

Svetlana Zivanovic

Food Carbohydrate Chemistry
Food Biopolymers Research Group
Department of Food Science and Technology
103 Food Safety and Processing Building
The University of Tennessee; Knoxville, TN 37996-4500
Phone: (865) 974-0844; Fax: (865) 974-7332
E-mail: lanaz@utk.edu
Web: <http://web.utk.edu/~szivanov>
<http://www.foodbiopolymers.net>

APPOINTMENTS

- 2007 – present, Adjunct Professor, University of Belgrade, Belgrade, Serbia
- 2006 – present, Associate Professor, Dept. Food Science and Technology, University of Tennessee, Knoxville, TN
- 2001 – 2006, Assistant Professor, Dept. Food Science and Technology, University of Tennessee, Knoxville, TN
- 1998 – 2001, Graduate Research Assistant – Food Biochemistry, Dept. Food Science, University of Arkansas, Fayetteville, AR
- 1990 – 1998, Research and Teaching Assistant (full time position), Dept. Food Technology and Biochemistry, University of Belgrade, Belgrade, Serbia

EDUCATION

- Ph.D. in Food Biochemistry. 2001. University of Arkansas, Fayetteville, AR, USA
- M.S. in Biotechnology. 1993. University of Belgrade, Belgrade, Serbia
- B.S. in Food Science and Engineering. 1988. University of Belgrade, Belgrade, Serbia

RESEARCH INTEREST

Research interests include:

- Characterization and application of biopolymers in food processing and safety
- Encapsulation of nutrients
- Characterization and application of polysaccharides recognized as beneficial in human diet
- Utilization of waste material from food industry for production of value-added products

Currently, research focus is directed toward:

- Development of chitosan antibacterial and antiviral films and coatings
- Production, characterization, and applications of chitosan films and fibers
- Development of extraction procedures and characterization of chitosans from fungal biomass
- Application of ultrasound for enhanced extraction and modification of chitin and chitosan
- Encapsulation of vitamins to enhance their thermal and storage stability

TEACHING

- Food Chemistry; FST 410 (undergraduate/graduate level)
- Instrumental Analysis of Food; FST 510 (chromatography and spectroscopy; graduate level)
- Advanced Food Chemistry; FST 515 (carbohydrate chemistry; graduate level)
- Food Biopolymers - Polysaccharides; FST 615 (graduate level)
- Research Ethics in Life Sciences; PS 529 (team taught; graduate level)

PROFESSIONAL AFFILIATIONS

- Institute of Food Technologists; Carbohydrate Division Chair for 2009/10
- American Chemical Society
- Gamma Sigma Delta
- NASA FTCSA Affiliate Faculty

AWARDS AND HONORS

- Excellence in Teaching, Award of Merit; presented by Gamma Sigma Delta, UT (2008)
- Leadership program LEAD21 (2007/08)
- The T.J. Whatley Distinguished Young Scientist Award; presented by UTIA (2006)
- Outstanding faculty award - under ten years of service; presented by Food Science Club, Department of Food Science and Technology, UT (2005, 2006)
- W.F. & Golda Moss Outstanding Teaching Award – under ten years of service; presented by Collage of Agricultural and Natural Resources, University of Tennessee (2004)
- Outstanding faculty award - under five years of service; Department of Food Science and Technology, University of Tennessee (2003)
- Outstanding faculty advisor award - under five years of service; Student Food Science Club, University of Tennessee (2003)
- IFT graduate student poster competition; second place (2001)
- Outstanding Ph.D. Student in Department of Food Science, University of Arkansas (2000)
- Best student poster award; Annual Gamma Sigma Delta Student Competition (2000)
- Best student poster award; Ozark Food Processors Association and the Ozark Section of the Institute of Food Technologists (1999)
- Jim "J.B" Brooks Ozark Food Processors Association Scholarship (1999, 2000, 2001)
- Travel Grant, Texture Technologies Corp. (1999, 2001)
- Distinguished M.S. Thesis Award; Microbiological Society of Yugoslavia (1995)
- Scholarship of Republic Foundation for the Development of Science and Art Youth (1988-1990; Yugoslavia)

