DEEPTI SALVI

Department of Food, Bioprocessing, and Nutritional Sciences, North Carolina State University, Raleigh, NC 27695 Tel. (919) 513-0176, E-mail: dasalvi@ncsu.edu

RESEARCH INTERESTS

- Food processing techniques such as cold atmospheric pressure plasma, high pressure processing, microwave processing, extrusion, ultraviolet processing to ensure food safety and quality
- Investigate the role of physical properties of food to control excessive caloric intake and enhance nutrient absorption in human gastrointestinal tract
- Numerical modeling of transport phenomena in biological and food engineering

TEACHING INTERESTS

Undergraduate and graduate courses: Food Process Engineering, Thermal and Non-thermal Processing of Food, Principles of Food Science, Food Safety, Quality Assurance, HACCP and SCP, Food Chemistry, and Bio-process Technology.

EDUCATION

2005-2008	Doctor of Philosophy, Biological and Agricultural Engineering, Louisiana State University,
	Baton Rouge, LA
2003-2005	Master of Engineering, Food Engineering and Bioprocess Technology, Asian Institute of
	Technology, Pathumthani, Thailand
1999-2003	Bachelor of Technology, Agricultural Engineering, Dr. B. S. Konkan Agriculture University,
	Dapoli, India

PROFESSIONAL & RESEARCH EXPERIENCE

2018-present	Assistant Professor, Department of Food, Bioprocessing and Nutrition Sciences, North
	Carolina State University, Raleigh, NC
2016-2018	Assistant Research Professor (Non-tenure track faculty), Food Science Department,
	Rutgers University, New Brunswick, NJ
2013-2016	Research Associate (Non-tenure track faculty), Food Science Department, Rutgers
	University, New Brunswick, NJ
2008-2010	Post-doctoral Researcher, Audubon Sugar Institute, Louisiana State University AgCenter,
	St. Gabriel, LA
2005-2008	Graduate Research Assistant, Department of Biological and Agricultural Engineering,
	Louisiana State University, Baton Rouge, LA
2003-2005	Graduate Research Assistant, Food Engineering and Bioprocess Technology, Asian
	Institute of Technology, Pathumthani, Thailand

TEACHING EXPERIENCE

Rutgers University

Instructor (Short Course for Industry Professionals) *Course:* **Introduction to Food Engineering** (Summer 2015; Summer 2017)

Instructor (Undergraduate level laboratory class) Course: Principles of Food Science Laboratory (Fall 2014)

Responsibilities: Taught laboratory experiments for 2 sessions (51 Students), prepared laboratory exercises, managed teaching assistants.

Guest Lecturer (Graduate level Class) Course: Food Engineering Fundamentals

(Spring 2014, Spring 2015, Spring 2016, Spring 2017)

Responsibilities: Conducted classes, prepared and graded exams.

Guest Speaker (Undergraduate level Class) Course: Byrne Seminar (Processed Food)

(Spring 2015, Spring 2016)

Responsibilities: Taught classes and demonstrated laboratory experiments

Guest Speaker (Undergraduate level Class)

Course: Science of Food

(Fall 2015, Fall 2016, Fall 2017)

Responsibilities: Taught a class on Introduction to Food Engineering (appx. 200 Students)

Guest Speaker (Graduate level class) Course: Thermal and Non-Thermal Processing (Fall 2013, Fall 2014, Fall 2015, Fall 2017)

Responsibilities: Taught classes and demonstrated laboratory experiments, prepared and graded assignments and exams.

