Email ID: kotpalvasudha@gmail.com

Nationality: Indian

https://orcid.org/0000-0001-8004-5759 Scopus Author ID: 56235919900



Google Scholar Profile



EDUCATION

PhD Food Process Engineering

Jan'10 – April'14

Indian Institute of Technology Kharagpur, West Bengal

M.Sc. Food Technology2006-2008Guru Jambheshwar University of Science & Technology, HissarGPA: 8.7/10

Specialization in Cereal Technology: Extruded products & Product Development

B.A.Sc. (Hons) Food Technology
Bhaskaracharya College of Applied Sciences, University of Delhi
74%

PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Food Technology Jamia Hamdard, New Delhi

Dec'12 – till date

- **Courses taught**: Food Processing & Preservation, Food Safety & Quality Management, Food Biotechnology, Food Microbiology, Technology of Cereal, Pulses and Oilseeds
- Key research areas: Nutraceuticals & Functional foods, Probiotics, Extraction of bioactives & Incorporation in food substrates, Biosensors for Food Safety
- M.Tech Food Technology: Curriculum Drafting and Revising; B. Tech Food Technology Curriculum Drafting and Course Module Development.

Part Time Academic Counselor, IGNOU, School of Agriculture for PG Diploma Food Safety & Quality Management, PG Diploma Food Science and Technology

Lead Auditor Food Safety Management Systems (ISO 22000)

Quality Assurance Executive Sodexo India Pvt. Ltd, Gurgaon

Aug'08 -Sept'09

- Implementation of food safety standards
- Monitoring and Inspection of GMPs, GHPs, CCPs
- Food safety Audits

Industrial Trainings & Projects

-	SGS India Private Ltd, Gurgaon	Jun '07-Jul '07
-	The Ambassador's Sky Chef, New Delhi	May '06-Jun '06
-	Nestle' India Ltd., Moga	May '05-Jun '05

RESEARCH EXPERIENCE

Doctoral Research Topic (Research Advisor: Prof H N Mishra, IIT Kharagpur)

Broad Area: Development of Fermented Functional Beverages

Thesis Title: Process Technology for the Preparation of Probiotic Vegetable Beverage

Research Overview: A probiotic vegetable beverage was developed from bitter gourd, carrot and bottle gourd juice by fermentation with *Lactobacillus plantarum*. The suitability of vegetable juice for the growth of probiotics; optimization of fermentation process parameters: pH, temperature, time, growth and acidification kinetics of *Lactobacillus plantarum* in vegetable juice during fermentation was determined. The nutritional, physicochemical, rheological, biological and sensory properties of the developed probiotic vegetable beverage were evaluated and it was found to be rich in anti-oxidants, polyphenols and showed anti-oxidant and anti-diabetic activity. A novel technology for the production of probiotic beverage from vegetable juices with good nutritional properties and health benefits, with acceptable sensory quality and storage stability was successfully developed during the research programme.

Working as Assistant Professor, Jamia Hamdard, New Delhi

Set up of food chemistry and microbiology laboratory

Key research areas: Nutraceuticals & Functional foods, Probiotics, Gluten free products, Extraction of bioactives & Incorporation in food substrates, Product development, Waste valorization, Upcycling, Nanobiosensors for Food Safety Applications.

B.A.Sc (Hons.) and M.Sc. Thesis

"Effects of processing variables on the quality of Instant noodles and process optimization using Response Surface Methodology" (Research Advisor - Prof. B.S. Khatkar, GJU S& T)

The six months project focused on optimization of processing variables: Dough mixing time, resting time, sheet thickness and frying time with responses – textural properties, oil uptake and cooking quality.

Product developed-'Hunger crunch', a nutritious, healthy, energy giving cereal bar made using oatflakes, corn flakes, wheat bran and jaggery as ingredients.