PUBLICATIONS

Articles published in refereed journals

- Su X., Zivanovic S., D'Souza DH. (2010) Inactivation of human enteric virus surrogates by high intensity ultrasound. *Submitted to Foodborne Pathogens and Disease*.
- Li J., Zivanovic S., Davidson P.M., Kit K. 2010. Characterization and comparison of chitosan/PVP and chitosan/PEO blend films. *Carb Polym.* 79:786-791.
- Su X., Zivanovic S., D'Souza D. 2009. The effect of chitosan on the infectivity of murine norovirus, feline calicivirus and MS2 bacteriophage. *J Food Prot.* 72(12):2623-2628.
- Desai K., Kit K, Li J., Davidson P.M., Zivanovic S., Meyer H. 2009. Nanofibrous chitosan non-wovens for filtration applications. *Polymer.* 50:3661-3669.
- Zhong, Q., M. Jin, P.M. Davidson, and S. Zivanovic. 2009. Sustained release of lysozyme from zein microcapsules produced by a supercritical anti-solvent process. *Food Chemistry.* 115:697-700.
- Zhong, Q., H. Tian, and S. Zivanovic. 2009. Encapsulation of fish oil in solid zein particles by liquid-liquid dispersion. *Journal of Food Processing and Preservation.* 33(2):255-270.
- Jin M., Davidson P.M., Zivanovic S., Zhong Q. 2009. Production of corn zein microparticles with loaded lysozyme directly extracted from hen egg white using spray drying: Extraction studies. *Food Chemistry.* 115:509-514.
- Kumar S. Subbiah J., Thippareddi H., Zivanovic S., Davidson P. M., Harte, F. 2009. Inactivation of Escherichia coli K-12 in apple juice using combination of high pressure homogenization and chitosan. *Journal of Food Science.* 74(1):M8-11.
- Wu T., Zivanovic S., Hayes D.G., Weiss J. 2008. Efficient reduction of chitosan molecular weight by high intensity ultrasound: underlying mechanism and effect of process parameters. *J Agri Food Chem.* 56(13); 5112-5119.
- Wu T., Zivanovic S. 2008. Determination of the degree of acetylation (DA) of chitin and chitosan by an improved first derivative UV method. *Carb Polym.* 73:248-253.
- Desai K., Kit K., Li J., Zivanovic S. 2008. Morphological and surface properties of electrospun chitosan nanofibers. *Biomacromolecules.* 9(3):1000-1006. The most accessed article of the journal in 2008.
- Zivanovic S., Li J., Davidson P.M., Kit K. 2007. Physical, mechanical and antimicrobial properties of chitosan/PEO blend films. *Biomacromolecules* 8(5):1505-1510.
- Dodic J., Pejin D., Dodic S., Popov S., Mastilovic J., Popov-Raljic J., Zivanovic S. 2007. Effects of