Guest Speaker (Undergraduate level Class) Course: Foods: from Field to Table

(Spring 2016)

Responsibilities: Taught a class on Grain Processing

Louisiana State University

Instructor (High-school Project)

(Fall 2008)

Project Title: Effect of enzyme Accellerase1000 on the production of free sugars and ethanol in ammonium treated bagasse using lignocellulosic biomass hydrolysis

Awards won: Best project at Regional Science Fair Louisiana

U.S. Navy Award winner (Invited for the International Science Fair 2009, Reno, NV)

Teaching Assistant (Class)

Course: Process Design in Biological Engineering

(Spring 2005)

Responsibilities: Conducted problem solving sessions, set and graded assignments, developed the answer key manual for the book 'Bioseparations: Downstream Processing for Biotechnology - Belter PA, Cussler EL, Hu W'

Teaching Assistant (Laboratory)

Course: Process Design in Biological Engineering

(Spring 2006)

Responsibilities: Demonstrated and taught laboratory experiments, set and graded assignments and lab reports

Instructor (Training) (Fall 2008)

Course: COMSOL Multiphysics training

Responsibilities: Designed course outline and content, prepared handouts and power point presentations, put together sample and assignment models

INVITED MAGAZINE ARTICLES

- 1. **Salvi, D.** (2017). Understand Produce Contamination. CEP Magazine- An AICHE Publication, May 2017 Issue, pp. 33-39
- 2. Aita, G.A., **Salvi, D.A.** (2009) Lignocellulose as a source for fuels and chemicals. Louisiana Agriculture Magazine, Fall 2009 Issue

BOOK CHAPTERS

1. **Salvi, D.**, Arserim, E.H., Karwe, M.V. (2017) Innovative technologies for processing mangoes and mango products. In: Handbook of Mango Fruit Production, Postharvest Science, Processing Technology and Nutrition (eds. Zafar, T & Sidhu, J.). Wiley-Blackwell

PEER REVIEWED RESEARCH PUBLICATIONS

- 1. Gosavi, N.S., **Salvi, D.,** and Karwe, M.V. (2019) High Pressure Assisted Infusion of Calcium into Baby Carrots Part II: Influence of Process Variables on β-Carotene Extraction and Color of the Baby Carrots *Food and Bioprocess Technology*, FABT-D-18-00856R1, Accepted for publication
- 2. Gosavi, N.S., **Salvi, D.,** and Karwe, M.V. (2018) High Pressure-Assisted Infusion of Calcium into Baby Carrots Part I: Influence of Process Variables on Calcium Infusion and Hardness of the Baby Carrots. *Food and Bioprocess Technology*, pp.1-12. https://doi.org/10.1007/s11947-018-2203-5
- 3. Joshi I., **Salvi D.**, Schaffner D.W., Karwe M.V. (2018). Characterization of Microbial Inactivation Using Plasma-Activated Water and Plasma-Activated Acidified Buffer. *Journal of Food Protection*, In press. doi:10.4315/0362-028X.JFP-17-487
- 4. K. Huang, Y. Tian, **D. Salvi**, M.V. Karwe, and N. Nitin (2018). Influence of exposure time, shear stress, and surfactants on detachment of *Escherichia coli* O157:H7 from fresh lettuce leaf surface during washing process. *Food and Bioprocess Technology*, 11 (3), 621–633
- 5. **Salvi D.,** Khurana M., Karwe M.V. (2017). Prediction of temperature distribution in a horizontal high pressure food processing vessel and its impact on process uniformity. *Journal of Food Process Engineering*, 40 (5), e12547. doi: https://doi.org/10.1111/jfpe.12547
- Bhide S., Schaffner D.W., Salvi D., Karwe M.V. (2017). Effect of surface roughness in model and fresh fruit systems on microbial inactivation efficacy of cold atmospheric pressure plasma. *Journal of Food Protection*, 80(8):1337-1346. doi: http://dx.doi.org/10.4315/0362-028X.JFP-17-064
- 7. **Salvi, D.**, Gosavi, N.S., Karwe, M.V. (2016). High Pressure Cold Pasteurization. Reference Module in Food Sciences. Elsevier, pp. 1–6. doi: http://dx.doi.org/10.1016/B978-0-08-100596-5.21075-5

