

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

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## **EDUCATION**

**2008 Doctor of Philosophy**, Biological and Agricultural Eng, Louisiana State University, Baton Rouge  
**2005 Master of Engineering**, Food Engineering and Bioprocess Tech., Asian Institute of Tech., Thailand  
**2003 Bachelor of Technology**, Agricultural Engineering, Konkan Agriculture University, India

## **ACADEMIC POSITIONS**

**2018-present Assistant Professor** (Food Engineering), 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  
**2016-present Adjunct Professor**, 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

## **HONORS AND AWARDS**

**2023 Winner, Goodnight Early Career Innovator Award**, at NC State. The award supports early career faculty excellence and recognizes faculty whose scholarship clearly and substantively contributes to innovation and advancement in STEM or STEM education  
**2022 Finalist, Outstanding Graduate Faculty Mentor Award**, from the Graduate School, North Carolina State University  
**2022 NIFA Partnership Award in the category of 'Mission Integration: Research, Teaching or Extension'**, for the multi-institutional online seminar course that was offered in Spring 2021 in the USDA Multi-state project (NC-1023: Engineering for Food Safety and Quality)  
**2021 Winner, Outstanding Postdoc Mentorship Award**, from the Office of Postdoctoral Affairs and the Graduate School at the 9th Annual NC State postdoctoral research symposium, North Carolina State University  
**2022 and 2021 Nominee, Goodnight Early Career Innovator Award**, College of Agriculture and Life Sciences at North Carolina State University  
**2021** Selected for "**Rising Stars**" seminar series by University of California - Davis  
**2019** Invited to join '**Emerging Leaders Network**' by Institute of Food Technologists (IFT)  
**2008** Gamma Sigma Delta **Graduate Student Merit Honor Roll** (Year 2008)  
**2003** Awarded Netherlands Government's Scholarship and AIT Fellowship for graduate studies at Asian Institute of Technology, Bangkok (Year 2003-2005)  
**2003** Awarded scholarship for graduate studies at IIT by Ministry of HRD, Govt. of India (Year 2003)

## **RESEARCH, TEACHING GRANTS, and FUNDING ACQUIRED (Total: US \$ 3,815,074)**

1. Co-PI for award "Post-harvest produce sanitation using novel energy-efficient low-temperature plasma device with scalability" PI: Y. Xiao, Co-PIs: D. Adhikari. USDA Small Business Innovation Research and Technology Transfer Program, Phase 1. July 2024 (Awarded \$ 175,000; NCSU Share: 53K)
2. Co-PI for award "Effect of high intensity pulsed light on liquid egg shelf-life, protein quality and functionality" by the American Egg Board (Prime: US Dept. of Agriculture) PI: Campbell Y, Co-PIs: Zheng H, Walker LL. October 2023 (Awarded \$250,000)
3. PI for award "Development of ready-to-eat healthy snacks by extrusion of sweet potato, cassava, and grape pomace" by N.C. Agricultural Foundation, Inc. July 2023 (Awarded \$88,095)
4. PI for award "Far- Ultraviolet-C (220 nm) for inactivation of *Cronobacter sakazakii* surrogate in low moisture powder foods" by Center for Advanced Processing and Packaging Studies – CAPPs, a NSF IUCRC Founded Center. May 2023 (Awarded \$ 60,000)
5. Co-PI for award "Microaerophilic Workstation for Interdisciplinary Research on Microaerophilic/Anaerobic Microorganisms" by Laboratory Research Equipment Program, NCSU. PI: Walker, L Co-PI: Kiess, A; Salvi, D.; Kulkarni, R. November 2022 (Awarded \$25,000)
6. Co-PI for the award "Evaluating Egg Quality Due to the Shift from Caged to Cage-free Egg Production" by the American Egg Board (Prime: US Dept. of Agriculture) PI: Kiess AS, Co-PIs: Anderson KE, Toomer O, Walker LL, Salvi DA, Santos F. October 2022 (Awarded \$217,073)
7. Co-PI for the award "Evaluating Egg Functionality Due to the Shift from Caged to Cage-Free Egg Production" by the American Egg Board (Prime: US Dept. of Agriculture) PI: Kiess AS, Co-PIs: Zheng H, Salvi DA, Campbell Y, Simunovic J. October 2022 (Awarded \$221,472)
8. PI for award "Plasma-activated water (PAW) as a cleaning-in-place (CIP) solution in a model continuous pipe system" by Center for Advanced Processing and Packaging Studies – CAPPs, a NSF IUCRC Founded Center. Co- PI: H. Zheng. May 2022 (Awarded \$ 60,000)
9. Co-PI for award "Conversion of food wastes into energy storage devices" by Center for Advanced Processing and Packaging Studies – CAPPs, a NSF IUCRC Founded Center. PI: Kola P. Co-PIs: Shah S. May 2022 (Awarded \$ 60,000)
10. PI for award "Redesign Moodle space for clear instructions and easy accessibility", by Distance Education and Learning Technology Applications (DELTA), August 2021 NCSU (Awarded \$ 2,000)
11. PI for award "Plasma-activated water as a cleaning in place solution for fouling removal and microbial inactivation" by Center for Advanced Processing and Packaging Studies – CAPPs, a NSF IUCRC Founded Center. Co- PI: H. Zheng. May 2021 (Awarded \$ 60,000)
12. PI for Instructional Design Assistance Program at FBNS to develop 'Non-thermal Processing' course

