# Dr. Moumita Das

PhD in Food Science and Technology (CSIR-CFTRI, Mysore, Inida) Mobile: +919051779926, +918420267849 Email: <u>mou.biochemistry12@gmail.com/mous.zone12@gmail.com</u> LinkedIn: <u>https://www.linkedin.com/in/moumita-das/</u>

# SKILLS:

- Extraction of **bioactive components**
- Identification and quantification of food derived components through **HPLC**
- Quantification of volatile compounds through **Gas chromatography**
- New Food Product development, Ideation, Optimization, Enrichment, Food processing
- Compositional analysis of foods, shelf-life study (e.g-moisture, protein, ash, minerals, oils)
- *In-vitro* studies: cell culture work, antioxidant capacity analysis, enzyme inhibitory activity analysis
- *In-vivo* studies: animal handling, ELISA and serum sample analysis, PCR, protein expression studies through western blot
- Analytical skills, data interpretation (GraphPad Prism, SPSS)
- Skilled at communication and public relationship

## ACADEMIC QUALIFICATIONS:

- Doctor of Philosophy in Food Science and Technology from <u>CSIR- Central</u> Food Technological Research Institute (<u>CFTRI</u>), India (2018-2023)
- Master of Science in Food & Nutrition, University of Calcutta (2012-2014), 79.3% (CGPA 4.965 A+)
- Bachelor of Science in Food & Nutrition, University of Calcutta (2009-2012), 73.75%
- Higher Secondary Examination, 81%
- Secondary School Examination, 84.73%

## **RESEARCH EXPERIENCE:**

• Former **Research Scholar** (**UGC-JRF**) at CSIR-Central Food Technological Research Institute (January 2018- July 2023)

- Junior Project Officer at School of Medical science and Technology, Indian Institute of Technology, Kharagpur (February 2015-June 2016)
- **Reviewer** in potential journals of Elsevier and Royal Society of Chemistry (July 20203 - present)

# **TEACHING EXPERIENCE**

- Assistant Professor in the department of Food and Nutrition, under School of Allied Health Sciences, Swami Vivekananda University (March 2024- Present)
- Faculty of Food, Nutrition and Dietetics under School of Health and Medical Sciences, Adamas University (August, 2023 – February 2024)
- Guest-lecturer, Department of Food and Nutrition, Behala College, University of Calcutta (July 2017- December 2017)

# **PROJECTS:**

- Effect of different drying technologies on quality parameters of dehydrated products
- **Development of high protein pasta** with mushroom powder incorporation
- Community participation model for economic development and nutrition health management
- Changes in the nutraceuticals during the post processing of oyster mushroom
- Study on analysis of plant derived fat soluble bio-actives and development of functional food product targeting obesity

## AWARDS & RECOGNITIONS:

- Young Researcher Award (2023) by Indian Society of Agriculture & Horticulture Research Development, Chandigarh for outstanding contribution in the field of Food Sciences and Nutrition
- Student of the year-2022 award presented by The Society of Tropical Agriculture, New Delhi for the contribution in research of Food Science and Nutrition, 2022
- Awarded for 'Best paper presentation' for the presentation in the International Conference on interface between Agriculture, Food, Chemical & Biological Sciences held at University of Kashmir, Hazratbal Srinagar, India during July 27-29, 2022
- Awarded 'Young Researcher Award' by Institute of Scholars, 2022
- Awarded as First class 3<sup>rd</sup> in order of merit in Bachelor of Science Examination, Food & Nutrition (2012), University of Calcutta
- Awarded as First class 4<sup>th</sup> in order of merit in Masters of Science Examination, Food & Nutrition (2014), University of Calcutta

## **PUBLICATIONS:**

1. **Das, Moumita**, and Suresh Kumar Gurusiddaiah. "Ergosterol fraction from *Agaricus bisporus* modulates adipogenesis and skeletal glucose uptake in high fat diet induced obese C57BL/6 mice." *Life Sciences* 315 (2023): 121337. **Impact Factor: 6.78** 

2. Das, Moumita, V. P. Mayookha, V. Geetha, R. Chetana, and G. Suresh Kumar. "Influence of different drying techniques on quality parameters of mushroom and its utilization in development of ready to cook food formulation." *Journal of Food Science and Technology* 60, no. 4 (2023): 1342-1354. Impact Factor: 3.1

3. **Das, Moumita**, V. Geetha, Mehrdad Zarei, and Nanishankar V. Harohally. "Modulation of obesity associated metabolic dysfunction by novel lipophilic fraction obtained from *Agaricus bisporus*." *Life Sciences* 305 (2022): 120779. **Impact Factor: 6.78**  4. **Das, Moumita**, and G. Suresh Kumar. "Potential role of mycosterols in hyperlipidemia– A review." *Steroids* 166 (2021): 108775. **Impact Factor: 2.76** 

5. **Das, Moumita**, Mehrdad Zarei, Mayookha VP, and Nanishankar V. Harohally. "Studies on the partial characterization of extracted glycosaminoglycans from fish waste and its potentiality in modulating obesity through in-vitro and in-vivo." *Glycoconjugate Journal* 39, no. 4 (2022): 525-542. **Impact Factor: 3.0** 