- 8. Karwe, M.V., **Salvi, D.**, Gosavi, N.S. (2016). High Pressure–Assisted Infusion in Foods. Reference Module in Food Sciences. Elsevier, pp. 1–6. doi: http://dx.doi.org/10.1016/B978-0-08-100596-5.21042-1
- 9. Mahadevan, S., Nitin, N., **Salvi, D.** and Karwe, M.V. (2016). High-Pressure Enhanced Infusion: Influence of Process Parameters. *Journal of Food Process Engineering*, Volume 39, Issue 1, February 2016, pp. 53–60. doi: 10.1111/jfpe.12190
- 10. Mahadevan, S., **Salvi, D.** and Karwe, M. V. (2015). High Pressure-Enhanced Infusion in Fresh and Frozen-Thawed Cranberries: A Comparative Study. *Journal of Food Process Engineering*, 39(1), 53–60 doi: 10.1111/jfpe.12198
- 11. Karthikeyan J. S., Desai K. M., **Salvi D.**, Bruins R., and Karwe M. V. (2015). Effect of temperature abuse on frozen army rations. Part 1: Developing a heat transfer numerical model based on thermo-physical properties of food, *Journal Food Research International*, 76(3), 595–604. doi: 10.1016/j.foodres.2015.07.007
- 12. Karthikeyan J. S., Desai K. M., **Salvi D.**, Bruins R., Schaffner D., and Karwe M. V. (2015). Effect of temperature abuse on frozen army rations. Part 2: Predicting microbial spoilage, *Journal Food Research International*, 76(3), 587–594. doi: 10.1016/j.foodres.2015.07.012
- 13. DeQueiroz, G.A., **Salvi, D.A.**, Walker, M.S. (2011). Enzyme hydrolysis and ethanol fermentation of dilute ammonia pretreated energy cane. *Bioresource Technology*, 102, 4444–4448
- 14. **Salvi, D.A.,** Boldor D., Aita G. M., Sabliov C. M. (2011). COMSOL Multiphysics model for continuous flow microwave heating of liquids. *Journal of Food Engineering*, 104, 422–429
- 15. **Salvi, D.A.,** Boldor D., Ortego J., Aita G. M., Sabliov C. M. (2010). Numerical Modeling of Continuous Flow MicrowaveHeating: A Critical Comparison of COMSOL and ANSYS. *Journal of Microwave Power and Electromagnetic Energy*, 44 (4), 187-197
- 16. **Salvi, D.A.,** Aita, G.A., Robert, D., Bazan, V. (2010). Dilute ammonia pretreatment of sorghum and its effectiveness on enzyme hydrolysis and ethanol fermentation, *Applied Biochemistry and Biotechnology*, 161(1-8), 67-74
- 17. **Salvi, D.A.,** DeQueiroz, G.A., Robert, D., Bazan, V. (2009). Ethanol production from sweet sorghum by a dilute ammonia solution. *Journal of Industrial Microbiology and Biotechnology,* 37 (1), 27-34, DOI:10.1007/s10295-009-0645-5
- 18. **Salvi, D.A.**, Boldor, D., Sabliov, C.M., Ortego, J., Arauz, C. (2009). Experimental temperature measurement of liquids during continuous flow microwave heating to study effect of different dielectric and physical properties on temperature distribution. *Journal of Food Engineering*, 93(2), 149–157