PUBLICATIONS

JOURNAL

- Hanan, E., Hasan, N., Zahiruddin, S., Ahmad, S., **Sharma, V**., & Ahmad, F. J. (2023). Metabolite profiling and Ameliorative effect of quince (*Cydonia oblonga*) leaves against doxorubicin induced cardiotoxicity in Wistar rats. Food Bioscience, 102691
- Singh, S., Aeri, V., & **Sharma**, V. (2023) Encapsulated natural pigments: Techniques and applications. *Journal of Food Process Engineering*, e14311.
- Tiwari, A., Kumar, S., Choudhir, G., Singh, G., Gangwar, U., **Sharma**, V., ... & Sharma, S. (2022). Bioactive metabolites of edible mushrooms efficacious against androgenic alopecia: Targeting SRD5A2 using computational approach. *Journal of Herbal Medicine*, 100611.
- Rastogi, S., Kumari, V., **Sharma, V.,** & Ahmad, F. J. (2022). RGB colorimetric method based detection of oxytocin in food samples using cysteamine functionalized gold nanoparticles. *Analytical Biochemistry*, 656, 114886
- Tiwari, A., Singh, G., Choudhir, G., Motiwale, M., Joshi, N., **Sharma, V.**, ... & Singour, P. K. (2022). Deciphering the Potential of Pre and Pro-Vitamin D of Mushrooms against Mpro and PLpro Proteases of COVID-19: An In Silico Approach. *Molecules*, 27(17), 5620
- Bashir, O., Sharma, V., Hussain, S. Z., Naseer, B., Amin, T., Ameer, K., ... & Mohamed Ahmed, I.