- by Distance Education and Learning Technology Applications (DELTA), June 2020 NCSU (Awarded \$ 5,000)
13. PI for award "Plasma-activated water (PAW) for inactivation of mixed-species biofilms" by Center for Advanced Processing and Packaging Studies –CAPPS, a NSF IUCRC Founded Center. May 2020 (Awarded \$ 119,999)
  14. PI for award "Natural Antimicrobial Edible Coatings for Enhancing Microbial Safety and Prolonging Shelf-Life of Raw Poultry Meat" by N.C. Agricultural Foundation, Inc. Co- PI: N. Lavoine. Fall 2020 (Awarded \$ 31,960/year for 3 years)
  15. PI for award "High-quality manufacturing of packaged fresh produce with conformable in-package cold atmospheric plasma" Co-PIs: K. Stapelmann and A. Mazzeo. USDA NIFA AFRI 2019. September 2020 (Awarded \$ 468,000)
  16. PI for award "Evaluating efficacy of plasma-activated water in egg washing" Co-PIs: S. Kathariou. USDA NIFA AFRI 2019. May 2020 (Awarded \$ 478,500)
  17. Co PI for award "Harnessing (bio-)electrochemical technologies as sustainable sources for on demand precision agriculture" by Game-Changing Research Incentive Program for Plant Sciences Initiative. PI: K. Stapelmann et al. February 2020. (Awarded \$656,250)
  18. Co PI for award "Biodegradable and recyclable paper-based alternative to single use beverage plastic products" by Center for Advanced Processing and Packaging Studies –CAPPS, a NSF IUCRC Founded Center. PI: N. Lavoine. October 2019 (Awarded \$ 15,000)
  19. PI for award "Plasma treatment for inactivation of bacteria and bacterial biofilm on conveyor belt surfaces" by Center for Advanced Processing and Packaging Studies –CAPPS, a NSF IUCRC Founded Center. Co-PIs: N. Lavoine and K. Stapelmann. May 2019 (Awarded \$ 55,000)
  20. 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. Kathariou, and K. Stapelmann. October 2018 (Awarded \$ 14,965.50)
  21. 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: NCSU Share \$ 106,838)
  22. 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)
  23. Co PI for incentive award "Process induced modifications of whole bean flour to tailor bioaccessibility of carbohydrates and proteins" by The Northharvest Bean Growers Association, January 2017. (Awarded: \$20,000)

24. 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)
25. 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)
26. 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)
27. 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)
28. 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)
29. 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)
30. 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)
31. Co PI for award "Preparation of hydrolyzed material from acid treated bagasse" for British Petroleum, IL, 2008 (Awarded: \$ 82,000)
32. Assisted in writing the project proposal for 'Microwave assisted extraction of rice bran oil' for LSU ORGS Faculty Research Grant, 2006 (Awarded: \$ 10,000)

## **TEACHING EXPERIENCE**

### **North Carolina State University**

- |  |   |   |
|--|---|---|
| Non-thermal Food Processing Technologies for Food (FS591: 3 credits) | - | Fall 2021<br>Fall 2023  |
| Principles of Food and Bioprocess Engineering (FS231: 4 credits)     | - | Spring 2019,<br>Spring 2020,<br>Spring 2021,<br>Spring 2022<br>Spring 2023<br>Spring 2024 |
| Emerging Research in Healthy and Sustainable Food (FS623: 1 credit)  | - | Spring 2021   |

- FS 201 Introduction to Food Science (Guest Lecturer) - Fall 2021
- Emerging Research in Food and Biomaterials Processing (FS623: 1 credit) - Spring 2022  
Spring 2023  
Spring 2023

**Rutgers University**

- Introduction to Food Engineering (Short Course for Industry Professionals) - Summer 2015,  
Summer 2016,  
Summer 2017
- Principles of Food Science Laboratory - Fall 2014
- Food Engineering Fundamentals (Guest Lecturer) - Spring 2014,  
Spring 2015,  
Spring 2016,  
Spring 2017
- Byrne Seminar on Processed Food (Guest Speaker) - Spring 2015,  
Spring 2016
- Science of Food (Guest Speaker) - Fall 2015, Fall 2016,  
Fall 2017
- Thermal and Non-Thermal Processing (Guest Lecturer) - Fall 2013, Fall 2014,  
Fall 2015, Fall 2017
- Foods: from Field to Table (Guest Speaker) - Spring 2016

**BOOK**

1. Matthews, K., and **Salvi, D. (Ed.)** (2023) The Produce Contamination Problem: Causes and Solutions, THIRD EDITION, Elsevier

