

CURRICULUM VITAE



DR. ASHWATH KUMAR K

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Professional Experience

- ❖ **Senior Technical Officer (1)** FMBCT Department, **CSIR – Central Food Technological Research Institute**, Ministry of Science and Technology, Govt. of India, Mysuru since June 2022
- ❖ **Technical Officer** at FMBCT Department, **CSIR – Central Food Technological Research Institute**, Ministry of Science and Technology, Govt. of India, Mysuru June 2017 to May 2022.
- ❖ **Assistant Manager (R&D)** at Modern Innovation Centre, **M/s Modern Food Enterprises Pvt. Ltd.** Chennai (Modern Bread brand) from October 2016 to May 2017.
- ❖ **Junior Research Fellow** and **Senior Research Fellow** at **DRDO - Defence Food Research Laboratory**, Ministry of Defence, Govt. of India, Mysuru from November 2012 to October 2016.
- ❖ **Executive – R&D** at **M/s Elite Agro Foods**, Thrissur, Kerala, from November 2010 to October 2012.
- ❖ **Trainee Quality Control** at **M/s Nuthatch Nutricare Technologies Pvt. Ltd.** Bangalore from July 2010 to October 2010.

Academic Qualification

- ❖ **PhD** in **Food Science** from DRDO - Defence Food Research Laboratory (DFRL) affiliated with Bharathiar University Coimbatore in 2018.
- ❖ **K-SET** (Karnataka State Eligibility Test) for Assistant Professorship in 2014.
- ❖ **DRDO – Junior Research Fellowship (JRF)** in 2013 and **Senior Research Fellowship (SRF)** in 2015.
- ❖ **M.Sc** in Foods and Nutrition from PSG College of Arts and Science, affiliated with Bharathiar University, Coimbatore.
- ❖ **B.Sc** in Food, Nutrition and Dietetics from Alva's College, Moodbidri, affiliated with Mangalore University, Mangalore.
- ❖ **MBA** in Total Quality Management from Sikkim Manipal University, Bangalore.
- ❖ **Post Graduate Diploma in Food Safety and Quality Management** from IGNOU, New Delhi.
- ❖ **Diploma** in Computer Application from Manipal Career Academy, Manipal.

Presentations [16 No]

1. Effect of additives on the quality and microbial characteristics of par-baked burger bun during storage at 9th IFCON during 7-10 December 2023 held at CSIR-CFTRI campus, Mysuru, India (**Best Paper award**).
2. Impact of the Incorporation of red seaweed biomass on the dough rheology, and physicochemical, and bioactive profile of the buns prepared thereof at 9th IFCON during 7-10 December 2023 held at CSIR-CFTRI campus, Mysuru, India.

3. "Rheological, physical and sensory characteristics of the fibre-enriched wheat bun" at 29th Indian Convention of Food Scientists & Technologists (ICFoST) during 5-7th January 2023 held at The AI Saj Convention Centre, Thiruvananthapuram, Kerala, India.
4. "Effect of natural lutein from marigold oleoresin on the quality characteristics of extruded products" at 29th Indian Convention of Food Scientists & Technologists (ICFoST) during 5-7th January 2023 held at The AI Saj Convention Centre, Thiruvananthapuram, Kerala, India.
5. "Application of lutein-rich marigold oleoresin as a natural colourant in buns" at 29th Indian Convention of Food Scientists & Technologists (ICFoST) during 5-7th January 2023 held at The AI Saj Convention Centre, Thiruvananthapuram, Kerala, India.
6. "*Beta vulgaris* root as a natural colourant in bakery product" at Emerging and Adaptable Technologies for Sustainable Agro-Food Industries and Economy (EAT-SAFE) during 20-22 January 2022 held virtually.
7. "*Decalepis hamiltonii* root extract (2H4MB) as natural flavour in bakery application" at Emerging and Adaptable Technologies for Sustainable Agro-Food Industries and Economy (EAT-SAFE) during 20-22 January 2022 held virtually.
8. "Protein concentrates and isolates as egg replacers in vegan cakes: A Sustainable Alternative Approach in Baking" at E-Conference on "Global Pandemic and Sustainable Food System: Challenges and Response to Research and Practice" during 1-2 July 2020 **(Best Paper Award)**.
9. "Studies on the interaction of egg replacers with wheat protein for replacement of egg in cakes" at National Conference on Health and Wellness through Nutrition and Nutraceuticals -2020 held at Ramaiah University of Applied Sciences, Bangalore 22-24 January 2020. **(Best Paper Award)**.
10. "Gluten-free pizza base using multigrain flour" at International Conference FOODS 2019 during 05-06 December 2019 held at MOP Vaishnav College Chennai.