- A. (2022). Effect of roasting and frying treatments on aflatoxins and capsaicinoids content and nutritional profile of green chilies (*Capsicum annum* L.). Food Science & Nutrition
- Rastogi, S., Kumari, V., **Sharma, V**., & Ahmad, F. J. (2022). Colorimetric Detection of Oxytocin in Bottle Gourd Using Cysteamine Functionalized Gold Nanoparticle (Cys-AuNPs). *Food Analytical Methods*, *15*(11), 2972-2983.
- Manzoor, S., Rashid, R., Panda, B. P., Sharma, V., & Azhar, M. (2022). Green extraction of lutein from marigold flower petals, process optimization and its potential to improve the oxidative stability of sunflower oil. *Ultrasonics sonochemistry*, 85, 105994.
- Bhardwaj, A., Sharma, N., Alam, T., **Sharma, V.,** Sahu, J. K., Hamid, H., ... & Alam, M. S. (2022). Development and Characterization of Chitosan and Beeswax–Chitosan Coated Biodegradable Corn Husk and Sugarcane Bagasse-Based Cellulose Paper. *Waste and Biomass Valorization*, 1-12.
- Bhardwaj, A., Sharma, N., **Sharma, V**., Alam, T., Sahu, J. K., & Hamid, H. (2022). Assessing the consumer acceptance and storability of chitosan and beeswax coated cellulose packaging for whole wheat bread. *Food Control*, *133*, 108682.
- Tiwari, A., Singh, G., Singh, U., Sapra, L., Rana, V., **Sharma, V.**, ... & Sharma, S. (2022). Edible mushrooms: The potential game changer in alleviating vitamin D deficiency and improving human health. *International Journal of Food Science & Technology*, 57(3), 1367-1377.
- Purohit, S. R., Rana, S. S., Idrishi, R., **Sharma, V.,** & Ghosh, P. (2021). A review on nutritional, bioactive, toxicological properties and preservation of edible flowers. *Future Foods*, *4*, 100078
- Rastogi, S., Kumari, V., **Sharma, V.,** & Ahmad, F. J. (2021). Gold Nanoparticle-based Sensors in Food Safety Applications. *Food Analytical Methods*, 1-17
- Tiwari, A., Singh, G., **Sharma, V**., Srivastava, R. K., & Sharma, S. (2021). Harnessing the potential of UVB irradiation for improving the nutraceutical properties of edible xylotrophic mushroom dried powder. *LWT*, 111913.
- Jan, Y., Malik, M., **Sharma, V.**, Yaseen, M., Bora, J., & Haq, A. (2021). Utilization of whey for formulation of whey jamun juice ice pops with antidiabetic potential. *Food Frontiers*.
- Hanan, E., Rudra, S. G., **Sharma, V**., Sagar, V. R., & Sehgal, S. (2021). Pea pod powder to enhance the storage quality of buckwheat bread. *Vegetos*, 1-10.
- Naseer, B., **Sharma**, V., Hussain, S. Z., & Bora, J. (2021). Development of Functional Snack Food from Almond Press Cake and Pearl Millet Flour, *Letters in Applied NanoBioScience*, 11(1), 3191-3207
- Rizvi, Q. H., **Sharma**, V., Shams, R., Dar, A. H., Jan, B., & Manzoor, A. (2021). Extraction of oil from flaxseed using three phase partitioning. *Journal of Postharvest Technology*, 9(1), 35-45.
- Grover, S., Kumari, P., Kumar, A., Soni, A., Sehgal, S., & **Sharma, V.** Preparation and Quality Evaluation of Different Oil Blends, *Letters in Applied NanoBioScience* 10 (2), 2126-2137.
- Kumar, A., Rani, P., Kumar, R., Sharma, V., & Purohit, S. R. (2020). Data-driven modelling and prediction of COVID-19 infection in India and correlation analysis of the virus transmission with socio-economic factors. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 1 4(5), 1231-1240.
- Gaur, R. S., Entesar, H., Sagar, V. R., Rakesh, B., Santanu, B., & **Sharma**, V. (2020). Manufacturing of mayonnaise with pea pod powder as a functional ingredient. *Journal of Food Measurement & Characterization*, 14(5), 2402-2413.
- Bashir, S., Yaseen, M., **Sharma, V**., Purohit, S. R., Barak, S., & Mudgil, D. (2020). Rheological and textural properties of gluten free cookies based on pearl millet and flaxseed. *Biointerface Res. Appl. Chem*, 10, 6565-6576.
- Bhardwaj, A., Alam, T., **Sharma, V.,** Alam, M. S., Hamid, H., & Deshwal, G. K. (2020). Lignocellulosic Agricultural Biomass as a Biodegradable and Eco-friendly Alternative for Polymer-Based Food Packaging. *Journal of Packaging Technology and Research*, 1-12.
- Hanan, E., Rudra, S. G., Sagar, V. R., & **Sharma**, V. (2020). Utilization of pea pod powder for formulation of instant pea soup powder. *Journal of Food Processing and Preservation*, e14888.
- Rastogi, S., **Sharma, V.**, Gupta, M., Singh, P., Bocchetta, P., Kumar, Y. (2020) Methods of Synthesis and Specific Properties of Graphene NanoComposites for Biomedical and Related Energy Storage Applications, *Current nanoscience*, Accepted, In press
- Malik, M., Bora, J., & **Sharma, V.** (2019). Growth studies of potentially probiotic lactic acid bacteria (*Lactobacillus plantarum, Lactobacillus acidophilus, and Lactobacillus casei*) in carrot and beetroot juice substrates. *Journal of Food Processing and Preservation*, 43(11), e14214.
- Muzzafar, A., **Sharma, V.** (2018). Microencapsulation of probiotics for incorporation in cream biscuits. *Journal of Food Measurement & Characterization*, 09/2018, 12 (3), 1 -9.
- Gangwar, A.S., Bhardwaj A, Sharma, V. (2017). Fermentation of Tender Coconut Water by Probiotic

- Bacteria Bacillus coagulans. International Journal of Food Studies, 04/2018;7 (1), ISSN: 2182-1054.
- Rafiq, S., **Sharma, V.**, Nazir, A., Rashid, R., & Sofi, S.A. (2016). Development of Probiotic Carrot Juice. *J Nutr Food Sci*, 6(534), 2, ISSN: 2155-9600.
- Sharma V, Mishra H. N., Unstructured kinetic modeling of growth and lactic acid production by Lactobacillus plantarum NCDC 414 during fermentation of vegetable juices, *LWT-Food Science & Technology*, 05/2014; 59(2):1123-1128.
- **Sharma V**, Mishra H.N., Fermentation of vegetable juice mixture by probiotic lactic acid bacteria, *Nutrafoods*. 01/2013; 12(1).
- **Sharma V**, Mishra H. N., Non Dairy Probiotic Beverages: A Review, *International Journal of Food Research* 06/2012; 20:7-15.
- Singh A.K., **Sharma V., &** Yadav, K.C., "Effect of Moisture Content on Physical Properties of Flaxseed" in *Research & Reviews: Journal of Food Science & Technology*, ISSN: 2278 2249, Vol. 3, Issue 2, pp. 19-27, August 2014