**BOOK CHAPTERS (Total: 7)**

1. Matthews, K., and **Salvi, D.** (2023) Scope of the Produce Contamination Problem. The Produce Contamination Problem: Causes and Solutions, THIRD EDITION, Elsevier
2. Rivero, W., and **Salvi, D.** (2023) Vertical Farming. The Produce Contamination Problem: Causes and Solutions, THIRD EDITION, Elsevier
3. Wang, Q., and **Salvi, D.** (2023) Post-harvest Sanitation of Produce with Conventional and Novel Technologies. The Produce Contamination Problem: Causes and Solutions, THIRD EDITION, Elsevier
4. Matthews, K., and **Salvi, D.** (2023) Conclusions and Recommendations. The Produce Contamination Problem: Causes and Solutions, THIRD EDITION, Elsevier
5. Stroforos, G., **Salvi, D.**, Palazoglu, T.K., Yavuz, N., Coronel, P.M., and J. Simunovic (2022) Computational and Numerical Models and Simulations for Aseptic Processing. CRC Press

6. Hemker, A.K., Nguyen, L.T, **Salvi, D.** (2022) Effect of High-Pressure Processing on Enzyme Activity and Stability Effect of High-Pressure Technologies on Enzyme Structure and Function: Foundations and Applications, Elsevier
7. **Salvi, D.**, Arserim, E.H., and 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 (Total: 44)**

1. Ahuja M., Wang Q., **Salvi D.** (2023). Decontamination of biofilms on leafy greens using plasma-activated water: comparison of two types of lettuce. International Journal of Food Microbiology. Under Review
2. Rivero, W., Wang, Q., & **Salvi, D.** (2023). Cold atmospheric pressure plasma and plasma-activated mist as novel food sanitizers: microbial inactivation properties and chemical composition. Postharvest Biology and Technology, Final Revision
3. Navare, S., Karwe, M. V., & **Salvi, D.** (2023). Effect of high pressure processing on selected physicochemical and functional properties of yellow lentil protein concentrate. Food Chemistry Advances, Food Chemistry Advances, 3, December 2023, 100546. <https://doi.org/10.1016/j.focha.2023.100546>
4. Wang, Q., Kathariou, S., & Salvi, D. (2023). Plasma-activated water for inactivation of *Salmonella* Typhimurium avirulent surrogate: Applications in produce and shell egg and understanding the modes of action. LWT- Food Science & Technology, 187, 115331. <https://doi.org/10.1016/j.lwt.2023.115331>
5. Campbell V. M., Hall S., **Salvi D.** (2023). Antimicrobial Effects of Plasma-Activated Simulated Seawater (PASW) on Total Coliform and Escherichia coli in Live Oysters During Static Depuration. Fishes 8.8 (2023): 396. DOI: 10.3390/fishes8080396
6. Trosan, D., Walther P., Mclaughlin S., **Salvi, D.**, Mazzeo, A., Stapelmann, K. (2023). Analysis of the Effects of Complex Electrode Geometries on the Energy Deposition and Electric Field Measurements of Surface Dielectric Barrier Discharges. Plasma Processes and Polymer. e2300133. <https://doi.org/10.1002/ppap.202300133>
7. Narasimhan, S. L., **Salvi, D.**, Schaffner, D. W., Karwe, M. V., & Tan, J. (2023). Efficacy of cold plasma-activated water as an environmentally friendly sanitizer in egg washing. Poultry Science, 102893. <https://doi.org/10.1016/j.psj.2023.102893>
8. Date, M., Rivero, W., Tan, J., Specca, D., Simon, J., **Salvi, D.** and M.V. Karwe (2023). Effect of plasma-activated nutrient solution (PANS) on sweet basil (*O. basilicum* L.) grown using an ebb and flow hydroponic system. Agriculture, 2023, 13, 443. <https://doi.org/10.3390/agriculture13020443>

