

Individual Biodata

Name	:	Dr.D.Kesavan
Designation	:	Assistant Professor & Head
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Qualification	:	M.Sc., Ph.D. Postdoc.
Field of Specialization	:	
Major	:	Chemistry
Specializing field	:	Polymer science, Nanomaterials, Sensors, Fish Spoilage, Pocket-size devices, smart and intelligent packages
Experience (in years)	:	11.5 years (9 years in TNJFU + 2.5 years other institutions)

Current Projects: 2 nos.

S. no.	Title of the project	Year	PI & Co-PI	Funds (in Rs.)	Funding Agency
1.	Development of Bioplastic Packaging Material for Food Products for Technical Empowerment of People in Muttam and Manjakollai Villages	2024	Dr.D.Kesavan (PI) Dr.T.Anand Er.S.Monikandon Dr.M.Ramar	1,00,000/-	Unnat Bharat Abhiyan 2.0, Ministry of Education, Govt. of India
2.	Development of Naked-eye Sensor and Empowerment of People in Vadakudi and Muttam Villages in the Application of Packed Fishery Products	2024	Dr.D.Kesavan (PI) Dr.T.Anand Er.S.Monikandon Dr.M.Ramar	1,00,000/-	Unnat Bharat Abhiyan 2.0, Ministry of Education, Govt. of India

Completed Projects: 4 nos.

S. no.	Title of the project	Year	PI & Co-PI	Funds (in Rs.)	Funding Agency
1.	Development of edible package	2023	Dr.D.Kesavan (PI) Dr.T.Anand	1,00,000/-	Unnat Bharat Abhiyan 2.0,

	technology for fish soup for economic empowerment of Vadagudi and Manjakollai villagers		Dr.M.Ramar Er.S.Monikandon		Ministry of Education, Govt. of India
2.	Pocket-Size Device for Water Quality Assessment in Aquaculture/Pond	2022	Dr.D.Kesavan (PI) Dr.T.Anand Er.S.Monikandon Dr.M.Ramar	1,00,000/-	Unnat Bharat Abhiyan 2.0, Ministry of Education, Govt. of India
3.	Development of halochromic sensor-based on bionanocomposite for monitoring spoilage of packaged fish	2019-2020	Dr.D.Kesavan (PI)	2,00,000/-	TNJFU-JTRF
4.	Development and demonstration of innovative fisheries engineering interventions for the production maximization in fisheries industries in Tamil Nadu Sub project Development of small scale automatic integrated powder making unit using fish/food waste	2017-2021	Dr.M.Sivakumar Dr.N.Manimehalai Dr.P.Karthickumar Dr.D.Kesavan (Co-PI)	30,60,000/-	Tamil Nadu Innovation Initiative (TANII)

Recent Publications:

1. Kesavan Devarayan, Yazhiniyan Palanisamy, Gangeswar Mohan, Anand Theivasigamani, Vimaladevi Sekar, Sabariswaran Kandasamy, MonikandonSukumaran,Evon Umesh Siluvai John, Ramar Marimuthu
Non-Invasive Measurement of Spoilage of Packed Fish using Halochromic Sensor
Pigment and Resin Technology, 2024, Published online; DOI:10.1108/PRT-11-2023-0100.
Impact factor: 1.40; NAAS 7.40.

2. Kesavan Devarayan, Deepika Anandakumar Muthurani, Geetha Kannusamy, Yazhiniyan Palanisamy, Anand Theivasigamani, Gangeswar Mohan, Monikandon Sukumaran, Ramar Marimuthu, Evon Umesh Siluvai John, Hema Anjappan
On-Site Colorimetric Determination of pH in Brackish Water Aquaculture
Pigment and Resin Technology, 2024, Published online; DOI: 10.1108/PRT-11-2023-0099. IF: 1.40; NAAS 7.40.

3. Mathiyazhagan Narayanan, Kesavan Devarayan, Monu Verma, Manickam Selvaraj,

Hamed A. Ghramh, Sabariswaran Kandasamy
Assessing the Ecological Impact of Pesticides/Herbicides on Algal Communities: A Comprehensive Review. Aquatic Toxicology, 2024, 268, 106851. IF:4.5; NAAS 10.50.

4. Kesavan Devarayan*, Madhan Kathavarayan, Anand Theivasigamani, Monikandon Sukumaran, Sabariswaran Kandasamy, Development of portable colorimeter for on-site determination of water quality in aquaculture. Pigment & Resin Technology, 2023, 52(6), 685-694: IF: 1.4; NAAS 7.40.

5. Kesavan Devarayan, Vinothini Vaz Motcham, Madhan Kathavarayan, Hema Anjappan Real-Time Detection of Packaged Seer Fish Spoilage using Halochromic Optical Nose Journal of Aquatic Food Product Technology, 2021, 30, 484-495. IF: 1.9. NAAS 7.90.

6. Kesavan Devarayan, Souta Nakagami, Shuichi Suzuki, Ichiro Yuki and KousakuOhkawa Electrospinning and Post-Spun Chain Conformations of Synthetic, Hydrophobic Poly(α-amino acid)s. Polymers, 2020, 12(2), 327. Impact factor: 4.7. NAAS 10.7.