- 19. Boldor, D., Balasubramanian, S., Purohit, S., Guiterrez-Wing, M.T., Rusch, K. A., **Salvi, D.A.**, Sabliov, C.M. (2008). A continuous microwave treatment system for prevention of invasive species during deballasting operation. *Journal of Microwave Power and Electromagnetic Energy*, 42 (3), 27-38
- 20. **Salvi, D.A.**, Boldor, D., Sabliov, C.M., Rusch, K.A. (2008). Numerical and experimental analysis of continuous microwave heating of ballast water as preventive treatment for introduction of invasive species. *Journal of Marine Environmental Engineering*, 9 (1), 45-64
- 21. Sabliov, C.M., **Salvi, D.A.**, Boldor, D. (2007). High frequency electromagnetism, heat transfer, and fluid flow coupling in ANSYS Multiphysics. *Journal of Microwave Power & Electromagnetic Energy*, An invited paper in special issue 'Contemporary Modeling on Microwave Power Engineering', 41(4), 4-16
- 22. Dandekar, S.R., **Salvi, D.A.**, Jain, S.K., Kad, V.P., Powar, A.G. (2005). Effect of direct steam roasting on whole kernel recovery of cashew-nut. *Journal of Beverage and Food World*, 32(10), 39-45
- 23. Jain, S.K., Kad, V.P., Dandekar, S.R., **Salvi, D.A.**, Dhekale, J.S., Powar, A.G. (2004). Effect of direct steam roasting on organoleptic properties of cashew kernels. *The Cashew Journal*, 18(1), 20-26

CONFERENCE PAPERS & PRESENTATIONS

- Hemker A.K., Nguyen L.T, Karwe M.V, and Salvi D. (2018) Pressure assisted enzymatic hydrolysis of fish waste protein and functionalities of the hydrolysates. Abstract #679 IUFoST- World Congress of Food Science and Technology 2018, Mumbai, India
- 2. Gosavi N.S., Karwe M.V, and Salvi D. (2018) High pressure assisted infusion of calcium in fruits and vegetables: influence of processing parameters and food microstructure. IUFoST- World Congress of Food Science and Technology 2018, Mumbai, India
- Navare S.S., Salvi D., Karwe M.V. (2018). Effect of High Pressure Processing on the Physiochemical and Functional Properties of Yellow Lentil Protein. Conference on Food Engineering (COFE 18), Minneapolis, MN
- Arserim E.H., Salvi D., Karwe M.V. (2018). Numerical Simulation and Experimental Investigation of Microbial Inactivation Efficacy of Cold Atmospheric Pressure Plasma. Institute of Food Technologist Annual Meeting and Food Expo 2017, Chicago, II
- 5. Tian T., **Salvi D**., Kang, H., Nitin, N., and Karwe M.V. (2017). Understanding effect of shear stress on microbial attachment and detachment A numerical Study. Institute of Food Technologist Annual Meeting and Food Expo 2017, Las Vegas, NM (Won second prize in Food Engineering Division)
- 6. Joshi I.G., **Salvi D**., Schaffner D.W., and Karwe M.V. (2017). Microbial inactivation using plasma activated water and plasma activated buffer in model and fruit systems. Institute of Food Technologist Annual Meeting and Food Expo 2017, Las Vegas, NM