- hydrophilic gums on fermentation activity yeast and finished bakery products quality made of frozen dough. *J Food Sci.* 72(4):235-241.
- Chi S., Zivanovic S., Penfield M. 2006. Physico-chemical characterization and consumer acceptability of chitosan films prepared with oregano essential oil. *Food Sci. Technol. Intern.* 12(2):111-117.
 - Kjartansson G.T., Zivanovic S., Kristbergsson K., Weiss J. 2006. Sonication-assisted extraction of chitin from shells of fresh water prawns (*Macrobrachium rosenbergii*). *J. Agri. Food Chem.* 54(9):3317-3323.
 - Kjartansson G.T., Zivanovic S., Kristbergsson K., Weiss J. 2006. Sonication-assisted extraction of chitin from north Atlantic shrimps (*Pandalus borealis*). *J. Agri. Food Chem.* 54(16):5894-5902.
 - Russell K., Weiss J., Morris W.C., Penfield M., Zivanovic S. 2005. A Research Note: The effect of glass shape on the concentration of polyphenolic compounds and perception of merlot wine. *J. Food Qual.* 28:377-381.
 - Wu T., Zivanovic S., Draughon F.A., Conway W.S., Sams C.E. 2005. Physicochemical properties and bioactivity of fungal chitin and chitosan. *J. Agri. Food Chem.* 53(10):3888-3894.
 - Baxter S. R., Zivanovic S., Weiss J. 2005. Molecular weight and degree of acetylation of high-intensity ultrasonicated chitosan. *Food Hydrocolloids.* 19(5):821-830.
 - Zivanovic S., Chi S., Draughon F.A. 2005. Antimicrobial activity of essential oils incorporated in chitosan films. *J. Food Sci.* 70:M45-M51.
 - Zivanovic S., Basurto C.C., Chi S., Davidson P.M., Weiss J. 2004. Molecular weight of chitosan influences antimicrobial activity in oil-in-water emulsions. *J. Food Protection.* 67:952-959.
 - Zivanovic S., Buescher R. 2004. Changes in mushroom texture and cell wall composition affected by thermal processing. *J. Food Sci.* 69:SNQ44-49.
 - Wu T., Zivanovic S., Draughon F.A., Sams C.E. 2004. Chitin and chitosan – value-added products from mushroom waste. *J. Agric. Food Chem.* 52: 7905-7910.
 - Zivanovic S., Buescher R.W., Kim K.S. 2003. Mushroom texture, cell wall composition, color, and ultrastructure as affected by pH and temperature. *J. Food Sci.* 68(5):1860-1865.
 - Meullenet J-F., Xiong R., Hankins J.A., Dias P., Zivanovic S., Monsoor M.A., Bellman-Horner, T. Liu Z., Fromm H. 2003. Modeling preference of commercial toasted white corn tortilla chips using proportional odds models. *Food Qual. Pref.* 14:603-614.
 - Meullenet J-F., Xiong R., Monsoor M.A., Bellman-Horner T., Zivanovic S., Dias P., Fromm H., Liu Z. 2002. Preference mapping of commercial toasted white corn tortilla chips. *J. Food Sci.* 67(5): 1950-1957.
 - Zivanovic S., Buescher R.W., Kim K.S. 2000. Textural changes in mushrooms (*Agaricus bisporus*) associated with changes in cell wall composition and ultrastructure. *J Food Sci.*48(8):1404-1408.
 - Niksic M., Stojanovic M., Zivanovic S., Veljic S. 1997. Ecological approach in preservation of edible mushrooms by lactic acid fermentation. In: Baras J. editor. [Ecology in Food Industry and Biotechnology]. Poslovna Zajednica Vrenje. Belgrade, Yugoslavia. p 217-225.
 - Veres M., Zivanovic S., Vladislavljevic G. 1996. Modified method for the production of sterilized peas. Review of research work at the college of agriculture. University of Belgrade. Belgrade, Yugoslavia. 41 (1): 197-203.
 - Zivanovic S. 1994. [Chemical composition and antimicrobial effects of honey]. *Hrana i Ishrana [Food and Nutrition]*. 35 (3-4): 59-64.

