#### **PROFILE**

Name : Dr. G. Gowthamraj

**Designation** : Assistant Professor

Department : Food Science & Nutrition

**Date of Joining** : 19.06.2023

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Degree	Subject	College / University & place	Year Completed
B.Sc.	Food Science and Nutrition	Gandhigram Rural Institute – Deemed University, Dindigul, Tamil Nadu.	2013
M.Sc.	Food Science and Nutrition	Pondicherry University, Pondicherry	2015
P. G. Diploma	Teaching Skills	Pondicherry University, Pondicherry	2017
Ph. D.	Food Science and Nutrition	Pondicherry University, Pondicherry	2022

# **Research Works Undergone:**

**Ph. D.:** "In-Vitro Efficacy of Finger millet based Low Protein Food Supplement for Inborn Error of Protein Metabolic Disorders"

**M. Sc.:** "Development and evaluation of quality characteristics of *Cissus quadrangularis* soup powder using Response Surface Methodology".

## **Work Experience**

Designation	College / Institution	Experience
Assistant Professor	Department of Food Science and Nutrition, The American College, Madurai	June, 2023 – Present
Assistant Professor	Department of Food Science and Nutrition, Nehru Arts and Science College, Coimbatore	November, 2021 – May 2023

### **Specialisation in Teaching:**

- Food Processing and Preservation Techniques
- Physiological Aspects of Nutrition
- Advanced Nutrition
- Food Product Development & Food Investigation Techniques
- Nutritional Biochemistry
- Clinical Nutrition and Dietetics
- Food Packaging

## **Specialization in Research:**

- Food Product Development
- Functional Foods
- Food Process optimization

# **Professional Qualification:**

Exam / Recognition	Subject	Organization	Month & Year
UGC – NET (LS & JRF)	Home Science	UGC - CSIR	December, 2015
UGC – NET (LS)	Home Science	UGC – CSIR	December, 2014
UGC – NET (LS)	Home Science	UGC – CSIR	June, 2015
Qualification Approval	Home Science	Bharathiar University	February, 2022

## Membership in Professional Bodies:

- 1. Tamil Nadu Science Forum- Life Member
- 2. AFSTI, Pondicherry chapter Annual Member

### **Papers Published**

Gowthamraj, G., Raasmika, M., & Narayanasamy, S. (2020). Efficacy of fermentation parameters on protein quality and microstructural properties of processed finger millet flour. Journal of Food Science and Technology, 1-12. IF:2.7

Gowthamraj, G., Jubeena, C., & Sangeetha, N. (2021). The effect of γ- irradiation on the physiochemical, functional, proximate, and anti-nutrient characteristics of finger millet (CO14 & CO15) flours. Radiation Physics and Chemistry, 83, 109403, IF: 2.858

Lavanya J P, Gowthamraj G, Sangeetha. N. (2021). Effect of heat moisture treatment on the physicochemical, functional and antioxidant characteristics of white sorghum (Sorghum bicolor (L.) grains and flour. Journal of Food Processing and Preservation 45 (12), e16017, IF:2.19

Perraulta Lavanya, J., Gowthamraj, G., Hemalatha, V., Sadashiv, S.O., Sharath, R., Narayanasamy Sangeetha. (2022). Physicochemical, techno-functional, and structural properties of gluten free crackers developed from sorghum (*Sorghum bicolor (L.)*) varieties. International Journal of Food Science and Technology, doi:10.1111/ijfs.15768. IF:3.71

Hema, T., Kiran, G. S., Sajayyan, A., Ravendran, A., Raj, G. G., & Selvin, J. (2019). Response surface optimization of a glycolipid biosurfactant produced by a sponge associated marine bacterium *Planococcus sp. MMD26*. Biocatalysis and Agricultural Biotechnology, 18, 101071. (Cite score: 3.9)

Kamalraj, R., Nandhivarman, M., Poyyamoli, G., Gowthamraj, G., & Priyadharshini, S. (2017). Effect of inorganic and organic amendments on the proximate composition of okra [*Abelmoschus esculentus (L) moench*]. Journal of Advances in Food Science & Technology, 4(2), 67-72.

Periasamy, P., Madhusudan, N. C., Gowthamraj, G., Nikolova, M. P., Bououdina, M., Supangat, A., ... & Devarajan, V. P. (2024). Graphene-Based Nanomaterials as Biomaterials in Stem Cell Differentiation, Tissue Regeneration and Cell Growth Studies. In Graphene-Based Nanomaterials (pp. 47-58). CRC Press.