- 7. Shruthi L. N., **Salvi D.**, Schaffner D.W., and Karwe M.V. (2017). Efficacy of Cold Plasma Generated Novel Sanitizers in Egg Washing, International Association for Food Protection Annual Meeting 2017, July 9-12 in Tampa, Florida
- 8. Joshi I.G., Schaffner D.W., **Salvi D.**, Karwe M.V. (2016). Effect of Surface Roughness in Fruit Systems on Microbial Inactivation Plasma Activated Water (PAW). Conference on Food Engineering (COFE 16), Columbus, Ohio
- 9. Karthikeyan J.S., **Salvi D.**, Karwe M.V. (2016). Effect of Viscosity of Food on Glycemic Index: a Human In Vitro Digestive Study. Conference on Food Engineering (COFE 16), Columbus, Ohio
- 10. Gosavi N.S., **Salvi D.**, Karwe M.V. (2016). High Pressure Assisted Infusion of Calcium in Baby Carrots pretreated with pectin methylesterase. Conference on Food Engineering (COFE 16), Columbus, Ohio
- 11. Ji L., Di R., **Salvi D.**, Karwe M.V. (2016). Effects of Different Fruit Drying and Drink Processing Methods on Vitamin C, Total Phenolics, Cellular Antioxidant Activity, and Mogroside V of Luo Han Guo (Siraitia Grosvenorii) Drink. Conference on Food Engineering (COFE 16), Columbus, Ohio
- 12. **Salvi D.**, and Karwe M.V. (2016) Understanding microbial attachment and detachment to produce surface during washing. Institute of Food Technologist Annual Meeting and Food Expo, Session no. 013, Chicago, IL
- 13. Manivannan M., Schaffner D.W., **Salvi D.,** Karwe M.V. (2016). Sequential Treatment of Mild Heat Followed by Ultraviolet Radiation to Inactivate *Alicyclobacillus Acidoterrestris* Spores in Apple Juice. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. P03-075, Chicago, IL
- 14. Chandran C., **Salvi D.**, Karwe M.V. (2016). Developing Quinoa-Cassava Extrudates Fortified with Cranberry Concentrate and Studying the Effect of Extrusion on Their Physicochemical Properties. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. P06-078, Chicago, IL
- 15. Ji L., Di R., **Salvi D.**, Karwe M.V. (2016). Effects of Different Fruit Drying and Drink Processing Methods on Vitamin C, Total Phenolics, Cellular Antioxidant Activity, and Mogroside V of Luo Han Guo (Siraitia Grosvenorii) Drink. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. P02-078, Chicago, IL
- 16. Gosavi N.S., **Salvi D.**, Karwe M.V. (2016). High Pressure Assisted Infusion of Calcium in PME Treated Baby Carrots. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. P01-087, Chicago, IL (Won third prize in non-thermal division)
- 17. Karthikeyan J.S., **Salvi D.**, Karwe M.V. (2016). Effect of Viscosity of Food on Glycemic Index: a Human In Vitro Digestive Study. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. P01-100, Chicago, IL (Won first prize in nutrition division)
- 18. Joshi I.G., Bhide S., Schaffner D.W., **Salvi D.**, Karwe M.V. (2016) Effect of Surface Roughness on Microbial Inactivation Using Cold Atmospheric Pressure Plasma (CAPP) and Plasma Activated Water (PAW). 1st International Workshop on Plasma Agriculture, Drexel Plasma Institute, Camden, NJ

- 19. Karthikeyan J. S., Desai K. M., **Salvi D.**, Bruins R., Schaffner D., and Karwe M. V. (2015). Effect of temperature abuse on freeze-thaw characteristics and microbial quality of frozen army rations: a numerical study. International Conference on Predictive Modelling in Food (ICPMF 9), Rio de Janeiro, Brazil, reference number: 0109
- 20. Gosavi N.S., **Salvi, D.,** and Karwe M.V. (2015). High pressure-assisted infusion of calcium in PME pretreated baby carrots, 12th International Congress on Engineering and Food, Quebec City, Canada.
- 21. Khurana M., **Salvi D.,** and Karwe M.V. (2015). Prediction of temperature distribution in a horizontal high pressure food processing vessel and its impact on process uniformity. ICHMT International Symposium on Advances in Computational Heat Transfer- 2015, Rutgers University, Piscataway, USA
- 22. Maldonado J.A, Schaffner D.W., Cuitino A., **Salvi D.**, Karwe M.V. (2015). Real-Time Measurements of Microbial Inactivation during High Pressure Processing of Bacteria Suspensions. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. 94-123, Chicago, IL
- 23. Bhide S., Schaffner D.W., **Salvi D.**, Karwe M.V. (2015). Effect of Surface Roughness in Model and Fresh Fruit Systems on Microbial Inactivation Efficacy of Cold Atmospheric Pressure Plasma. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. 94-63, Chicago, IL
- 24. Oliveira C., Marczak L., Gurak P., **Salvi D.**, Karwe M.V. (2015). Application of High Pressure Process to Enhance Extraction of Pectin from Passion Fruit Peel. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. 32-010, Chicago, IL
- 25. Aita, G.A., **Salvi, D.A.** (2010). Enzyme hydrolysis and ethanol fermentation of ammonia treated energy cane. 32nd Symposium on Biotechnology for Fuels and Chemicals. Clearwater Beach, FL
- 26. Aita, G.A., **Salvi, D.A.** (2010). Technical Developments in Ethanol Production from Energy Crops. American Chemical Society (ACS) Carbohydrate Chemistry Division Spring 2010 National Meeting, San Francisco, CA
- 27. **Salvi, D.A.,** Aita, G.A. (2009). Comparison of enzyme hydrolysis and fermentation yield for two ammonia pretreated energy crops. American Society for Microbiology-South Central Branch Meeting, Thibodaux, LA
- 28. Ortego, J., Boldor, D., **Salvi, D. A.,** Rusch, K.A., Sabliov, C. (2009). An investigation of temperature distribution in fluids during continuous flow microwave heating within a resonant cavity system. International Microwave Power Institute 43rd Annual Symposium, Washington, DC
- 29. **Salvi, D.A.,** DeQueiroz, G.A., Robert, D., Bazan, V. (2009). Ethanol production from sweet sorghum by a dilute ammonia solution. 31st Symposium on Biotechnology for Fuels and Chemicals, San Francisco, CA