9. Wang, Q., Lavoine, N., & **Salvi, D.** (2023). Cold atmospheric pressure plasma for the sanitation of conveyor belt materials: Decontamination efficacy against adherent bacteria and biofilms of *Escherichia coli* and effect on surface properties. *Innovative Food Science and Emerging Technologies*, 84, 103260. <https://doi.org/10.1016/j.ifset.2022.103260>
10. Shah, U., Wang, Q., Kathariou, S., & **Salvi, D.** (2023). Optimization of Plasma-activated Water for Future Scale-up and *Salmonella* surrogate validation. *Journal of Food Protection*, 86 (1), 100029. <https://doi.org/10.1016/j.jfp.2022.100029>
11. Wang, Q., Cui, H., Rai, R., Nitin, N., & **Salvi, D.** (2023). DNA-based Surrogates for Validation of the Microbial Inactivation Process for using Cold Atmospheric Pressure Plasma (CAPP) and Plasma-activated Water (PAW) processing. *Journal of Food Engineering*, 339, 111267 <https://doi.org/10.1016/j.jfoodeng.2022.111267>
12. Rivero, W., Wang, Q., & **Salvi, D.** (2022). Effect of Plasma-activated Water on Microbiological and Quality Characteristics of Alfalfa Sprouts, Broccoli Sprouts, and Clover Sprouts. *Innovative Food Science & Emerging Technologies*, 81, 103123 <https://doi.org/10.1016/j.ifset.2022.103123>
13. Wang, Q., Pal, R.K., Yen, H.W., Naik, S.P., Orzeszko, M.K., Mazzeo, A., **Salvi, D.** (2022) Flexible and Conformable Cold Plasma-generating Packages: Evaluation of Microbial Inactivation and Quality Changes of Fresh Produce, *Food Control*, 137, 108915. <https://doi.org/10.1016/j.foodcont.2022.108915>
14. Campbell, V.M., Wang, Q., Hall, H.G., **Salvi, D.** (2022) Physicochemical properties and antimicrobial impacts of plasma-activated simulated seawater (PASW) on *Escherichia coli*. *Journal of the Science of Food and Agriculture (JSFA) Reports*, 2(5), 228-235. <https://doi.org/10.1002/jsf2.46>
15. Wang, Q. and **Salvi, D.** (2021). Recent progress in the application of plasma-activated water (PAW) for food decontamination. *Invited article*. *Current Opinion in Food Science*, 42, 51-60. <https://doi.org/10.1016/j.cofs.2021.04.012>
16. Wang, Q. and **Salvi, D.** (2021). Evaluation of plasma-activated water (PAW) as a novel disinfectant: effectiveness on *Escherichia coli* and *Listeria innocua*, physicochemical properties, and storage stability. *LWT- Food Science & Technology*, 149, 111847. <https://doi.org/10.1016/j.lwt.2021.111847>
17. Karthikeyan, J. S., **Salvi, D.**, & Karwe M. V. (2021). Modeling of fluid flow, carbohydrate digestion, and glucose absorption in human small intestine. *Journal of Food Engineering*, 292, 110339. DOI: <https://doi.org/10.1016/j.jfoodeng.2020.110339>
18. Arserim, E. H., **Salvi, D.**, Fridman, G., Schaffner, D. W., & Karwe, M. V. (2020). Microbial Inactivation by Non-equilibrium Short-Pulsed Atmospheric Pressure Dielectric Barrier Discharge (Cold Plasma): Numerical and Experimental Studies. *Food Engineering Reviews*, 1-12. DOI: <https://doi.org/10.1007/s12393-020-09256-7>

19. Huang, K., Tian, Y. J., Tan, J., **Salvi, D.**, Karwe, M.V., and Nitin, N. (2020) Role of contaminated organic particles in cross-contamination of fresh produce during washing and sanitation. *Postharvest Biology and Technology*, 168, 111283. <https://doi.org/10.1016/j.postharvbio.2020.111283>
20. Hemker, A. K., Nguyen, L. T., Karwe, M., & **Salvi, D.** (2020). Effects of pressure-assisted enzymatic hydrolysis on functional and bioactive properties of tilapia (*Oreochromis niloticus*) by-product protein hydrolysates. *LWT*, 122, 109003. <https://doi.org/10.1016/j.lwt.2019.109003>
21. Karthikeyan, J.S., **Salvi D.**, Corradini, M., Ludescher, R., and Karwe, M.V. (2019) Effect of bolus viscosity on carbohydrate digestion and glucose absorption processes: an in vitro study. *Physics of Fluids*. *Fluids* 31.11: 111905. <https://doi.org/10.1063/1.5126277>
22. 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  $\beta$ -Carotene Extraction and Color of the Baby Carrots. *Food and Bioprocess Technology*, 12(4), 613-624. DOI: 10.1007/s11947-019-2236-4
23. Gosavi, N.S., **Salvi, D.**, and Karwe, M.V. (2019) 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>
24. 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*, 81(9), 1472-1480. doi:10.4315/0362-028X.JFP-17-487
25. Huang K., Tian Y., **Salvi D.**, Karwe M.V., 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), 621-63.3 <https://doi.org/10.1007/s11947-017-2038-5>
26. **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>
27. 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>
28. **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>
29. 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>



30. 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
31. 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
32. 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
33. 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
34. 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
35. **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
36. **Salvi, D.A.**, Boldor, D., Ortego, J., Aita, G. M., Sabliov, C. M. (2010). Numerical Modeling of Continuous Flow Microwave Heating: A Critical Comparison of COMSOL and ANSYS. *Journal of Microwave Power and Electromagnetic Energy*, 44 (4), 187-197
37. **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
38. **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
39. **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
40. Boldor, D., Balasubramanian, S., Purohit, S., Guitierrez-Wing, M.T., Rusch, K. A., **Salvi, D.A.**, Sabliov, C.M. (2008). A continuous microwave treatment system for prevention of invasive species during de-ballasting operation. *Journal of Microwave Power and Electromagnetic Energy*, 42 (3), 27-38

41. **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
42. 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
43. 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
44. 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

### **INVITED MAGAZINE ARTICLES (Total: 3)**

1. **Salvi, D.** and M.V. Karwe (2021) Sustainable and safer indoor farming of produce using new technologies: challenges and opportunities. *The International Union of Food Science and Technology (IUFOST), Scientific Information Bulletin (SIB)*. <http://www.iufost.org/news/urban-food-production-new-sib>.
2. **Salvi, D.** (2017). Understand Produce Contamination. *CEP Magazine- An AICHE Publication*, May 2017 Issue, pp. 33-39
3. Aita, G.A., **Salvi, D.A.** (2009) Lignocellulose as a source for fuels and chemicals. *Louisiana Agriculture Magazine*, Fall 2009 Issue