ARTICLES

- Pritika Sharma, **Vasudha Sharma**. Non dairy Probiotic Beverages in India: Current Scenario and Future Scope, PAI Newsletter, Vol 14, Oct March 2018.
- Vasudha Sharma. Probiotic Industry in India: Current Scenario and Future Scope, AFST(I) Newsletter of Delhi Chapter, Vol 3, March–July 2016.
- H. N. Mishra, **Vasudha Sharma**, Abhinav Mishra. Biofortification of Rice: A novel approach for Nutritional Security, Food Marketing and Technology (April 2012)
- Vasudha Sharma: Article on Probiotic bitter gourd juice published in Dainik Jagran dated 30th March 2010.

BOOKS

- Smart and Sustainable Food Technologies, Editors: Shalini Sehgal, Barinderjit Singh, **Vasudha Sharma**, Springer Nature, Singapore, **ISBN:978-9811917455**
- Effects of processing variables on the quality of instant noodles. **Vasudha Sharma**, LAP Lambert Academic Publishing, Germany, 2016, **ISBN:978-3-659-94746-9**

BOOK CHAPTERS

- Bhardwaj, A., Purohit, S., & **Sharma, V.** (2023). Asian fermented root and tuber-based products. In *Indigenous Fermented Foods for the Tropics* (pp. 285-296). Academic Press
- Garg, H., **Sharma**, V., & Purohit, S. R. Application of IoT in the Food Processing Industry. In *Applications of Artificial Intelligence, Big Data and Internet of Things in Sustainable Development* (pp. 183-202). CRC Press
- Idrishi, R., Aggarwal, D., & **Sharma**, V. (2022). Upcycling Technologies in the Food Industry. In *Smart and Sustainable Food Technologies* (pp. 367-392). Springer, Singapore
- Bhardwaj, A., Sharma, N., **Sharma, V.,** Alam, T., & Shafia, S. (2022). Smart Food Packaging Systems. In *Smart and Sustainable Food Technologies* (pp. 235-260). Springer, Singapore
- Kumar, R., **Sharma**, V., & Oruna-Concha, M. J. (2022). Waste Minimization and Management in Food Industry. In *Smart and Sustainable Food Technologies* (pp. 309-340). Springer, Singapore
- Tiwari, A., Singh, G., Chowdhary, K., Choudhir, G., **Sharma, V.,** Sharma, S., & Srivastava, R. K. (2022). Co-Product Recovery in Food Processing. In *Smart and Sustainable Food Technologies* (pp. 341-366). Springer, Singapore
- Garg, H., Purohit, S. R., **Sharma, V.,** & Sahu, J. K. (2022). Antioxidant-Rich Edible Packaging. In *Edible Food Packaging* (pp. 527-545). Springer, Singapore
- Sharma, P. & **Sharma**, V. Probiotics as anti-inflammatory agents in inflammatory bowel disease and irritable Bowel syndrome. In Probiotic Research in Therapeutics Volume 2: Modulation of Gut Flora: Management of Inflammation and Infection Related Gut Etiology. Springer Nature [In Press]
- Sehgal, S., & **Sharma**, V. Palm/Palm Kernel (*Elaeis guineensis*). In Oilseeds: Health Attributes and Food Applications (pp. 145-161). Springer, Singapore.
- Kumari, V., Rastogi, S., & Sharma, V. (2019). Emerging Trends in Nanobiosensor. In Nanobiotechnology in Bioformulations (pp. 419-447). Springer, Cham.

