

ST. XAVIER'S COLLEGE (Autonomous), PALAYAMKOTTAI – 627 002.

(Recognized as "College with Potential for Excellence" by UGC & Accredited at A⁺ Grade with a CGPA of 3.66 out of 4 in IV Cycle by NAAC)

ANNUAL REPORT 2024-2025

CENTRE FOR AQUACULTURE RESEARCH AND EXTENSION (CARE) (1996)

Centre for Aquaculture Research and Extension (CARE), under the Department of Zoology, conducts interdisciplinary research across various aquaculture domains, including biodiversity, toxicology, pollution assessment, fish nutrition, feed formulation technology, fish pathology, genetics, water quality assessment, aquatic biotechnology, and fish histology. Recent research efforts focus on advancements in probiotics, specifically fish gut probiotics, water probiotics, and the discovery of drugs utilizing bacterial secondary metabolites. CARE's research priorities also include the treatment and management of fish diseases and enhancing growth rates in both large-scale and small-scale aquaculture operations. Furthermore, the centre places significant emphasis on developing culture and breeding techniques for ornamental fish species.

Currently, seven research scholars are pursuing their doctoral degrees under the guidance of Dr. J. Ronald, Dr. P. Raja, and Dr. R. Azhaguraj. Notably, D. Anni Jain Askwith Mary, a research scholar under Dr. R. Azhaguraj, was awarded a Ph.D. for her work on "Effect of Probiotics and Spirulina on Growth, Haematology, and Biochemical Constituents of Labeorohita." Additionally, two research scholars Mrs. P. Krishnammal (241112822001) and Mrs. G.S. Mowniga (241112822011) have registered for a Ph.D. under the guidance of Dr. R. Azhaguraj during this academic year.

The centre's research output includes 14 research articles published in Scopus/Web of Science journals, with Dr. R. Azhaguraj (8) and Dr. P. Raja (6) as contributors, along with three book chapters. Dr. R. Azhaguraj also served as a resource person in nine programs, including seminars, conferences, workshops, and guest lectures. CARE's research scholars actively participated in national and international conferences, presenting papers on various topics. The centre's research endeavours are further supported by the college management, with Dr. R. Azhaguraj receiving a minor project grant of ₹25,000 for the project titled "Quantification and Characterization of Microplastics in Sediment, Water, and Fish from the Tamiraparani River, India," funded by SXC.