6. Pimpley, Vaibhavi A., **Moumita Das**, Suresh Kumar Gurusiddhaiah, and Pushpa S. Murthy. "Modulatory effect of green coffee bioactives on high-fat diet–induced obesity in C57BL6 mice model." *Nutrition* 115 (2023): 112141. **Impact Factor: 4.4** 

7. Patil, Siddhi, **Moumita Das**, G. Suresh Kumar, and Pushpa S. Murthy. "Coffee leaf extract exhibits anti-obesity property and improves lipid metabolism in high-fat diet-induced C57BL6 obese mice." *3 Biotech* 13, no. 8 (2023): 278. **Impact Factor: 2.8** 

8. Geetha, V., Mayookha, V. P., **Das, M.**, & Kumar, G. S. (2024). Bioactive carbohydrate polymers from marine sources as potent nutraceuticals in modulating obesity: a review. *Food Science and Biotechnology*, 1-12. **Impact Factor: 2.9** 

9. Venkatesh, G., **Das, M.**, Ramakrishna, C., & Kumar, G. S. (2023). Development and Characterization of Functional Low Calorie Gelatin Gummies Enriched with Glycosaminoglycans Extracted from Mackerel Fish Waste. *Journal of Aquatic Food Product Technology*, *32*(8-9), 599-613. **Impact factor: 1.6** 10. Jadhav, H. B., **Das, M.**, Das, A., Geetha, V., Choudhary, P., Annapure, U., & Alaskar, K. (2024). Enhancing the functionality of plant-based proteins with the application of ultrasound–A Review. *Measurement: Food*, 100139.

11. Jadhav, H. B., Choudhary, P., Deshmukh, N. D., Singh, D. K., Das, **M., Das**, A., & Nayik, G. A. (2024). Advancements in non-thermal technologies for enhanced extraction of functional triacylglycerols from microalgal biomass: A comprehensive review. *Food Chemistry: X*, 101694. **Impact factor: 6.5** 

12. Ray A, Dev M, **Das M**. A concise review on current trend of replacing fat in the development of non-dairy cheese analogues. *Food Science and Biotechnology*. 16:1-8. Oct 2024. **IF: 2.4** 

13. **Das M**, Das A. A comprehensive review on strategies for replacing saturated fats in bakery products. *Discover Food*. 4(1):1-1. Dec 2024.

### Articles in Scientific magazine:

14. **Das Moumita** and Das Arpita. Intelligent Packaging and Its application in Food Sector: An overview. Food Infotech Magazine, 2024. <u>https://www.foodinfotech.com/food-infotech-</u> magazine-january-issue-2024/

15. **Das, Moumita.** Emerging role of Mushrooms and Mycosterols in Healthy Living. Food Infotech Magazine, 2024. https://www.foodinfotech.com/emerging-role-of-

mushrooms-and-mycosterols-in-healthy-living/

### **Book Chapter:**

16. Mayookha V P, Geetha V, **Moumita Das** & Suresh Kumar G. Neurodegenerative Disease: Prevention and Treatment Through Plant Extracts Therapy. Frontiers in Clinical drug research- CNS and Neurological Disorders. Frontiers in Clinical drug research- CNS and Neurological Disorders, 2020.

### **SCIENTIFIC PRESENTATION:**

- Utilization of mushroom powder to develop high protein pasta and its quality evaluation. 29<sup>th</sup> Indian convention of Food Scientists and Technologists (ICFoST) (2023)
- Ergosterol fraction from Agaricus bisporus attenuates obesity associated complications in high fat diet induced obese C57BL/6 mice model. 3<sup>rd</sup> International Conference on interface between Agriculture, Food, Chemical & Biological Sciences held at University of Kashmir, Hazratbal Srinagar, India (2022)
- Studies on nutritional and sensory quality of mushroom enriched ready to cook chilla mix. 28<sup>th</sup> Indian convention of Food Scientists and Technologists (ICFoST) (2022)
- Effect of sterol extract from mushroom on obesity related complications. 7<sup>th</sup>

**Bioprocessing India** (BPI) held at CSIR-CFTRI, Mysore, Karnataka (2019)

- Biological activity of the ergosterol extract from white button mushroom (Agaricus bisporus). 8<sup>th</sup> International Food Convention held at CSIR- CFTRI, Mysore, Karnataka (2018)
- Inter-relationship between Vitamin D and Non-insulin-dependent-diabetesmellitus (type 2)-a review work. National Conference on "Nutritional, Functional & Safety Challenges of Food & Health Issues in the Current Scenario" held at Sam Higginbottom Institute of Agriculture, Technology & Sciences, Allahabad (2016)

#### **CONFERENCES & WORKSHOP:**

- National Nutrition week, 2009 organized by International College of Nutrition Calcutta Chapter at Indian Science Congress Association, Kolkata
- World Breast Feeding Week, 2014, Indian Dietetic Association, Bengal Chapter
- Workshop on Technologies for Entrepreneurship and Skill development at Agri-Expo 2015, Indian Institute of Technology, Kharagpur (IIT-KGP), Agricultural and Food Engineering Department and rural Development Centre
- National Nutrition Week 2016, Life Cycle Approach: For Better Nutrition. Scientific CME

#### **PROFESSIONAL MEMBERSHIP**

- Life member of Association of Food Scientists and Technologists (India)
- Life membership at Indian Dietetic Association (Bengal chapter)