- Sharma V, Bhardwaj A., (2019). Chapter Title: Scanning Electron Microscopy (SEM) in food quality evaluation. In: Evaluation Technologies for Food Quality, Editor: Zhong, Elsevier Inc., ISBN No. 978-0-12-814217-2
- Sharma V, Bhardwaj A., (2018). Chapter Title: Natural Anti-microbial Agents in Food Packaging. In: Food Frontiers, New Delhi Publisher, ISBN No. 978-93-86453-84-6
- **Sharma V**, Bhattacharya M., Mishra HN (2018). Chapter Title: Ready to drink Fermented Vegetable Juices and beverages. Editor: Dr. H.N. Mishra. In: "Novel Food Products and Process Technologies: Value Addition & Shelf life Extension", New India Publishing Agency, 97 8-93-86546-15 -9.
- Sehgal S, **Sharma V**. (2017). Chapter Title: Natural Food Antimicrobials of Microbial Origin. In: "Microbial Control and Food Preservation", In: Juneja V., Dwivedi H., Sofos J. (eds) Microbial Control and Food Preservation. Food Microbiology and Food Safety. Springer, New York, NY ISBN: 97 8-1-4939-7 554-9
- **Sharma V**, Mishra HN. (2016). Chapter Title: Optimization of Fermentation of Vegetable Juice by *Lactobacillus plantarum*. In: "Food Process Engineering and Technology", Excel India Publishers ISBN: 978-93-86256-30-0, pp: 507 -519.
- **Sharma V** (2016). Chapter Title: Functional Foods from Fruits and Vegetables. In: "Functional Foods: Sources and Health Benefits", Scientific Publishers ISBN: 97 8-93-86237 -00-2, pp: 311 -331.
- Naseer B., Bora J., **Sharma V**. (2016). Chapter Title: Utilization of Almond Press Cake in Food Fortification. In: "Food Process Engineering and Technology", Excel India Publishers ISBN: 978-93-86256-30-0, pp: 331- 350.
- **Sharma V**, Mishra HN (2012). Chapter Title: Production of probiotic bitter gourd juice by lactic acid bacteria. Editor: Dr. H. Prathap Kumar Shetty. In: "Traditional Foods: Recent trends and future perspectives", Puducherry Co- operative Book Society (publishers) ISBN: 81-87 299-56-8, pp: 264-271.

PATENTS

01 Indian Patent Granted:

• A colorimetric sensor for detecting oxytocin and method thereof; Ref No./Application No 202114035397

03 Indian Patents Filed:

- Eco-friendly paper product made from corn husk (CH), pithed sugarcane bagasse (SB) and their furnish; RefNo./Application No.: 202111022364
- A Probiotic Bael based Nutraceutical and a Process of Preparation Thereof; Application No.: 202211012630

01 International Patent Granted:

 A colorimetric sensor for detecting oxytocin and method thereof; RefNo./Application No 2021104945 [Australian Patent]

Sponsored Research Projects

- Indian Council of Medical Research (ICMR) funded Project title: Technological interventions to enhance the bioavailability of omega fatty acids using nanoencapsulated systems; May 2022 continuing; [File No. 3/1/2/207/2021-Nut.]
- Indian Council of Medical Research (ICMR) funded Project title: Probiotic bael (*Aegle marmelos*) based nutraceuticals for remission of ulcerative colitis; March 2019- Feb 2022; [File No. 5/3/8/58/ITR-F/2019-ITR]
- NPIU TEQIP funded Project Title under Collaborative Research Scheme (Co-PI): Development of Synbiotic Beverage from Underutilized Indian fruits to Alleviate Oxidative Stress and Inflammation in Gut

Post graduate theses supervised - 58

AWARDS & HONORS

- Centre for Quality and Food Safety (CQFS) Award 2022 of Mentor during World Food Safety Day 2022 celebrations held on 7th June 2022 at I.P. University, New Delhi
- Centre for Quality and Food Safety (CQFS) Award 2021 on World Food Safety Day 2021
- Member of Expert Committee for drafting academic curriculum for Food Safety education in India under Surakshit Khadya Abhiyan (SKA), a Confederation of Indian Industries (CII) initiative.

- Invited talks in National and International Conferences 18
- Vice President Association of Food Scientists' & Technologists (India) Delhi Chapter (2021-2022)
- Joint Secretary Association of Food Scientists' & Technologists (India) Delhi Chapter (2019-2020)
- Executive Member Women's Indian Chamber of Commerce & Industry (WICCI) Delhi Food Processing Council [2020-22]
- Certificate of Outstanding contributions in reviewing: LWT Food Science and Technology (awarded Nov 2015)
- Certificate of Outstanding contributions in reviewing: Journal of Cereal Science (awarded June 2016)
- Research Fellowship from DBT, GOI at IIT Kharagpur from Sept 2009 Dec 2012
- Travel Grant received from DBT CTEP for Probiotics 2012, November 19-21 in San Antonio, Texas
- Qualified ICAR National Eligibility Test (NET) since Feb 2010
- Reviewer for LWT Food Science and Technology since 2013; International Journal of Food Properties since 2012, International Journal of Biological Macromolecules since 2012, Carbohydrate Polymers since 2012, Food Research international.

