Individual Biodata



Name : Dr. Amit Ranjan

Designation : Assistant Professor

Address : TNJFU - IFPGS, OMR Campus
Vaniyanchavadi-603103
Chennai

Contact
Mobile : 8976882500
Email : amitranjan@tnfu.ac.in

Qualification : M.F.Sc., Ph.D.

Field of Specialization : Fish Nutrition and Feed Technology

Major Specializing field : Fish & Shrimp Nutrition

Experience (in years) : 6 years 6 months

Citations	742
h-index	18
i10-index	22

Current projects

Sl.No.	Title of the Project	Year	PI / Co- PI of the Project	Funds (in Rs)	Funding Agency
1.	Nutrigenomic studies on feed development for larvae of Striped Murrel (Channa striata)	2022-26	PI	Rs. 50.38 Lakh	DBT, New Delhi
2.	Electron beam irradiation and its effect on anti-nutritional factors, digestibility, and mycotoxin levels of aquafeed ingredients	2025-27	PI	Rs. 1.95 Lakh	UGC-DAE, CSR
3.	Microplastic Induced Physiological Disruptions in Fish: Insights into growth, Physio-metabolic responses and gut microbiota diversity	2026-28	PI	Rs. 22.05 Lakh	CMRG, Tamil Nadu

Research Publications :

1. Kalaiselvan, P., **Ranjan, A.,** Nazir, M. I., Suresh, E., Thangarani, A. J., & Malarvizhi, K. (2024). Effect of Different Early Weaning Diets on Survival, Growth, and Digestive Ontogeny of Channa striatus (Bloch, 1793) Larvae. Animals, 14(19), 2838. https://doi.org/10.3390/ani1419283 **(NAAS Rating: 8.70)**

2. Kalaiselvan, P., Malarvizhi, K., & **Ranjan, A.** (2024). Exploring phytobiotics in aquaculture: sources, mode of action, effects, administration, and its bioavailability in fish. Aquaculture International, 32, 5737–5799. https://doi.org/10.1007/s10499-024-01444-0 **(NAAS rating: 8.40)**

3. Kalaivanan Rajalakshmi, Nathan Felix, **Amit Ranjan**, Uma Arumugam, Mir Ishfaq Nazir and Govindharaj Sathishkumar (2025). Effects of diets formulated with different combinations of novel feed ingredients on growth performance, apparent digestibility, digestive enzymes and gene expression activities of Pacific white shrimp, Penaeus vannamei. Aquaculture International, 33, 120. https://doi.org/10.1007/s10499-024-01803-x **(NAAS rating: 8.40)**

4. Sathishkumar, G., Felix, N., **Ranjan, A.,** Uma, A., Chidambaram, P., Manikandan, K., & Rajalakshmi, K. (2025). Efficacy of spirulina (Arthrospira platensis) meal with fish protein hydrolysate as sustainable fish meal alternative in striped murrel (Channa striata) diets. Aquaculture International, 33(3), 235. **(NAAS rating: 8.40)**

5. Kalaivanan Rajalakshmi, Nathan Felix, **Amit Ranjan**, Arumugam Uma, Govindharaj Sathishkumar (2025). Evaluation of different inclusion levels of a novel ingredient combination on growth performance, nutrient utilization and gene expression in *Penaeus vannamei*. Scientific Reports. (10.1038/s41598-025-90208-8) **(NAAS rating: 9.90)**

6. Pandi Kalaiselvan, **Amit Ranjan**, Albin Jemila Thangarani, Nathan Felix, D Kamil Akamad (2025). The Fate of Dietary Tryptophan in Fish: Unveiling Its Sources, Transport, Metabolism, and Multifaceted Impacts. The Journal of Nutrition, https://doi.org/10.1016/j.tjnut.2025.05.034. **(NAAS rating: 9.80)**

7. Govindharaj Sathishkumar, Nathan Felix, **Amit Ranjan**, Arumugam Uma, Kalaivanan Rajalakshmi (2025). Exploring the Impact of Selected Functional Feed Additives on Growth Performance, Nutrient Utilization, Enzyme Activities and Immune Gene Expression of Striped Murrel (Channa striata) Juveniles. Probiotics & Antimicrobial Proteins. https://doi.org/10.1007/s12602-025-10598-z **(NAAS rating: 10.40)**

8. **Amit Ranjan**, Pandi Kalaiselvan, Ambika Binesh, Kaliyamurthi Venkatachalam, Albin Jemila Thangarani, Nathan Felix (2025). Prospects and potential of electron beam and gamma irradiation in improving nutritional profile of plant-based ingredients used in aquafeed. Journal of Food Composition and Analysis, 148 (1), 2025, 108200. https://doi.org/10.1016/j.jfca.2025.108200. **(NAAS rating: 10.60)**

9. Kalaivanan Rajalakshmi, Nathan Felix, **Amit Ranjan**, Uma Arumugam, Govindharaj Sathishkumar (2025). Influence of different inclusion levels of novel ingredients on nutritional composition and immune gene expression of Penaeus vannamei. Food Bioscience, 107543. https://doi.org/10.1016/j.fbio.2025.107543 **(NAAS rating: 11.90)**

10. Kaliyaperumal Sriranjani, **Amit Ranjan**, Albin Jemila Thangarani, Ambika Binesh, Mohamood Kavimugaraja, Subbiah Balasundari, Nathan Felix (2025). Interactive Effects of Dietary Starch Levels and Exogenous α-Amylase on Growth, Digestibility, and Metabolic Responses in Channa striata Juveniles. Biology, 14(9), 1237; https://doi.org/10.3390/biology14091237 **(NAAS rating: 9.50)**

Students guided PG and Ph.D.

S. No.	Student name and Email id	Degree	Research Title
1.	Kalaiselvan P. kalaiprs1641@gmail.com	M.F.Sc. (Fish Nutrition and Feed Technology)	Effects of Different Weaning Strategies on Survival, Growth, and Digestive Ontogeny of *Channa striata* (Bloch, 1917) larvae
2.	Sriranjani K. kgsriranjan12@gmail.com	M.F.Sc. (Fish Nutrition and Feed Technology)	Effect of dietary alpha amylase supplementation on carbohydrate utilization in *Channa striatus* juveniles