### **CONFERENCE PAPERS and PRESENTATIONS (Total: 70)**

1. Salvi D. (Invited Presentation) Sustainable Cold Plasma Technology to Ensure Microbial Safety of Food and Food Contact Surfaces. 17th Dubai International Food Safety Conference, December 2023, Dubai, UAE.
2. Patil J., Kota S., Salvi D. Extending the Shelf Life of Strawberries using Far UVC Light. 17th Dubai International Food Safety Conference, December 2023, Dubai, UAE.
3. Patil J., Kota S., Salvi D. Sustainability Spoon by Spoon. 17th Dubai International Food Safety Conference, December 2023, Dubai, UAE.
4. Weyrich A., Salvi D. Ultraviolet Inactivation of *Cronobacter sakazakii* Surrogate in Infant Formula and Wheat Flour. 17th Dubai International Food Safety Conference, December 2023, Dubai, UAE.
5. Shah U., Gilleland J., Salvi D. Evaluating the effectiveness of atmospheric pressure plasma treatment on microbial inactivation and quality effects on shell eggs. 17th Dubai International Food Safety Conference, December 2023, Dubai, UAE.

6. Ghevariya D., Salvi D. Efficacy of plasma-activated water in inactivating mixed-species biofilms on fouling deposits in a continuous cleaning-in-place (CIP) system. 17th Dubai International Food Safety Conference, December 2023, Dubai, UAE.
7. **Salvi D.**, Stapelmann K., Mazzeo A., Trosan D., McLaughlin S., Wang Q., Tammineni D.K., Enhancing Produce Safety with Novel In-Package Surface Dielectric Barrier Discharge Cold Plasma Technology. 2023 IFT-EFFoST International Nonthermal Processing Workshop & Short Course, October 2023, Minneapolis, MN, USA
8. Medagam S., Wang Q., **Salvi D.**, A novel edible coating based on UV-C treated gallic acid and chitosan: antimicrobial efficacy against *Salmonella* cocktail. 023 IFT-EFFoST International Nonthermal Processing Workshop & Short Course, October 2023, Minneapolis, MN, USA
9. Shah U., **Salvi D.**, Waterless Plasma Treatment for the Safety of Shell Eggs. 023 IFT-EFFoST International Nonthermal Processing Workshop & Short Course, October 2023, Minneapolis, MN, USA
10. Lee Y., Bornhorst G., Chen J., **Salvi D.**, Tikekar R., White J., Evaluation of Student Perspectives on Food Engineering Institute of Food Technologists (IFT) FIRST, July 2023, Chicago, IL, USA.
11. Tammineni, D.K., Wang, Q., Trosan, D., McLaughlin, S., Mazzeo, A., Stapelmann, K., **Salvi, D.**, Surface Dielectric Barrier Discharge Plasma for in-Package Inactivation of *E. coli* O157:H7 Biofilms on Baby Spinach Leaves, International Association for Food Protection (IAFP) Annual Meeting, Toronto, Canada, July 2023.
12. Ma, L., Wang, Q., **Salvi, D.**, Nitin N. Development of an enzyme-based surrogate to assess the antimicrobial effectiveness of fresh produce washing, International Association for Food Protection (IAFP) Annual Meeting, Toronto, Canada, July 2023.
13. Medagam, S. R., Wang, Q., & **Salvi, D.** Optimization of novel edible coating based on UV-C treated gallic acid and chitosan: antimicrobial efficacy against *Salmonella* Typhimurium. Institute of Food Technologists (IFT) FIRST, July 2023.
14. Rivero W., Wang, Q., Zheng, H., & **Salvi, D.** Microbiological Validation of a Novel Cleaning Solution, Plasma-activated Water (PAW), for Cleaning-In-Place (CIP) of Biofilms on Proteinaceous Fouling. Institute of Food Technologists (IFT) FIRST, July 2023.
15. Wang, Q., Rivera, J.L., Siliveru K., & **Salvi, D.** Synergistic effect of PAW and mild heat for *E. coli* inactivation during wheat tempering and its impact on wheat flour quality. Institute of Food Technologists (IFT) FIRST, July 2023.
16. McLaughlin, S., Trosan, D., Wang, Q., Pal, R., **Salvi, D.**, Stapelmann, K., Mazzeo, A. Dielectric Comparison for Paper-Like Surface Dielectric Barrier Discharge Devices. International Mechanical Engineering Congress and Exposition (IMECE2022). October 2022, New Orleans, LA, USA.

