

Name: DR. SURESH K DEVATKAL

Academic qualifications:

Sy no d	Academic qualification	University/Institute	Year	Specialization	Academic distinction/ marks
1	Bachelor of Veterinary Sciences	Veterinary College, Bidar,UAS,Dharwad(Karnataka)	1993-1998	Veterinary Science and Animal Husbandry	8.48/10.00
2	Master of Veterinary Sciences	Indian Veterinary Research Institute, Izatnagar (UP)	1998-2000	Livestock Products Technology and Veterinary Public Health	8.26/10.00
3	Ph.D	Indian Veterinary Research Institute, Izatnagar (UP)	2000-2003	Livestock Products Technology, Poultry Science and Animal Biochemistry	8.46/10.0

Overseas training and experience:

1. Postdoctoral Research in Food safety and Engineering at The Ohio State University, Columbus, Ohio, U.S.A.
2. Advanced research training on high pressure processing, pressure assisted thermal processing and thermal processing in the Department of Food Science and Technology, The Ohio State University, Columbus, Ohio, U.S.A.
3. Certificate of completion in "Introduction to HACCP Course" offered by The Ohio State Meat Science Extension and The Ohio Department of Agriculture, Ohio, U.S.A.
4. Certificate of completion in "Thermal Processing of Ready to eat Meat Products" offered by The Ohio State Meat Science Extension and Department of Animal Science and Food Science and Technology, The Ohio State University. Columbus Ohio, U.S.A.

Additional trainings:

1. Completed a certificate and advanced diploma course in computer application.
2. Training on meat production and environment management at Centre of Excellence in meat science and technology, Kerala Agricultural University, Kerala, India.
3. Training on application of multimedia technology in teaching and research at National Academy of Agricultural Research and Management, Hyderabad, India.
4. Training on Prioritization of agricultural research in India, at NAARM, Hyderabad.

5. Training on Leadership development for agricultural research in India, at NAARM, Hyderabad
6. Training on Application of solar energy in food sector
7. Training on Agribusiness incubation
8. Training on identifying, capturing, protecting , managing and commercializing innovations

Research expertise:

1. Meat Science and Microbiological Food safety
2. Microbiological Food safety experiments, microbial inactivation kinetic studies, testing and evaluation natural ingredients for antimicrobial efficacy
3. Nonthermal technologies in food processing (High Pressure processing, ozone processing, phytochemicals use in food preservation)
4. Combined methods of food preservation/processing (Pressure assisted thermal processing, thermal processing in combination with natural preservatives)
5. Entrepreneurship and business development in meat and food processing
6. Development of value added and further processed meat products

Projects handled and at presently handling:

Ongoing projects:

1. Development of technology for extraction, purification and characterization of conjugated linoleic acid from meat industry by-products
2. Effect of Meat Slaughter and Meat Export policy on livestock, milk production, draught power and Eco balance in India
3. Agribusiness Incubator at NRC-Meat
4. Evaluation of carcass traits and meat quality characteristics of Aseel x brown layer, brown layer x colored broilers developed by Indbro

Completed Projects:

1. Shelf-life extension of meat and meat products using natural extracts and vacuum packaging as hurdles.
2. A value chain on novelty meat/pork products under organized farming system.
3. Improving the microbial safety and nutritional quality of fresh meat using a low cost refrigerated cabinet for retail marketing of meat in street meat shops.

4. Establishing food testing laboratory in Central Institute of Post-harvest Engineering and Technology. (Ministry of Food Processing).
5. Enhancement of shelf-life and microbial safety of meat and meat products applying high pressure, vacuum packaging and natural extract
6. National Meat Research Database

Important publications (2013-2016)

1. Muzaddadi, A., Devatkal, S., Oberoi, H., 2016. Seafood Enzymes and Their Application in Food Processing. In: Dhillon, G.Singh, Kaur, S. (Eds.), *Agro-Industrial Wastes as Feedstock for Enzyme Production: Apply and Exploit the Emerging and Valuable Use Options of Waste Biomass*. Academic Press, 201–232.(Book Chapter)
2. Suresh K. Devatkal, Pranita Jaiswal, Amanpreet Kaur & Vijay Juneja (2016): Inactivation of *Bacillus Cereus* and *Salmonella Enterica* Serovar Typhimurium by Aqueous Ozone: Modelling and UV-Vis Spectroscopic Analysis, *Ozone: Science & Engineering*, 38(2):124-132
3. Suresh Devatkal Jeremy Somerville, Rarinthorn Thammakulkrajang V.M.Balasubramaniam (2015). Microbiological efficacy of pressure assisted thermal processing and natural extracts against *Bacillus amyloliquefaciens* spores suspended in deionized water and beef broth. *Food and bioproducts processing*, 95(2015)183–191.
4. Suresh Devatkal and Sanjoy Das (2015). Germination and Inactivation of *Bacillus amyloliquefaciens* Spores Using Moderate High Pressure and Pomegranate Peel Extract. *Journal of Agricultural Engineering Vol. 52 (2): April-June, 2015, 37-41*.
5. Kulkarni, V.V. and Suresh Devatkal (2015). Utilization of by-products and waste materials from meat and poultry industry: A Review. *Journal of Meat Science*, 11(1), 1-10.
6. Suresh Devatkal, M. Manjunatha, K. Narsaiah, and R. T. Patil (2014). Evaluation of quality characteristics of chicken meat emulsion/nuggets prepared by using different equipment. *Journal of Food Science and Technology*, 51:511-518.
7. Suresh Devatkal Jaiswal, P. Jha, S.N.Bharadwaj, R & Viswas, K.N. (2013). Antibacterial activity of aqueous extracts of pomegranate peel against *Pseudomonas stutzeri* isolated from poultry meat. *Journal of Food Science and Technology*, 50: 555-560.
8. Suresh Devatkal, Rahul Anurag, Bindu Jaganath and Srinivasa Rao (2014). Microstructure, microbial profile and quality characteristics of high-pressure-

treated chicken nuggets. *Food Science and Technology International*. DOI: 10.1177/1082013214546957

9. Suresh K. Devatkal, Ritu Kamboj & Devosmita Paul (2014). Comparative antioxidant effect of BHT and water extracts of banana and sapodilla peels in raw poultry meat. *Journal of Food Science and Technology*, 51(2):387-391.
10. Suresh Devatkal, Pramod Thorat, M. Manjunatha (2014). Effect of vacuum packaging and pomegranate peel extraction quality aspects of ground goat meat and nuggets. *J Food Sci Technol (October 2014) 51(10):2685*