

Name: ANTO S

Designation: Junior Research Fellow (DST INSPIRE Faculty Project, India)

Area of Interest: Algal biotechnology, Biofuels, Metabolic engineering

E-mail: antojosphin11@gmail.com



EDUCATIONAL QUALIFICATION

- Completed Post Graduation (M.Tech) in **Biotechnology** from **Anna University Regional Campus, Coimbatore.**
- Completed Under Graduation (B.Tech) in **Biotechnology** from **Sathyabama University, Chennai.**

ACADEMIC CREDENTIALS

- Gold Medalist and First Rank holder in M.Tech (Biotechnology).
- Fifth Rank holder in B.Tech (Biotechnology).

WORKSHOPS/NATIONAL/INTERNATIONAL CONFERENCES

- Participated in one week workshop on “Bioenergy, biofuels and biorefining” organized by Department of Chemical engineering, National Institute of Technology, Tiruchirappalli (June 10-15, 2019).
- Participated in “Workshop on Application of Bioinformatics in Biological Data Analysis” at NFMC, Bharathidasan University (March 21-22, 2019).
- Presented a poster entitled “Bioenergy from marine brown microalgae: a study of lipid enhancement and bio-nanoparticle mediated transesterification for biodiesel production” at International Conference on Biotechnological Research and Innovation for Sustainable Development organized by CSIR-IICT, Hyderabad. (November 22-25, 2018).
- Best oral presentation award on the topic “Biomass production of microalgae using easily acquirable nutrient sources for Biodiesel production” during One day Technical Symposium at Kamaraj College of Engineering & Technology, Virudhunagar (January 31, 2018).

- Coordinated a National level Seminar on 24th March 2017, conducted by Department of Biotechnology, Anna University Regional Campus, Coimbatore on “Biotechnological Implications in Pharmaceutical Industries”.
- Attended the workshop on “Phytochemical screening and bioactivity studies of plant extracts” conducted by Faculty of Bio and Chemical Engineering, Sathyabama University, Chennai (September 3-5, 2014).
- Won second prize in poster presentation on the topic “Application of stem cells on second degree burn” during National Level Students Symposium organized by St.Joseph’s College of Engineering, Chennai (March 3, 2014).
- Won first prize in Quiz competition during National Science Day Celebrations 2014 organized by Department of Biotechnology, AMET University, Chennai (February 28, 2014).

EXPERIENCE

- Project student for M.Tech Dissertation at Department of Molecular Microbiology, Madurai Kamaraj University (September 4, 2017 to October 16, 2018).
- Completed two days training programme on Molecular Biology and Immunology at SCMS Institute of Bioscience & Biotechnology Research and Development, Cochin (February 16 and 17, 2017).
- Completed three days training programme on Food safety and microbial quality analysis of fermented foods conducted by IICPT, Thanjavur (January 16 to 18, 2017).
- Undergone training programme in the Department of Laboratory, Meenakshi Mission Hospital & Research Centre, Madurai (October 13 -18, 2014).

SKILLS AND INTERESTS

- Molecular biology skills- PCR, Partial Sequencing, DNA/RNA isolation, Gene expression studies.
- Learnt HPLC handling.

RESEARCH WORK

Algae based biofuels have gained innumerable attentions in the current era because of the depletion of fossil fuel resources and green house gas emission from conventional biofuel sources. Biofuels from algal source are bioethanol, biodiesel, biohydrogen etc. In search of best alternative to biodiesel, this study focuses on the marine microalgal species as the sole source for efficient biodiesel production. Biochemical approach such as cost effective and energy efficient lipid extraction system, optimum nitrogen and phosphorus concentration etc is employed for this research. Genetic engineering approach such as analysis of lipid biosynthetic pathway and strain improvement technique is also employed for successful biodiesel production from microalgal source.

PUBLICATIONS

- Susaimanickam Anto, Rathinasamy Karpagam, Ponnuswamy Renukadevi, Kalimuthu Jawaharraj, and Perumal Varalakshmi. "Biomass enhancement and bioconversion of brown marine microalgal lipid using heterogeneous catalysts mediated transesterification from biowaste derived biochar and bionanoparticle." *Fuel* 255 (2019): 115789 [IF: 5.128].
- Susaimanickam Anto, Arivalagan Pugazhendhi, and Thangavel Mathimani. "Lipid enhancement through nutrient starvation in *Chlorella* sp. and its fatty acid profiling for appropriate bioenergy feedstock." *Biocatalysis and Agricultural Biotechnology* 20 (2019): 101179 [IF: 0.862].