Periasamy, P., Gowthamraj, G., Selvakumar, B., Nikolova, M. P., Bououdina, M., Supangat, A., ... & Devarajan, V. P. (2024). Application of Green Graphene-Based Nanomaterials in Agri-Biotechnological Sensors for Surveillance and Prevention of Agricultural Productivity. In Graphene-Based Nanomaterials (pp. 109-120). CRC Press.

### **Papers and Posters Presented**

Effect of natural, back-slope and controlled fermentation methods on the quality characteristics of selected finger millet (CO14) flour – 51<sup>st</sup> International conference on Nutrition security: blending tradition with modern technology organized NSI, India.

Optimization of treatment parameters for the development of low protein finger millet (CO14) flour – 3rd International Conference on Emerging Trends in Millet Technology for Health Promotion (ICMET – 2020) organized by Department of Nutrition and Dietetics, Periyar University, Salem. (Won second price in paper presentation).

Phytochemical, Antioxidant and Anti-Carcinogenic characteristics of Freeze-Dried Opuntia Ficus-Indica Powder - International conferences on Innovative Approaches in Life Sciences (ICIALS23) organized by Department of Food Science and Nutrition, The American College, Madurai.

Development and quality evaluation of processed *Cissus quadrangularis* soup powder using response surface methodology (Poster presentation)— International conference on Indian Institute of Food Processing Technology, Government of India, Thanjavur, Tamil Nadu.

Development and characterization of flavoured paneer infused with beetroot juice (Poster presentation - as corresponding author)— 54th Annual International Conference of Nutrition Society of India, National Institute of Nutrition, Government of India, Hyderabad.

Development of bioplastic-based active packaging using natural colourant from black carrot (Poster presentation - as corresponding author)—54th Annual International Conference of Nutrition Society of India, National Institute of Nutrition, Government of India, Hyderabad.

#### **Other Activities / Academic Credentials:**

Initiated UGC NET Coaching classes for the PG students of the Food Science and Nutrition department, American College from the academic year of 2023-2024.

Acted as a resource person and delivered a session on "Process optimization using Response Surface Methodology" for the media preparation at Kalasalingam University, Srivilliputhur, Tamil Nadu on 16.02.2024.

Organized and given training to 30+ postgraduate students (Department of Textiles, Periyar University, Salem) for the UGC – National Eligibility Test. (March 2020).

Organized an Online Quiz Competition for School students concerning World Health Day, 2022.

Acted as a resource person in NSS Camp, 2022, organized by Nehru Arts and Science College, and gave a lecture on the "Importance of Food" to the High School Students, in Thirumalaiyam palayam, Coimbatore, Tamil Nadu.

#### CONFERENCES AND OTHER ACTIVITIES

Participated in 5 Days Online International Online Faculty Development Program on "Material Science and Engineering Approaches for Food System Design" organized by Tezpur University, Tezpur (ATAL).

Participated in 5 Days, Online International Faculty Development Program on "Non-Thermal Processing of Food Products" organized by the College of Food Processing Technology and Bioenergy (ATAL).

Participated in 2 Day, Online workshop on "Emerging Trends and New Opportunities in High-Pressure Processing" organized by the College of Agriculture, Vellanikara, Kerala.

participated in the PFNDAI Nutritional Awareness program organized by the Department of Food Science and Technology, PU and PFNDAI, India (August 2017).

Participated in the workshop on URKUND organized by the PU and INFLIBNET, India (Oct 2015). Participated in the National Seminar on Facilitating Skill Development and Start-ups in the Food Sector, organized by AFSTI (Pondicherry Chapter) on 19.03.2018.

Participated in the International Conference on Inborn Error of Metabolism organized by the ISIEM, India. (Jan 2017).

Participated in One day workshop on Food Safety Act "Know the Act & Regulations" organized by AFSTI (Pondicherry Chapter) on 14th March 2014.

Participated in a 3-day workshop on IT Skills for scholars, organized by the Human Resource Development Centre (UGC-HRDC) from 1st Feb 2018 to 3rd Feb 2018.

Participated in the National Conference on Food Regulation on India's current status and ways forward, organized by AFSTI (Pondicherry Chapter) from 27.03.2017 to 28.03.2017.

Participated in the 3<sup>rd</sup> International Conference on Food Technology (3<sup>rd</sup> InfoTech- 2013) organized by IICPT (currently IIFPT), Thanjavur, Tamil Nadu.