- 30. **Salvi, D.A.**, Ortego, J., Sabliov C.M., Boldor, D. (2009). Numerical modeling of continuous flow microwave heating by one-way coupling of electromagnetism, heat transfer, and fluid flow in COMSOL Multiphysics. Conference of Food Engineering, Columbus, OH
- 31. **Salvi, D.A.**, Boldor, D., Sabliov C.M., Ortego, J., Arauz, C. (2008). Experimental study of temperature profile in liquids heated in a continuous flow microwave system effect of flow rate, physical and dielectric properties on temperature distribution. Institute of Food Technologist Annual Meeting and Food Expo, Paper no. 207-05, New Orleans, LA
- 32. Boldor, D., Ortego, J., **Salvi, D.A.**, Rusch, K.A., Sabliov C.M. (2008). Temperature profiling of fluids in a continuous flow microwave system using fiber-optic technology. ASABE Annual International Meeting, Paper no. 084229, RI
- 33. **Salvi, D.A.**, Boldor, D., Sabliov, C.M., Rusch, K.A. (2007). Finite element analysis and experimental validation of continuous microwave heating using synthetic ballast water as a model, 11th International Conference on Microwave and High Frequency Heating, Oradea, Romania
- 34. **Salvi, D.A.**, Sabliov, C.M., Boldor, D. (2007). Numerical modeling and validation of heat transfer in flowing fluid in a focused microwave system. ASABE Annual International Meeting, Minneapolis, MN
- 35. **Salvi D. A.**, Dandekar, S.R., Jain, S.K. (2005). Effect of steaming treatment on quality attributes of steam roasted cashew kernels. The 2nd International Conference on Innovations in Food Processing Technology and Engineering, Bangkok, Thailand

RESEARCH GRANTS & FUNDING

- 1. PI for award "Evaluating Microbial Inactivation Efficacy of Plasma-Activated Water, a Novel Surface Disinfectant for Food" by Center for Advanced Processing and Packaging Studies —CAPPS, a NSF IUCRC Founded Center. Co-PIs: S. Kathariou1, and K. Stapelmann. October 2018 (Awarded \$ 14,965.50)
- 2. PI (May-June 2018), co-PI (June 2018 onwards) for award "An Integrated Approach for Improving Growth and Quality of Sweet Basil Using Cold Plasma Activated Water and Mist" Current PI: M. V. Karwe, Co-PIs: D. W. Schaffner, J. E. Simon, Q. Wu, S. Guran, D. Specca, A. Fridman, G. Fridman, V. Miller, A. Rabinovich. USDA NIFA AFRI 2017 (Awarded \$ 688,799)
- 3. Co PI for award "Recycling and value addition of fish skin waste to produce bioactive peptides" International Collaborative Research Grants by Centers for Global Advancement and International Affairs. April 2017 (Awarded: \$ 4,000)
- 4. Co PI for incentive award "Process induced modifications of whole bean flour to tailor bioaccessibility of carbohydrates and proteins" by The Northarvest Bean Growers Association, January 2017. (Awarded: \$20,000)
- 5. Co PI for award "Extrusion of gluten-free pasta from a combination of cassava flour, pea starch, rice flour, and corn flour" for American Key Food Products, NJ, 2016 (Awarded: \$16,060)

