BBSRC NIBB)
2. CBMNet (Crossing Biological Membranes Network, A BBSRC NIBB)
3. BIOCATNET (Network in biocatalyst discovery, development and scale up)

### Honorary Position

- ✓ 'Student's Secretary' during Ph.D., served as a Secretary in the 'Botany club' for the year 2002-2003 at Centre for Advanced Studies in Botany, University of Madras, Guindy Campus, Chennai, India.

## UNESCO

- ✓ International Tsunami Information Center ([http://itic.ioc-unesco.org/index.php?option=com\\_oe&task=search&searchText=13794&field=institutionID&title=Members+of+University%20of%20Algarve&orderby=name](http://itic.ioc-unesco.org/index.php?option=com_oe&task=search&searchText=13794&field=institutionID&title=Members+of+University%20of%20Algarve&orderby=name))
- ✓ IODE (Intergovernmental Oceanographic Commission of UNESCO-International Oceanographic Data and Information Exchange) ([https://www.iode.org/index.php?option=com\\_oe&task=viewMemberRecord&memberID=24181](https://www.iode.org/index.php?option=com_oe&task=viewMemberRecord&memberID=24181))

## Scientific Media

- ✓ LinkedIn : <https://www.linkedin.com/in/rathinamraja/>
- ✓ Research gate : [https://www.researchgate.net/profile/Rathinam\\_Raja](https://www.researchgate.net/profile/Rathinam_Raja)
- ✓ ORCID ID : 0000-0002-8445-6034
- ✓ Web of Science : AAB-4668-2022
- ✓ Ciencia ID : E91D-0A35-7AEA
- ✓ Degois : rraja307
- ✓ Researcher ID : M-8564-2013
- ✓ Scopus Author : 160 293 999 00

**Social Media:** Daily magazines (**Tamil News Paper**), published from Tamil Nadu, India

- ✓ Dinamalar, Madurai Edition, 23.08.2014
- ✓ Dinakaran, Madurai Edition, 24.08.2014
- ✓ Daily Thanthi, Madurai Edition, 25.08.2014
- ✓ The Hindu (Tamil), Coimbatore Edition, 12.10.2014
- ✓ The Hindu (Tamil), Coimbatore Edition, 09.10.2014
- ✓ Daily Thanthi (Tamil), Cuddalore Edition, 01.10.16
- ✓ Pudhugai Varalaaru, Tiruchy Edition, 01.10.17
- ✓ Dinamalar, Chennai Edition, 21.12.2024
- ✓ Dinamalar Web News, 21.12.2024
- ✓ Hindu Tamil, Chennai Edition, 21.12.2024
- ✓ Dinakural, Chennai Edition, 21.12.2024
- ✓ Dinamani (Page 4), Chennai Edition 23.12.2024
- ✓ The Hindu, Education News, Chennai Edition, 01.01.2025
- ✓ Dinamani (Page 4), Chennai Edition, 30.05.2025

Daily Magazines (**English News Paper**), published from Tamil Nadu, India

- ✓ Chrompet Talk (English), Chennai Edition, 19.09.2016
- ✓ Trinity (Evening English News Paper), Chennai Edition, 12.09.2023
- ✓ Express News, Chennai Edition, 21.12.2024
- ✓ Southern Mail, 21.12.2024
- ✓ News Today, 23.12.2024
- ✓ Chennai Glitz, 25.12.2024
- ✓ Chennai Updates, 25.12.2024
- ✓ Trinity (Evening English News Paper), Chennai Edition, 31.05.2025

Daily magazines (**Hindi News Paper**), published (Hindu), India

- ✓ Rajasthan Pathrika, 21.12.2024

Daily magazines (**English News Paper**), published from Andhra (Telugu), India

- ✓ Andhra Jothi (ABN), 21.12.2024
- ✓ Sakshi, 21.12.2024

Daily magazine (**National English News Paper**), India

- ✓ The Hindu, 22<sup>nd</sup> July 2016
- ✓ Deccan Chronicle, 21.12.2024
- ✓ The New Indian Express (Chennai Digest), 06<sup>th</sup> June 2025

**TV News** (Tamil)

- ✓ Vendhar News 27, 18.10.2023

**Societal activities at Portugal**

- ✓ Participated in the Euraxess Roadshow 2015 organized by the European Commission at the University of Algarve, Faro, Portugal on 30<sup>th</sup> October 2015.
- ✓ Participated in a programme on 'B-ON'. A research oriented bibliographic downloads using the portal, B-ON: Their features, types and research tools a discussion held on 14<sup>th</sup> April 2016 organized by the Central Library, University of Algarve, Gambelas, Faro, Portugal.
- ✓ Participated in a Seminar on 'A Economia Circular no Algarve' on 5 e 6 de dezembro de 2018, Auditorio da CCDR Algarve, Faro, Portugal.

**Tamil Mandram**

Vice-President since 29.09.2024 @ Sree Balaji Medical College and Hospital (SBMCH)

## Countries visited

Andora	Austria	Belgium	Denmark
Dubai	England	France	Germany
Hungary	Italy	Luxembourg	Malaysia
Morocco	New Zealand	Portugal	Singapore
Slovakia	Spain	South Korea	Switzerland
Taiwan	Thailand	The Netherlands	USA
Wales			

## PERSONAL DETAILS

Marital Status : Married  
 Spouse : Dr. S. Hemaiswarya, M.Sc., Ph.D.  
 Daughters : R. Aathirai & R. Sangaththamizh

## Declaration

Hereby I sincerely declare that the above mentioned details are true to the best of my knowledge.

Sincerely yours



**R. Raja**

நல்லார் ஒருவர் உளரேல் அவர்பொருட்(டு)  
 எல்லார்க்கும் பெய்யும் மழை

- ஓளவை