	PhD Theses Suj	pervision		
1	Aastha Bhardwaj (Co- supervisor)	Development of biodegradable packaging materialmade from agricultural wastes and assess its suitability for food products	PhD Food & Fermentation Technology (Jamia Hamdard)	Awarded on 22 nd Dec 2022
2	Pritika Sharma	Process Technology for a probiotic bael (Aegle marmelos) drink for remission of ulcerative colitis	PhD Food & Fermentation Technology (Jamia Hamdard)	In progress
3	Sarushi Rastogi	Development of gold nanoparticle based biosensor for detection of oxytocin	PhD Food & Fermentation Technology (Jamia Hamdard)	Awarded on 20 th March 2023
4	Entesar Hanan(Co- supervisor)	Cardioprotective effects of different formulations of quince (<i>Cydonia oblonga miller</i>) kashmiri bamchount: A potential source of bioactive compounds	PhD Food & Fermentation Technology (Jamia Hamdard)	In progress
5	Shivani Singh	Development of heat resistant encapsulant for selected pigments using thermal protectants	PhD Food & Fermentation Technology (Jamia Hamdard)	In progress
6	Tarun Kumar	Development of Millet Based Probiotic Beverage	PhD Food & Fermentation Technology (Jamia Hamdard)	In progress
7	Abhay Tiwari (Co- supervisor)	Studies on Mushroom based nutraceutical and. Probiotic products	PhD (Centre for Rural Development & Technology, IIT Delhi)	Submitted – Under evaluation

EXTENSION AND OUTREACH PROGRAMMES

- Contributed towards question bank for Surakshit Khadya Abhiyaan (SKA) Asia Quiz Competition onFood Safety, 2018
- Coordinator for SNF Fellows Program: Involved in creating awareness on food safety in schools, under FSSAI Safe & Nutritious Food fellowship program at Jamia Hamdard [Outreach: 1200+]
- Contributed to National EAT Right Mela organized by FSSAI on 14th December 2018 and Swastha Bharat Yatra.
- Contributed towards creation of South-Asia cadre of food safety professionals by serving as expert and providing inputs in the field of Food Safety and Food Hygiene (Nestle Food Safety Institute).
- Contributed towards student's internship & placement.

ADMINISTRATIVE EXPERIENCE

- Member Board of Studies for Department of Food Technology since March 2013-2020.
- PhD Coordinator for School of Interdisciplinary Science & Technology (SIST)
- Committee Member from SIST for: NIRF, AISHE, AQAR, QS Ranking since 2018
- Committee member for NAAC criteria 7 Best practices for Jamia Hamdard