Contributions to edited volumes

- Warriner K., Zivanovic S. 2005. Microbial metabolites in produce in fruits and vegetables. In: Produce degradation: reaction pathways and their prevention. Eds. O. Lamikanra, S. H. Imam and D. O. Ukuku. CRS Press. Boca Raton, FL. pp. 505-528.
- Davidson P.M., Zivanovic S. 2003. The use of natural antimicrobials. In: Food preservation techniques. Eds. P. Zenthen and L. Bogh-Sorensn. Woodhead Publishing, Lim. Cambridge, UK.
- Sutic M, Zivanovic S. 1995. [Investigations of biotic and abiotic factors affecting mould growth and mycotoxin synthesis in foods]. In: Radovanovic RM, editor. [Fundamental research in food technology]. University of Belgrade. Belgrade, Yugoslavia. p 21 – 34.
- Zivanovic S, Veres M, Savic N. 1995. [Influence of processing treatment on prunes quality]. In:

Obradovic DB, Jankovic MA, editors. [Modern trends in food technology]. University of Belgrade. Belgrade, Yugoslavia. p 30 - 39.

- Veres M, Bukvic B, Zlatkovic B, Zivanovic S. 1995. [Environmental pollution and rationalization in the technology of fruit and vegetable processing]. In: Baras J, editor. [Ecotechnology in food industry and biotechnology]. Poslovna Zajednica Vrenje. Belgrade, Yugoslavia. p 165 - 176.

Presentations at technical and professional meetings

1. Zivanovic S. 2009. Health benefits of fungal cell wall polysaccharides. **Invited** presentation. SYMPOSIUM: Health benefits of fungal beta-glucans. Institute of Food Technologists Annual Meeting; July 6-9, 2009; Anaheim, CA.
2. Zivanovic S., Li J. 2009. Development and inclusion of chemical safety in the software. **Invited** presentation. WORKSHOP: A user-friendly food microbiological and chemical safety simulator. Institute of Food Technologists Annual Meeting; July 6-9, 2009; Anaheim, CA.
3. Goan E., Davis R., Li J., Zivanovic S., Mount J., Sams C. 2009. Quality of applesauce as affected by different cultivars of apples and storage conditions. Abstract #153-10. Institute of Food Technologists Annual Meeting; July 6-9, 2009; Anaheim, CA.
4. Zivanovic S. 2009. Food Authenticity. NATO ATC "Food Safety and Food Security". **Invited** presentation. Belgrade, Serbia. May 18 – 22, 2009.
5. Zivanovic S. 2009. Ultrasound – a new technology for food processing and research. **Invited** presentation. 6 Congreso Internacional de Ingenieria Quimica y Alimentos. UDLAP, Puebla, Mexico. February 24 - 27, 2009.
6. Zivanovic S. 2009. Experiences in education of middle school, high school and college students in food science and recruitment for the field. **Invited** presentation. UDLAP, Puebla, Mexico. February 27, 2009.
7. Zivanovic S. 2009. Preparation, characterization, and functionality of chitosan films. **Invited** presentation. Instituto Politecnico Nacional Centro de Desarrollo de Productos Bioticos. Yautepec, Morelos, Mexico. February 27, 2009.
8. Li J., Zivanovic S., Davidson P.M., Kit K. 2008. Functionality of chitosan films as affected by addition of synthetic polymers. Southeastern Regional Meeting of American Chemical Society (SERMAC 2008). Nashville, TN, November 12-15, 2008.
9. Zivanovic S. 2008. Structure and functionality of beta-glucans and chitosan from mushrooms and other sources. **Invited**/Plenary presentation. 11th Congress of Nutrition. Belgrade, Serbia, October 15-18, 2008.
10. Zivanovic S. 2008. Application of ultrasound in the food industry and research. **Invited** presentation. 11th Congress of Nutrition. Belgrade, Serbia, October 15-18, 2008.
11. Kumar S, Harte F, Davidson PM, Zivanovic S, Subbiaha J, Thippareddia H. 2008. Inactivation of escherichia coli k-12 in apple juice and apple cider using high pressure homogenization and chitosan. IAFP 2008 August 3-6, 2008.
12. Desai KI., Li J., Zivanovic S., Davidson P.M., Kit. K. 2008. Bioderived nanofibrous filter media for heavy metal chelation and anti-microbial applications. 236th ACS National Meeting, Division of Polymeric Materials: Science & Engineering, Philadelphia, PA, August 17-21, 2008.
13. Zivanovic S. 2008. Beta-glucans and chitin in cultivated mushrooms and their potential importance to human health. SYMPOSIUM Bioactive components of mushrooms of nutritional or medicinal importance in functional foods. Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans, LA.
14. Zivanovic S. 2008. Application of ultrasound on polysaccharide degradation/processing. SYMPOSIUM Applications of ultrasound in food processing and characterization. Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans, LA.
15. Li J, Zivanovic S, Davidson PM, Kit K. 2008. Performance improvement of chitosan films by blending with poly (vinyl pyrrolidone). Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans, LA.
16. Wu T, Zivanovic S, Davidson PM, 2008. Antimicrobial activity of hydrophobically modified chitosan. Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans,