11. "Effect of *dicoccum* wheat, barley flour and soya flour on pizza making quality and its starch digestibility" at International Conference FOODS 2019 during 05-06 December 2019 held at MOP Vaishnav College Chennai. (**Best Paper Award**).
12. "Effect of fat and sugar reduction on rheological, textural, nutritional and sensory quality characteristics of multigrain cookies" at International food convention (IFCON) on Holistic approaches for start-ups, human resource training for agriculture and food industry gemmation during 12-15 December 2018.
13. "Influence of multigrain premix on rheological, textural, microstructural characteristics of wheat flour and quality of biscuits" at the 6th International Conference on "Emerging Technologies in Food and Nutrition for Health management" during 14-15 May 2015 at NDRI Bangalore (**Best Paper award**).
14. "Effect of incorporation of multigrain premix on rheological, textural and microstructural characteristics of wheat flour and quality of biscuits" at National Seminar on "Fostering Innovative Research and Entrepreneurship (FIRE) for Indian Foods" During 13-14th December 2014 held at NIFTEM campus, Kundli, Haryana.
15. "Development of multigrain premixes and its nutritional studies" at 7th International food convention (IFCON-2013) on NSURE-Healthy Foods during 18-21 December 2013 held at CSIR-CFTRI, Mysore.
16. "Formulation and organoleptic evaluation of Ready to Serve (RTS) punch beverage prepared from lactic acid bacteria fermented carrot and sweet lime juice" at National conference on "Emerging trends and opportunities in food processing sector" during 28-29 January 2010 held at M.O.P Vaishnav College, Chennai (**Best paper award**).

Publications [23 No] (* Corresponding author)

1. **Ashwath Kumar K**, Kasar C, Vijayanand P and Prabhasankar P. (2024). Rheological characteristics of wheat flour fortified with *Musaceae* flours and physicochemical properties

of layered flat-bread (*Parotta*). *Journal of Food Measurement and Characterization*, 2248-2258.

2. Madhushree Padmaiah,†**Ashwath Kumar Kathalsar**, Soumya Chandrashekhar and Pichan Prabhasankar (2024). Influence of *Poaceae* flours on the empirical rheology, processing, quality characteristics of pizza base and digestibility studies. *International Journal of Food Science and Technology*, 59, 160-169.
3. Sudha ML, Umashankar K, **Ashwath Kumar K**, Giridhar P, Prabhasankar P. Physical characteristics, acceptability and biochemical properties of biscuits using *Decalepis hamiltonii* tuber extract as a natural flavouring agent. *International Journal of Food Science and Technology*, 58, 5134-5143. [IF: 3.612].
4. **K. Ashwath Kumar**, T. Vanitha, ML Sudha, P. Meenakumari, P. Vijayanand and P. Prabhasankar (2023). *Beta Vulgaris* root as a natural food colouring in doughnut: Dough rheological properties and bioactive composition. *International Journal of Food Science and Technology*, 58, 116-125. [IF: 3.612].
5. Vedika Singh, **Ashwath Kumar K**, Naveen Kumar JK and Prabhasankar P. (2023). Abiotic stress treatment to improve the iron bio-availability in cereal grains and its validation in biscuits. *Journal of Food Measurement and Characterization*, 17, 895 – 903. [IF: 3.006].
6. Juhi Agrawal, **K. Ashwath Kumar**, D. Indrani and C. Radha. (2022). Effect of *Moringa oleifera* seed flour on the rheological, physico-sensory, protein digestibility and fatty acid profile of cookies. *Journal of Food Science and Technology*, 59, 4731-4739. [IF: 3.117].
7. Riya Kumar, Soumya C, **Ashwath Kumar K** and Prabhasankar P. (2021). Multi *Fabaceae* flour for gluten-free pizza base: Rheology, processing, microstructural and physico-sensory characteristics. *Journal of Food Processing and Preservation*, 46(2), e16239. <https://doi.org/10.1111/jfpp.16239>. [IF: 2.609].
8. Smruthi Rao, **Ashwath Kumar K***, Indrani D. (2021). Low Carbohydrate High Fat Flour: Its rheology, bread making, physico-sensory and staling characteristics. *Journal of Food*

Science and Technology, 59, 2220-2230. <https://doi.org/10.1007/s13197-021-05235-w>. [IF: 3.117].