MAJOR CONFERENCES/PRESENT ATIONS/WORKSHOPS

- Oral presentation on "Graphene and its Derivatives: Potential for Food Applications" at International Conference on Advanced Materials (ICAM-2019) scheduled during 6-7th March 2019 at Jamia Milia Islamia, New Delhi.
- Oral presentation on "Application of probiotics in non-dairy foods for advancing human health" at International Conference titled "Technological Innovations for Integration of Food and Health (TiiFH 2019): A focus on North- Eastern India" during 14-16th February, 2019 at Tezpur University, Tezpur, Assam.
- Poster presentation on "Vegetable juice based fermented health beverage" and "Effect of anti-microbials from turmeric and ginger on growth and survival of *E.coli* in apple juice" at 19th World Congress on Food Science and Technology (IUFoST 2018) October 23 27th 2018 at Vashi, Mumbai, India
- Poster presentation on "Polyphenol Rich Probiotic Beverage from Vegetable Source: An Approach to Understand the Relationship between Polyphenol and Growth of *Lactobacillus plantarum*" at International Conference on Recent Advances in Food Processing Technology (iCRAFPT'18) August 17-19th 2018 at Indian Institute of Food Processing Technology, Thanjavur, Tamil Nadu.
- Oral presentation on "Fermentation of Tender Coconut Water by Probiotic Bacteria *Bacillus coagulans*" at National Conference on Emerging Sustainable Technologies in Food Processing (ESTFP 2018) March 15-16, 2018 at Sant Longowal Institute of Engineering &Technology (SLIET), Longowal, Sangrur, Punjab.
- Successfully completed UGC-Sponsored Orientation Programme from 21st Nov 2017 –19th Dec 2017 with 'A' grade at HRDC, Centre for Professional Development in Higher Education, University of Delhi, Delhi
- Poster presentation on "Microencapsulation of probiotics for incorporation in biscuit", Total Food UK, 31st Oct– 2nd Nov 2017, at Quadram Institute, Norwich Research Park, Norwich, UK.
- Attended workshop on "Probiotics in Clinical Practice", 20th & 21st April 2017, at NDRI Karnal, Haryana.
- Oral presentation on "Effect of stabilizers on Rheological Properties of Probiotic Vegetable Beverage" at National Seminar on Trends and Innovations in Food Processing Technology, TIFPT 2017, February 9-10th 2017 at Tezpur University, Assam.

- Oral presentation on "Optimization of Fermentation of Vegetable Juice by Lactobacillus plantarum" at International conference on Emerging Technologies in Agricultural and Food Engineering, ETAE 2016, December 27-30th 2016 at IIT Kharagpur.
- Attended short term course on "Predictive Microbiology for Food Safety", September 19-23rd, 2016, at GNDU Amritsar.
- Attended International conference on "Probiotics, Microbiome & Gut Function Transforming health Well Being", Feb 15-16, 2014, at Eros Hotel, New Delhi.
- Attended workshop on "Food Safety Management System for International Trade", April 6-8, 2013, at Shaheed Rajguru College of Applied Sciences for Women, University of Delhi.
- Attended conference on "Food Safety and Environmental Toxins", February 20–21, 2013, at India Habitat Centre, Lodhi road (New Delhi).
- Oral presentation on "Kinetics and modeling of Lactic acid production by *Lactobacillus plantarum* NCDC 414 in vegetable juice for production of probiotic vegetable beverage" at Probiotics 2012, Nov 18-21, 2012, Hilton San Antonio Airport Hotel, Texas.
- Vasudha Sharma, H.N. Mishra, Substrate Standardization and Process Optimization for Development of Probiotic Vegetable Beverage Using *Lactobacillus plantarum* by D-Optimal Mix ture Design, IFT 2012 Annual Meeting Scientific Program, June 25-28 in Las Vegas, NV (Published in Proceedings).
- Vasudha Sharma, H. N. Mishra, Fermentation of vegetable juice by beneficial lactic acid bacteria, FoQSAT2011, Feb 24-25, 2011, IIT Kharagpur.
- Vasudha Sharma, H. N. Mishra, Production of probiotic bitter gourd juice by lactic acid bacteria, International Conference on Traditional Foods, Dec 1 -3, 2010, Pondicherry University, Pondicherry.
- Attended International conference on "Food Security & Environmental Sustainability" Dec'09 at IIT Kharagpur.

MEMBERSHIP

- Life member Association of Food Scientists Technologists (India), AFST(I)Mysore, Membership no2/L029/16/ZON
- Life member Probiotic Association of India (PAI), Membership No 408
- Life member Nutrition Society of India, NIN, Hyderabad

REFERENCES

Prof. H.N. Mishra

Agricultural and Food Engineering Department Indian Institute of Technology, Kharagpur - 721302, India

Phone: 94344 14288 (Cell) Email: hnm@agfe.iitkgp.ernet.

in

Dr. Alka Sharma

Professor Department of Food Technology, G.J.U.S. &T., Hisar Haryana - 125001 Phone: 9812155510

Email: alkasharma@gjust.org

Dr. Vijay K. Juneja

Lead Scientist, Lead Scientist, USDA-Agricultural Research Service, Eastern Regional Research Center, Wyndmoor, PA 19038, US Email: vijay.juneja@usda.gov