- LA.
17. Deng X, Zivanovic S, Sams CE, Beelman RB. 2008. In-vitro calcium binding studies using ionic selective electrode and ICP-MS. Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans, LA.
 18. Kjartansson G, Kristbergsson K, Zivanovic S, Weiss J. 2008. Influence of high intensity ultrasound to accelerate the conversion of chitin to chitosan. Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans, LA.
 19. Kjartansson G, Kristbergsson K, Zivanovic S, Weiss J. 2008. FTIR spectroscopy to determine the degree of deacetylation of chitin and chitosan. Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans, LA.
 20. Kjartansson G, Kristbergsson K, Zivanovic S, Weiss J. 2008. Influence of temperature during deacetylation of chitin to chitosan with high intensity ultrasound as a pre-treatment. Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans, LA.
 21. Mount J, Rogers M, Zivanovic S. 2008. Boiling and microwaving effects on hydrophilic oxygen radical absorbance capacity of frozen vegetables. Institute of Food Technologists Annual Meeting; June 28-July 1, 2008; New Orleans, LA.
 22. Zivanovic S., Li J., Wu T., Rajpal G. 2007. Chemical and physical characterization of regular and ultra thin chitosan films stored at various temperatures. YUCOMAT2007, Herceg Novi, Montenegro, September 10-14, 2007.
 23. Desai K., Kit K., Li J., Zivanovic S., Davidson P.M. 2007. Electrospinning and surface properties of chitosan/PEO nanofibers. 234th ACS National Meeting, Boston, MA, August 19-23, 2007.
 24. Li J., Zivanovic S., Kit K., Davidson P.M. 2007. Surface properties of chitosan/PEO blend films as affected by film preparation method. 234th ACS National Meeting, Boston, MA, August 19-23, 2007.
 25. Wu T., Zivanovic S. 2007. Hydrophobically modified chitosan - synthesis, characterization and food related applications. 234th ACS National Meeting, Boston, MA, August 19-23, 2007. 234th ACS National Meeting, Boston, MA, August 19-23, 2007.
 26. Wu T., Zivanovic S. 2007. Production of hydroxymethylfurfural (HMF) from glucosamine and glucosamine-rich renewable materials. 234th ACS National Meeting, Boston, MA, August 19-23, 2007.
 27. Deng X., Zivanovic S., Sams C., Beelman B. 2007. Comparison of calcium-induced firmness in mushroom, fruit and vegetable by in vitro binding. 234th ACS National Meeting, Boston, MA, August 19-23, 2007.
 28. Wu T., Zivanovic S. 2007. Effects of chitosan properties on the depolymerization process by high intensity ultrasound. Institute of Food Technologists Annual Meeting; July 28-August 1, 2007; Chicago, IL.
 29. Wu T., Zivanovic S., Weiss J. 2007. Depolymerization kinetics of chitosan by ultrasound – Effects of acoustic parameters and solution properties. Institute of Food Technologists Annual Meeting; July 28-August 1, 2007; Chicago, IL.
 30. Deng X.Y., Zivanovic S., Sams C.E., Beelman R.B. 2007. Mechanisms of calcium-induced firmness in mushrooms. Institute of Food Technologists Annual Meeting; July 28-August 1, 2007; Chicago, IL.
 31. Li J., Davidson P.M., Kit K., Zivanovic S. 2007. Production and characterization of ultra-thin Chitosan/PEO blend films. Institute of Food Technologists Annual Meeting; July 28-August 1, 2007; Chicago, IL.
 32. Jones J., Zivanovic S. 2007. Metal binding properties of chitosan films as affected by plasticizers and cross-linkers. Institute of Food Technologists Annual Meeting; July 28-August 1, 2007; Chicago, IL.
 33. Craig A.M.D., Brandon M., Harte F., Zivanovic S. 2007. Rheological changes in processed cheese spread due to ingredient variation. Institute of Food Technologists Annual Meeting; July 28-August 1, 2007; Chicago, IL.
 34. Kjatansson G., Kristbergsson K., Zivanovic S., Weiss J. 2007. Comparison of short and long term high intensity ultrasonication to improve efficiency of chitin-to-chitosan conversion. Institute of