9. **Ashwath Kumar K** and Sudha ML. (2021). Effect of fat and sugar replacement on rheological, textural and nutritional characteristics of multigrain cookies. *Journal of Food Science and Technology*, 58(7), 2630-2640. <https://doi.org/10.1007/s13197-020-04769-9>. [IF: 3.117].
10. Adguru Papanna Bharath, **Ashwath Kumar Kathalsar**, Soumya Chandrashekhar & Pichan Prabhasankar (2020). Influence of tetraploid wheat (*Triticum dicoccum*) on low glycaemic index pizza base processing and its starch digestibility. *International Journal of Food Science and Technology*, 56(5), 2273-2281. <https://doi.org/10.1111/ijfs.14845> [IF: 3.612].
11. **Kathalsar Ashwath Kumar*** and Sharma Gopal Kumar (2020). Shelf stability of multigrain incorporated biscuits on storage: its Physico-chemical, textural and sensorial studies. *Annals Food Science and Technology*, 21(2), 315-325 http://www.afst.valahia.ro/images/documente/2020/issue_2/III.1_Kumar.pdf.
12. Aruna Pamisetty., **Ashwath Kumar K.**, Indrani D and Singh RP. (2020). Rheological, physico-sensory and antioxidant properties of puniceic acid rich wheat bread. *Journal of Food Science and Technology*, 57(1), 253-262. <https://doi.org/10.1007/s13197-019-04055-3>. [IF: 3.117]
13. **Ashwath Kumar K*.**, Sharma G.K. and Anilakumar K. R. (2019). Influence of multigrain premix on nutritional, *in-vitro*, *in-vivo* protein digestibility of multigrain biscuit. *Journal of Food Science and Technology*, 56(2), 746-753. <https://doi.org/10.1007/s13197-018-3533-z> [IF: 3.117]
14. Cherakkathodi Sudheesha, Kappat Valiyapeediyekkal Sunooj, Suraj Kumar Sinha Johnsy George, Sunny Kumar, Perumal Murugesan, Saravanan Arumugam, **K. Ashwath Kumar**, Vallayil Appukuttan Sajeev Kumar. (2019). Impact of energetic neutral nitrogen atoms created by glow discharge air plasma on physicochemical and rheological properties of kithul starch. *Food Chemistry*, 294, 194-202. [IF: 9.231].

15. **Ashwath Kumar K***. and Sharma G.K. (2018). The effect of surfactants on multigrain incorporated short biscuit dough and its baking quality. *Journal of Food Measurement and Characterization*, 12 (2), 1360-1368. <https://doi.org/10.1007/s11694-018-9750-3> [IF: 3.007].
16. **Ashwath Kumar K.*** and Aashitosh A Inamdar. (2017). Skill development initiative – Food Industry Perspective. *Indian Food Industry Mag*, 36(3), 36-46.
17. **Ashwath Kumar K.** and G.K Sharma*. (2017). Functionality of different surfactants on the rheological and microstructural characteristics of multigrain incorporated wheat flour. *Journal of Texture Studies*, 48, 57-65. [doi:10.1111/jtxs.12209](https://doi.org/10.1111/jtxs.12209) [IF: 3.942].
18. **Ashwath Kumar K***., Sharma G.K*., Khan M.A and Semwal A.D. (2016). A study on functional, pasting and microstructural characteristics of multigrain mixes. *Journal of Food Measurements and Characterization*, 10(2), 274-282. [DOI 10.1007/s11694-016-9304-5](https://doi.org/10.1007/s11694-016-9304-5). [IF: 3.006].
19. Divya K., **Ashwath Kumar K.**, Sharma G.K and Semwal A.D. (2016). Development and storage stability of buckwheat-chia seed fortified biscuits. *International Journal of Food and Fermentation Technology*, 6(1), 95-106. [DOI 10.5958/2277-9396.2016.00032.5](https://doi.org/10.5958/2277-9396.2016.00032.5) [NAAS Rating: 4.03].
20. **Ashwath Kumar K***., Sharma G.K*., Khan M.A., Govindraj T. and Semwal A.D. (2015) Development of multigrain premixes – its effect on rheological, textural and micro-structural characteristics of dough and quality of biscuits. *Journal of Food Science and Technology*, 52(12), 7759-7770. [DOI 10.1007/s13197-015-1950-9](https://doi.org/10.1007/s13197-015-1950-9). [IF: 3.117].
21. **Ashwath Kumar K***., Sharma, G.K*., Khan, M.A. and Semwal, A.D. (2015). Optimization of multigrain premix for high protein and dietary fibre biscuits using response surface methodology (RSM). *Food and Nutrition Sciences*, 6(9), 747-756. [DOI: 10.4236/fns.2015.69077](https://doi.org/10.4236/fns.2015.69077). [Google IF: 1.04].
22. **Ashwath Kumar K.**, Lalitha R., Rajendran R., Karthik S.S., (2011) Preparation and microbial evaluation of RTS beverage (punch) prepared with lactic acid fermented carrots