Patents/Designs

1. Kesavan Devarayan, Anand Theivasigamani, Monikandon Sukumaran, Yazhiniyan Palanisamy, Praveena Balasubramanian, Cathrine Leenus Leon, Ida Stella Grace Joseph, Edible and Biodegradable Packages for Shelf-life Extension of Food Products. India Patent, Published, Application no.202341082147, date:22.12.2023.
2. Kesavan Devarayan, Anand Theivasigamani, Archana Muthuvel, Monikandon Sukumaran, Ramar Marimuthu, Kishore Arasu, Atmospheric Water Generator, Indian Design Application no.401344-001, 2023.
3. Kesavan Devarayan, Anand Theivasigamani, Monikandon Sukumaran, Evon Umesh Siluvai John, Gangeswar Mohan, Yazhiniyan Palanisamy, Sandwich Structured Halochromic Sensor for Monitoring Spoilage of Packed Fish. Indian Patent Published, Appl.No.202241048351, 2022.
4. Kesavan Devarayan, Anand Theivasigamani, Monikandon Sukumaran, Ramar Marimuthu, Capacitive Deionization, Design Application, Appl.No.370485-001, 2022.
5. Dr.M.Ramar, Dr.D.Kesavan, Dr.T.Anand, Er.S.Monikandon, B. Sanjay, M. Gowsick Kumar, P. Suwathi, Piezoelectric Tiles, Design Application, Appl.No. 370291-001, 2022.
6. Ramar Marimuthu, Kesavan Devarayan, Anand Theivasigamani, Monikandon Sukumaran, Piezoelectric Shoe, Appl.No. 370787-001, 2022.
7. Monikandon Sukumaran, Kesavan Devarayan, Anand Theivasigamani, Ramar Marimuthu, Aquatic Animal, Habituation tank, Appl.No. 370865-001, 2022.
8. Monikandon Sukumaran, Kesavan Devarayan, Anand Theivasigamani, Ramar Marimuthu,AnbarasanRajmanickam, Balaji Munusamy, Aquatic Animal Harvester, Appl.No. 370867-001, 2022.
9. Anand Theivasigamani, Roshan Raju Umaselvi, Harini Ravi, Kesavan Devarayan, Monikandon Sukumaran, Ramar Marimuthu, Gearbox design for combined aerators, Appl.No.372078-001, 2022.
10. Kesavan Devarayan, Anand Theivasigamani, Monikandon Sukumaran, Ramar Marimuthu, Pocket-size Colorimeter. Granted, Design No.370129-001, 04.04.2024.
11. Anand Theivasigamani, Mohammed Imthathullah, Jenifer Loumin S., Kesavan Devarayan, Monikandon Sukumaran, Ramar Marimuthu, Grader for Shimp Nursery, Granted, Design No.372078-001, 15.03.2024.
12. Byoung-Suhk Kim and Kesavan Devarayan, Nanofibers having nanosize protrusions

and fabrication method for the same, South Korean Patent, Granted, Patent No. 10-1625358-0000, 2016.

13. Byoung-Suhk Kim and Kesavan Devarayan, Dying methode of cellulose nanofiber by vegetable dye, South Korean Patent, Granted, Patent No. 10-1751819-0000, 2017.
14. Byoung-Suhk Kim and Kesavan Devarayan, Fabrication Method for flexible and fibrous transparent electrode composing polyaniline nanowire and using the same, South Korean Patent, Granted, Patent No. 10-1622625-0000, 2016.

Awards and Honours

1. **Best Presentation Award (Oral), 2024,** 2 days International Conference on Biorevolution-Pioneering Innovations in Life Sciences, organized by PSGR Krishnammal College of Arts and Science, Coimbatore, 21&22.03.2024
2. **Tech Whiz Award, 2024**, College of Fisheries Engineering, Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam, 26.01.2024.
3. **Best Technology Award, 2022,** Regional Level Technology Competition, Tech4seva by Tamil Nadu Agricultural University, Regional Coordinator for Unnat Bharat Abhiyan, Coimbatore, 15.08.2022.
4. **Young Researcher Award, 2021,** Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam, India, 26.01.2022.
5. **Best Paper Award (Oral), 2020,** Virtual International Conference on Food and Agriculture Science and Technology, Salem, India, 31.10.2020.
6. **Best Paper Award (Oral), 2020,** 5th National Conference on Agricultural Scientific Tamil, 9-10.10.2020, TNAU, Coimbatore, India
7. **Junior Teacher Research Fellowship, 2019,** Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam, India
8. **Best Paper Award (Oral), 2018,** 4th National Conference on Agricultural Scientific Tamil, 19-20.11.2018, IFPGS, Chennai, India
9. **Best Paper Award (Poster), 2018,** International Conference on Recent Advances in Food Processing Technology, Thanjavur, India
10. **Outstanding Reviewer Award,** 2018, Carbohydrate Polymers, Elsevier, Netherlands.
11. **Best Teaching Faculty Award**, 2017, Tamil Nadu Fisheries University, Nagapattinam, India.

Google Scholar	:	https://scholar.google.co.in/citations?user=dQX7xjYAAAAJ&hl=en&oi=ao
Research Gate	:	https://www.researchgate.net/profile/Kesavan-Devarayan
Website	:	https://sites.google.com/site/dkesavan1/home