- Food Technologists Annual Meeting; July 28-August 1, 2007; Chicago, IL.
35. Ahmed O., Pangloli P., Zivanovic S., Draughon F.A. 2007. Correlation of acetate and lactate levels with occurrence of *Listeria monocytogenes* in RTE processed meat and poultry products collected at retail. 94th Annual Meeting of the International Association for Food Protection; July 8-11, 2007; Lake Buena Vista, FL.
 36. Li J., Davidson P. M., Kit K., Zivanovic S. 2006. Physical and mechanical properties of Chitosan/PEO blend films. Institute of Food Technologists Annual Meeting; June 24-28, 2006; Orlando, FL. Abstract #054C-31.
 37. Wu T., Zivanovic S. 2006. An improved first derivative UV method to determine the degree of deacetylation for chitin and chitosan. Institute of Food Technologists Annual Meeting; June 24-28, 2006; Orlando, FL. Abstract 078A-02.
 38. Rajpal G., Radovic M., Zivanovic S. 2006. Characterization of biodegradable antimicrobial chitosan films. Institute of Food Technologists Annual Meeting; June 24-28, 2006; Orlando, FL. Abstract 078A-04.
 39. Jones B., Zivanovic S. 2006. Effectiveness of chitosan films in binding chromium ions. Institute of Food Technologists Annual Meeting; June 24-28, 2006; Orlando, FL. Abstract 078A-05.
 40. Craig A.D., Jones J., Moreno D., Hernandez A., Mount J., Zivanovic S. 2006. Quality improvement of processed cheese spread. Institute of Food Technologists Annual Meeting; June 24-28, 2006; Orlando, FL. Abstract 078C-11.
 41. Kjartansson G.T., Kristbergsson K., Zivanovic S., Weiss J. 2006. Deacetylation of crustacean chitin with high intensity ultrasound. Institute of Food Technologists Annual Meeting; June 24-28, 2006; Orlando, FL. Abstract 020E-01.
 42. Zivanovic S., Wu T. 2006. Production of biofuel and furane-based chemical feedstock from glucosamine-rich biomass. 5th Annual Southern BioProducts Conference, April 3-4, 2006; Choctaw, MS.
 43. Craig A.D., Zivanovic S. 2006. Photochemical modification of carotenoids used as food colorants. 231th American Chemical Society National meeting; March 26-30, 2006, Atlanta, GA. Abstract AGFD 65.
 44. Li J., Zivanovic S. 2006. Physical properties of chitosan/PEO films. 231th American Chemical Society National meeting; March 26-30, 2006, Atlanta, GA. Abstract AGFD 74.
 45. Rajpal G., Wu T., Zivanovic S. 2006. Mechanism of color development in chitosan films. 231th American Chemical Society National meeting; March 26-30, 2006, Atlanta, GA. Abstract AGFD 81.
 46. Weiss J., Kit K., Zivanovic S., Davidson P.M. 2006. Challenges and progress in the production of electrospun biopolymer nanofibers. 231th American Chemical Society National meeting; March 26-30, 2006, Atlanta, GA. Abstract I&EC 266.
 47. Kjartansson G.T., Kristbergsson K., Zivanovic S., Weiss J. 2006. Determination, characterization and comparison of chemical and morphological changes in ultrasonically extracted chitin from the shells of fresh water prawns (*M. rosenbergi*) and North Atlantic shrimp (*P. borealis*). Natural Science Symposium. March 3-4, 2006; Reykjavik, Iceland. Abstract #V308.
 48. Wu T., Zivanovic S. 2005. Kinetics of formation of 5-hydroxymethyl-furfural (HMF) from glucosamine. 230th American Chemical Society National meeting; August 28 – September 1, 2005, Washington, D.C. Abstract #174.
 49. Wu T., Zivanovic S., Baxter S., Weiss J. 2005. Molecular weight and conformation analysis of chitosan molecules treated by high intensity ultrasound. Institute of Food Technologists Annual Meeting; July 16-20, 2005; New Orleans, LA. Abstract 18A-25.
 50. Michael L.M., Golden D., Zivanovic S. 2005. Flocculation of yeast cells as affected by natural biopolymer chitosan. Institute of Food Technologists Annual Meeting; July 16-20, 2005; New Orleans, LA. Abstract 89D-22.
 51. Noh J., Mount J., Zivanovic S., Sams C.E. 2005. Effects of chitosan and water-soluble chitosan coatings on quality of small fruits. Institute of Food Technologists Annual Meeting; July 16-20, 2005; New Orleans, LA. Abstract 36E-88.
 52. Kjartansson G.T., Kristbergsson K., Zivanovic S., Weiss J. 2005. Institute of Food Technologists Annual Meeting; July 16-20, 2005; New Orleans, LA. Abstract 71C-18.