17. Medagam, S. R., Wang, Q., Lavoine, N., & **Salvi, D.** (2022). A novel edible coating based on UV-C treated gallic acid and chitosan: antimicrobial efficacy against Salmonella Typhimurium. International Ultraviolet Association (IUVA), September 2022, Cincinnati, OH, USA
18. Rivero W., Wang, Q., & **Salvi, D.** Comparison of cold atmospheric pressure plasma (CAPP) and plasma-activated mist (PAM) as novel produce sanitizers: Identification of antimicrobial compounds and antimicrobial efficacy on produce surfaces. 15th Conference of Food Engineering, September 2022, Raleigh, North Carolina, USA.
19. Wang, Q., Ahuja M. & **Salvi, D.** Plasma-activated water as a novel sanitizer for biofilm inactivation: evaluation on sanitation efficacy and reusability. 15th Conference of Food Engineering, September 2022, Raleigh, North Carolina, USA.
20. Wang, Q., Trosan, D., McLaughlin, S., Pal, R., Mazzeo, A., Stapelmann, K., & **Salvi, D.** Conformable Surface Dielectric Barrier Discharge Plasma Electrodes for Fresh Produce Sanitation. 15th Conference of Food Engineering, September 2022, Raleigh, North Carolina, USA.
21. Karwe, M.V., **Salvi, D.** & Rabinovich, A. A1363: An Integrated Approach for Improving Growth and Quality of Sweet Basil Using Cold Plasma Activated Water and Mist. 15th Conference of Food Engineering, September 2022, Raleigh, North Carolina, USA.
22. Arserim, E. A., **Salvi, D.**, Schaffner, D.W., & Karwe, M.V. Interaction Between *Klebsiella michiganensis* B199A and Atmospheric Pressure Plasma Jet: Numerical and Experimental Studies. 15th Conference of Food Engineering, September 2022, Raleigh, North Carolina, USA.
23. **Salvi, D.** (2022). Applications of Cold Atmospheric Pressure Plasma in Food and Agriculture. Research Promotion. Institute of Food Technologists (IFT) FIRST, July 2022.
24. Wang, Q., Pal, R., Trosan, D., McLaughlin, S., Mazzeo, A., Stapelmann, K., **Salvi, D.** (2022). Flexible cold plasma electrodes for in-package sanitation: Evaluation of sanitation efficacy and quality changes in mushrooms. Institute of Food Technologists (IFT) FIRST, July 2022.
25. Shah, U., Wang, Q., Kathariou, S., & **Salvi, D.** Determination of disinfection efficacy of enhanced volumes of plasma-activated water for future scale-up. Institute of Food Technologists (IFT) 07-2022.
26. Rivero W., Wang, Q., & **Salvi, D.** Plasma-activated water (PAW) as a cleaning-in Place (CIP) solution for fouling removal. Institute of Food Technologists (IFT) FIRST, July 2022.
27. Wang Q., **Salvi D.** (2021). Cold atmospheric pressure plasma (CAPP) treatment for the inactivation of bacteria and bacterial biofilm on conveyor belt surfaces. Institute of Food Technologist Annual Meeting and Food Expo 2021, Virtual
28. Trosan, D., Wang, Q., Pal, R., Mazzeo, A., **Salvi, D.**, Stapelmann, K. (2021). High-Quality Manufacturing of Packaged Fresh Produce with Conformable In-Package Cold Atmospheric Plasma. 74th Annual Gaseous Electronics Conference, virtual conference.

29. Pal, R., Wang, Q., **Salvi, D.**, Mazzeo, A. (2021). Paper-based Cold Plasma-generating Electrodes for the Inactivation of Food-pathogens. European Materials Research Society, virtual conference.
30. Rivero W., Wang Q., **Salvi D.** (2021). Comparison of cold atmospheric pressure plasma (CAPP) and plasma-activated mist (PAM) for inactivation of *E. coli* DH5 $\alpha$ , *Listeria innocua*, and *Salmonella* Typhimurium. Institute of Food Technologist Annual Meeting and Food Expo 2021, Virtual. Won
31. Ahuja M., Wang Q., **Salvi D.** (2021). Comparison of inactivation efficacy of plasma-activated water against biofilms on two types of lettuce. International Association for Food Protection Annual Meeting, Virtual
32. Shah U., Wang Q., Kathariou S., **Salvi D.** (2021). Optimization of nonthermal plasma-activated water processing conditions for inactivation of *Salmonella* Typhimurium. International Association for Food Protection Annual Meeting, Virtual
33. Rivero W., Wang Q., **Salvi D.** (2021). Development of plasma-based decontamination treatment for hydroponic nutrient solution. International Association for Food Protection Annual Meeting, Virtual
34. Ahuja M., Wang Q., **Salvi D.** (2021). Inactivation efficacy of plasma-activated water (PAW) against mixed-species biofilms on biotic and abiotic surfaces. Institute of Food Technologist Annual Meeting and Food Expo 2021, Virtual
35. Wang Q., Salvi D. (2020). Evaluation of physicochemical properties and microbial inactivation efficacy of plasma-activated water under storage. 3rd Food Innovation and Engineering (FOODIE) Conference, November 4 - 6, 2020, Virtual
36. Wang Q., Kathariou S., **Salvi D.** (2020) Plasma-activated Water as a Novel Disinfectant: Effectiveness against Selected Bacteria and Application to Produce and Egg Washing. International Association for Food Protection Annual Meeting to October 25-28, 2020, Cleveland, OH
37. Wang Q., **Salvi D.** (2020) Evaluation of Plasma-Activated Water as A Novel Disinfectant: Microbial Inactivation Efficacy, Physicochemical Properties, and Activity During Storage. Institute of Food Technologist Annual Meeting and Food Expo 2020, Chicago, Il
38. Campbell V., Hall S, Wang Q., and **Salvi D.** (2020) Effects of plasma-activated salt water (PASW) on bacterial inactivation. North Carolina Ag and Life Sciences Research Foundation (NCALS) meeting. *Awarded the third prize in a poster presentation competition.*
39. Rivero W, Shin E, Wang Q., and **Salvi D.** (2020). Effect of Plasma-activated Nutrient Solution on the Growth and Quality of Hydroponic Sweet Basil. 7<sup>th</sup> Latin American Research Symposium, North Carolina State University, Raleigh, NC. *Awarded the first prize in a poster presentation competition.*
40. Wang Q., Pal R., Mazzeo A., **Salvi D.** (2019) Conformable Surface Dielectric Barrier Discharge Plasma Treatment of Fresh Produce: Evaluation of Microbial Inactivation Efficacy and Quality Attributes. 2nd Food Innovation and Engineering (FOODIE) Conference, Philadelphia, PA