and sweet lime juice. *Elixir Food Science*, 34, 2461-2464.
[https://www.elixirpublishers.com/articles/1349952395_34%20\(2011\)%202461-2464.pdf](https://www.elixirpublishers.com/articles/1349952395_34%20(2011)%202461-2464.pdf)

23. Lalitha R., **Ashwath Kumar K.**, Rajendran R., Karthik S.S., (2012). Formulation and storage stability of lactic acid fermented probiotic RTS punch beverage. *Beverage and Food World*, 39(4), 25-27.

Students Dissertation/ Project work guidance

Student Name & Year	Title of Dissertation work	University
Ms. Nikita Verma B.Tech Food Technology 2023	Effect of millet flour incorporation on the rheological characteristics of wheat flour and quality characteristics of cookie	Amity University, Uttar Pradesh India
Ms. Kadam Anagha Sunil MSc Food Technology 2022	Studies on the natural sugar replacers on the quality characteristics on millet cookies	CSIR – CFTRI, Mysuru, India
	Review on natural sugar replacers for bakery application	CSIR – CFTRI, Mysore, India
Ms. Sneha S MSc Food Technology 2021	Effect of Rice bran and Wheat bran incorporation on the rheological, physical and sensory quality characteristics of the wheat bun	Pondicherry Central University India
Ms. Shravya S MSc Food Technology 2019	Studies on interaction of egg replacers with wheat protein for replacement of egg in cakes	St. Aloysius College (Autonomous), Karnataka, India

Awards (6 No's)

1. **Best Poster award** at 9th International Food Convention (IFCON 2023) held on 7 – 10 December 2023 at CSIR – CFTRI campus, Mysuru.
2. **Best poster paper award** at E-Conference on "Global Pandemic and Sustainable Food System: Challenges and Response to Research and Practice" during 1-2 July 2020
3. **Best poster paper award** at National Conference on Health and Wellness through Nutrition and Nutraceuticals -2020 held at Ramaiah University of Applied Sciences, Bangalore 22-24 January 2020
4. **Best poster paper award** at International Conference FOODS 2019 during 05-06, December 2019 held at MOP Vaishnav College Chennai.
5. **Best oral paper award** at 6th International conference on “Emerging Technologies in Food and Nutrition for Health management” during 14-15 May 2015 at NDRI Bangalore.
6. **Best poster paper award** at National conference on “Emerging trends and opportunities in food processing sector” during 28-29 January 2010 at M.O.P Vaishnav College, Chennai.
7. **Raising Star** award by Modern Food Enterprises Pvt. Ltd. (“Modern Bread” brand) for best performance during 2017.

Training Programs (4 No's)

- ❖ Hands-on Training for Analysis of Food Bioactive conducted at the Department of Food Engineering and Technology, Institute of Chemical Technology, Mumbai during 5 - 7th February 2019.
- ❖ The training program conducted by the Indian Statistical Institute, Bangalore on the Design of Experiments during 13-14 December 2017.

- ❖ Training program conducted by CSIR- Central Food Technological Research Institute (CFTRI), Mysore on Baking Science and Technology from June 24-28, 2013.
- ❖ Internship experience at M/s MTR Foods Ltd. Bangalore involving in the field of analytical aspects of food and food-related raw materials during May - June 2009.