

Basic Details:

Name: Dr. G. SHANTHI

• **Designation**: Assistant Professor/HOD

• **Phone Number:** 81484834445

• Email ID:

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- **Area or Subject:** B. Tech Biotechnology, M.Tech Industrial Biotechnology & P.hD in Microalgae Biotechnology
- **Affiliation:** Department of Biotechnology, SRM Institute of Science and Technology, Ramapuram campus.

Educational Details:

- **Degree** B.Tech, M. Tech, PhD
- **Area or Subject** B . T e c h Biotechnology, M.Tech Industrial Biotechnology & P.hD in Microalgae Biotechnology.
- University Bharathidasan University, SASTRA University, National Institute of Technology
- Awarded Year
 - **B. Tech Biotechnology**, School of Engineering and Technology, Bharathidasan University, **2003**.

M.Tech Industrial Biotechnology, SASTRA University, 2005

P.hD in Microalgae Biotechnology, National Institute of Technology, Trichy, 2021.

Other Details:

Courses:

Bioprocess Engineering, Downstream processing, Energy Engineering, Environmental Biotechnology and pollution control, Bioenergy technologies, Recombinant DNA technology

Research Interests: Microalgae Biotechnology and Bioenergy

Papers Publications:

➤ G. Shanthi, M. Premalatha, N. Anantharaman; Effects of L-amino acids as organic nitrogen source on the growth rate, biochemical composition and polyphenol content of

- Spirulina platensis, Algal Research, 35, 471-478.
- ➤ G. Shanthi, M. Premalatha, N. Anantharaman; Potential utilization of fish waste for the sustainable production of microalgae rich in renewable protein and phycocyanin-Spirulina platensis, Journal of Cleaner Production, 294,2021,126106.
- ➤ G.Shanthi, M.Premalatha, N.Anantharaman Production and characterization of valuable protein hydrolysate from de-oiled residual biomass-Spirulina platensis, Biocatalysis and agricultural Biotechnology.

PATENT PUBLISHED:

➤ "Plant derived nitrogen and phosphorous for Microalgae cultivation" commercial patent, Inventors: Shanthi.G and M Premalatha, National Institute of Technology, Trichy,India (Under processing).

Papers communicated

➤ G.Shanthi, M.Premalatha, N.Anantharaman; In virto digestibility, functional and antioxidant activities of protein hydrolysates derived from de-oiled residual biomass of Spirulina platensis" Communicated to Food chemistry (2023)

Papers Presented:

International Conferences

- International Conference on "Embracing Biotechnology for a Sustainable Future" presented a paper on "Production of protein hydrolysates from dephenolized residual biomass of Spirulina" Shanthi.G, Anand VK, Swathi.G held on March 10-11, 2023, Raja Lakshmi Engineering College, Chennai.
- International Conference on "Embracing Biotechnology for a Sustainable Future" presented a paper on "Investigation of In Vitro Digestibility of Algal Protein- Chlorella sp" Nithish Kanna S., Shanthi G, Yaasir S, held on March 10-11, 2023, Raja Lakshmi Engineering College, Chennai.

National Conferences

- "National virtual conference on Food and Health Sciences –The Futuristic Outlook" presented a paper on "Production and characterization of protein hydrolysates from Arthospira platensis" held on Feb 9-10, 2023, NIFTEM, Thanjavur.
- National conference on Retrospect of Biological Sciences (NCRBS) presented a paper on production of hard carbon from tea waste" held on April 3,2023, College of Science and Humanities SRM, Ramapuram, Chennai

Working Papers:

- G.Shanthi, Daryl Lee, Raymond Lau, M.Premalatha; Effect of ultrasonication on in vitro digestibility of microalgae nutrients and energy content- *Chlorella sp.*
- G.Shanthi, M.Kirthika, M.Premalatha, N.Anantharaman; Effects of L-amino acids on CO₂ sequestration of *Spirulina platensis*
- G.Shanthi, M.Premalatha, N.Anantharaman; Optimization of green extraction of polyphenolics compounds from *Spirulina platensis*
- G.Shanthi, M.Premalatha, N.Anantharaman; Influence of organic nitrogen source on simultaneous production of photosynthetic pigments and polyhydroxyalkanoate (PHA) of *Spirulina platensis*

Work in Progress:

- Carbon sequestration
- Functional foods
- Value added products from leather waste
- Energy storage materials

International Conference Conducted: NIL

Workshop/Conferences attended:

International Conferences

- International Conference on "Embracing Biotechnology for a Sustainable Future" presented a paper on "Production of protein hydrolysates from dephenolized residual biomass of Spirulina" Shanthi.G, Anand VK, Swathi.G held on March 10-11, 2023, Raja Lakshmi Engineering College, Chennai.
- International Conference on "Embracing Biotechnology for a Sustainable Future" presented a paper on "Investigation of In Vitro Digestibility of Algal Protein- Chlorella sp" Nithish Kanna S., Shanthi G, Yaasir S, held on March 10-11, 2023, Raja Lakshmi Engineering College, Chennai.

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Academic Experience:

- Worked as Assistant Professor at SASTRA University, School of Chemical and Biotechnology since 1st August 2005 to 31 Nov 2008 (3 Year & 3 months). 2005-2008.
- Worked at National Institute of Technology Trichy as Temporary faculty in Department of Energy and Environment Since on 3rd Feb 2014 to 30th July 2015 (1 year 4 months). 2014-2015.
- Current Position as Assistant Professor and Head, Department of Biotechnology, SRMIST, Ramapuram, Chennai Since 13th July 2022 Till Date.

Memberships:

NIL