- 6. Assisted in writing proposal "Pressure induced transformations of food proteins for the creation of new textures and improved food quality: effects on network formation ability and digestibility" 2016-2018: USDA- NIFA AFRI Grant 2016. (Awarded –Rutgers' share: \$ 189,283)
- 7. Co PI for award "Effect of composition and extrusion processing conditions on properties of extrudates made from cassava flour and potato flakes" for American Key Food Products, NJ, 2015 (Awarded: \$7,500)
- 8. Assisted in writing proposal "An Integrated Approach to Eliminate Cross-Contamination during Washing, Conveying and Handling of Fresh Produce" USDA- NIFA Food Safety Grant 2015. (Awarded –Rutgers' share: \$ 499,270)
- 9. Co PI for award "Effect of degree of gelatinization of starch in the Cassava flour and processing conditions on the properties of extruded products" for American Key Food Products, NJ, 2015 (Awarded: \$ 6,000)
- 10. Co PI for award "Taste response study of amaranth-quinoa healthy snacks by Indian population" International Collaborative Research Grants by Centers for Global Advancement and International Affairs 2014 (Awarded: \$ 8,000)
- 11. Co PI for award "Destruction of sucrose within the milling process by microbial contamination: Microbial and chemical analysis and guidelines for the implementation of good housekeeping measures and preventive maintenance" for American Sugarcane League 2009 (Awarded: \$ 10,000)
- 12. Co PI for award "Preparation of hydrolyzed material from acid treated bagasse" for British Petroleum, IL, 2008 (Awarded: \$82,000)
- 13. Assisted in writing the project proposal for 'Microwave assisted extraction of rice bran oil' for LSU ORGS Faculty Research Grant, 2006 (Awarded: \$ 10,000)

CONTINUING EDUCATION

Statistics for Food Scientist	(September 2015)	
Internal Auditing, Ahold USA, Carlisle, PA	(September 2012)	
Safe Quality Food, Global Food Safety Initiative, Steritech, Charlotte, NC	(September 2012)	
USDA HACCP, Steritech, Charlotte, NC	(November 2011)	
SCP & Seafood HACCP, LSU AgCenter Baton Rouge	(September 2009)	
Affinity Based Separation Technologies: Existing Applications and New Challenges, Baton Rouge		
	(June 2009)	
COMSOL hands-on workshop, Houston	(December 2007)	
Introduction to ANSYS- Part I and II, Pittsburgh	(April 2007)	
MIT-UT- AIT Program on Sustainability on Food Security and Safety, Thailand	(August 2004)	
Central Institute of Post Harvest Engineering and Technology, Ludhiana, India	(Summer 2002)	
Northern Region Farm Machinery Training & Testing Institute, Hissar, India	(Summer 2001)	

PROFESSIONAL MEMBERSHIPS

- Institute of Food Technologists
 Society of Women Engineers

HONORS AND AWARDS

- Gamma Sigma Delta Graduate Student Merit Honor Roll (Year 2008)
- Awarded Netherlands Government's Scholarship and AIT Fellowship for graduate studies at Asian Institute of Technology, Bangkok (Year 2003-2005)
- Awarded scholarship for graduate studies at IIT by Ministry of HRD, Govt. of India (Year 2003)