41. Rivero, W., Wang Q., **Salvi D.** (2019) Effect of Plasma-Activated Water (PAW) on Microbiological and Quality Characteristics of Broccoli and Alfalfa Sprouts 2nd Food Innovation and Engineering (FOODIE) Conference, Philadelphia, PA
42. 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
43. 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
44. 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
45. 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 2018, Chicago, IL
46. 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, *Awarded the second prize in Food Engineering Division.*
47. 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
48. 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
49. 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
50. 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
51. 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
52. 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

53. **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
54. 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
55. 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
56. 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
57. 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. *Awarded the third prize in non-thermal division.*
58. 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. *Awarded the first prize in nutrition division.*
59. 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). 1<sup>st</sup> International Workshop on Plasma Agriculture, Drexel Plasma Institute, Camden, NJ
60. 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
61. Gosavi N.S., **Salvi D.**, and Karwe M.V. (2015). High pressure-assisted infusion of calcium in PME pre-treated baby carrots, 12th International Congress on Engineering and Food, Quebec City, Canada.
62. 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
63. 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

64. 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
65. 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
66. 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
67. 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
68. **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
69. 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 43<sup>rd</sup> Annual Symposium, Washington, DC
70. **Salvi, D.A.**, DeQueiroz, G.A., Robert, D., Bazan, V. (2009). Ethanol production from sweet sorghum by a dilute ammonia solution. 31<sup>st</sup> Symposium on Biotechnology for Fuels and Chemicals, San Francisco, CA
71. **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
72. **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
73. 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
74. **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
75. **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



76. **Salvi D. A.**, Dandekar, S.R., Jain, S.K. (2005). Effect of steaming treatment on quality attributes of steam roasted cashew kernels. The 2<sup>nd</sup> International Conference on Innovations in Food Processing Technology and Engineering, Bangkok, Thailand

### **INVITED PRESENTATIONS (Total: 13)**

1. **Salvi D.** (2023) Enhancing Produce Safety with Novel In-Package Surface Dielectric Barrier Discharge Cold Plasma Technology, Rutgers University, Nov 17, 2023
2. **Salvi D.** (2023) DNA-based Surrogates for the Validation of Microbial Inactivation using Plasma Technologies. Invited Speaker, NC1023 USDA Multistate Seminar Series, March 17, 2023
3. **Salvi D.** (2022) Non-thermal Food Processing. Invited Speaker, Food Science Summer Scholars Program, NCSU, June 21, 2022
4. **Salvi D.** (2021) Food Processing. Invited Speaker, RTP180 to present a TED-style talk at RTP 180: Food Science at Frontier RTP. September 16, 2021 [www.pbs.org/video/dr-deepti-salvi-nc-state-food-science-8pzbb/](http://www.pbs.org/video/dr-deepti-salvi-nc-state-food-science-8pzbb/)
5. **Salvi D.** (2021). Research updates on cold plasma technology. University of Georgia, Athens. November 4, 2021
6. **Salvi D.** (2021). Research updates on cold plasma technology. The Ohio State University. October 5, 2021
7. **Salvi D.** (2021). Cool Tech Part II: Pressure and Plasma with Dr. Deepti Salvi. Wolfing Down Food Science. April, 2021. <https://open.spotify.com/show/1Gqk6evevPU6TwaoVffq5y>
8. **Salvi D.** (2020). Applications of Cold Atmospheric Pressure Plasma in Food and Agriculture. "Rising Stars" seminar series. University of California, Davis. January 13, 2021
9. **Salvi D.** (2020). Applications of Cold Atmospheric Pressure Plasma in Agriculture. BASF. January 12, 2021
10. M.V. Karwe, J. Simon, and **Salvi D.** (2020) Effect of Cold Plasma on Physical and Quality Parameters of Hydroponically Grown Sweet Basil. Sweet Basil: Managing Basil Under increasingly Challenging Conditions: A Virtual Workshop. December 11, 2020
11. **Salvi D.** (2020). Applications of Cold Atmospheric Pressure Plasma in Food and Agriculture. Cornell Institute for Food Systems. October 13, 2020
12. **Salvi D.** (2020). Novel Food Processing Methods for Improving Food Safety and Quality. North Carolina State Emerging Research Showcase: Food, Biochemical & Engineered system, North Carolina State University, Raleigh, NC. February 19, 2020
13. **Salvi D.** (2019) High Pressure Processing of Dairy Products: Current Status and Future Applications. Southeast Dairy Foods Research Center (SDFRC) Annual Meeting. August 6-7, 2019

14. **Salvi D.** (2019). Food Science and Nutrition. Green Hope Elementary, Cary, NC. Oct 30, 2019

#### **GRADUATE STUDENTS ADVISED AS PRIMARY ADVISOR**

1. Urvi Shah	Ph.D. Candidate	In-progress
2. Sudarshan Medagam	Ph.D. Candidate	In-progress
3. Dushyanth Kumar Tammineni	Ph.D. Student	In-progress
4. Dhruv Ghevariya	M.S.	In-progress
5. Manveen Kaur Ahuja	M.S.	Completed
6. Wen Rivero Pena	M.S.	Completed
7. Wen Rivero Pena	Ph.D.	Completed

#### **GRADUATE STUDENTS ADVISED (Committee Member)**

1. Angelina Schiano	Ph.D. Student	Completed
2. Vashti Campbell	Ph.D. Student	Completed
3. Nicholas Sponsel	Ph.D. Student	In-progress
4. Jon Kizer	Ph.D. Student	In-progress
5. Duncan Trosan	Ph.D. Student	In-progress
6. Skye Freeland	M.S. Student	In-progress
7. Haoyi An	M.S. Student	In-progress

#### **GRADUATE STUDENTS ADVISED (Graduate School Representative)**

1. Nigatu Aklilu Atlaw	Ph.D. Student	Completed
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#### **UNDERGRADUATE STUDENTS ADVISED AS PRIMARY ADVISOR**

1. Mateo Schiemann	Fall 2018
2. Elizabeth Shin	Spring 2019, Fall 2019
3. Adrienne Caudill	Fall 2019
4. Cooper Seward	Spring 2022
5. Justin Gilleland	Spring 2023, Fall 2023, Spring 2024
6. Hazeen Naikzada	Spring 2023, Fall 2023
7. Rebecca Shenk	Spring 2024
8. Chloe Hughes	Spring 2024

- Gilleland J., Shah U., Salvi D. (2023). Evaluate Various Stages of Inoculation on Shell Eggs and Role of Plasma Technology in Shell Egg Surface Sanitization. Undergraduate Research Symposium at North Carolina State University (Poster)
- Naikzada H., Medagam S., Salvi D. (2023). Novel Antimicrobial Edible Coating against Salmonella: Optimizing UV-C Light Absorbance. Undergraduate Research Symposium at North Carolina State University (Poster)

## **VISITING UNDERGRADUATE STUDENTS ADVISED AS PRIMARY ADVISOR**

1.	Nikhil Raghuwanshi	National Dairy Research Institute, Kernal, India	Summer 2022
2.	Chetan Khoraniya	National Dairy Research Institute, Kernal, India	Summer 2022
3.	Shivanjali	National Dairy Research Institute, Kernal, India	Summer 2022
4.	Vratika Nagda	Maharana Pratap University of Agriculture and Technology, Udaipur, India	Spring 2023
5.	Mansi Menaria	Maharana Pratap University of Agriculture and Technology, Udaipur, India	Spring 2023
6.	Muskan Bhatt	Maharana Pratap University of Agriculture and Technology, Udaipur, India	Spring 2023
7.	Kunal Audichya	Maharana Pratap University of Agriculture and Technology, Udaipur, India	Spring 2023
8.	Vaibhav Vardhan Singh Rathore	Maharana Pratap University of Agriculture and Technology, Udaipur, India	Spring 2023

## **CONTINUING EDUCATION**

2023 IFT-EFFoST International Nonthermal Processing Workshop & Short Course	-	October 2023
2022 ALLI FACULTY LEVEL 2 Faculty LEAD workshop, NCSU, Raleigh, NC	-	September 2022-April 2023
Mentoring Makes a Difference, NCSU, Raleigh, NC	-	September 2021-October 2021
Diversity, Equity and Inclusion (DEI) Training, NCSU, Raleigh, NC	-	June 2021
2021 Faculty LEAD workshop, NCSU, Raleigh, NC	-	September 2021-April 2022
Emerging Leaders Network Alumni Program, by Institute of Food Technologists (IFT)	-	February-March 2021
Agricultural Leadership Learning Institute (ALLI) for Faculty, NCSU, Raleigh, NC	-	September 2019
Emerging Leaders Network by Institute of Food Technologists (IFT), New Orleans, LA	-	June 2019
Statistics for Food Scientist	-	September 2015
Internal Auditing for food safety, 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 Food Engineering
- The International Association for Food Protection
- Phi Tau Sigma