53. Wu T., Zivanovic S., Sams C.E., Conway W.S. 2004. Chitin and chitosan: Value-added products from mushroom waste. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 67D-1.
54. Chi S., Zivanovic S., Weiss J., Draughon F.A. 2004. Physico-chemical properties of chitosan films enriched with oregano essential oils. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 83B-22.
55. Michael L.M., Zivanovic S., Golden D.A. 2004. Surface charge of microbial cells and biopolymers as affected by environmental conditions. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 99D-25.
56. Baxter S.R., Zivanovic S., Weiss J., Mount J.R. 2004. Molecular weight and degree of acetylation of ultrasonicated chitosan. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 67D-3.
57. Sams T., Zivanovic S., Draughon F.A., Mount J.R., Sams C.E. 2004. Extension of fresh produce shelf-life with novel chitosan coatings. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 49F-19.
58. Kjartansson G.T., Kristbergsson K., Zivanovic S., Weiss J. 2004. Ultrasound-aided chitin extraction from freshwater Tennessee prawns shells. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 17F-6.
59. Sams T., Rodriguez J., Zivanovic S., Davidson P.M., Kit K., Weiss J. 2004. Production of antimicrobial electrospun PEO-chitosan fibers. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 17G-29
60. Gulseren I., Bruce B., Zivanovic S., Weiss J. 2004. High-intensity ultrasound mediated modifications of BSA adsorption kinetics at different solution pH. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 17E-15.
61. Perry H., Zivanovic S., Mount J.R., Penfield M.P., Weiss J. 2004. Ingredient optimization to improve texture and color of retorted egg products. Institute of Food Technologists Annual Meeting; July 12-16, 2004; Las Vegas, NE. Abstract 67F-25.
62. Rasmussen D., Mount J., Zivanovic S., New J., Richards H., Pangloli P., Draughon A. 2004. Five state epidemiological survey of four farm animal types for *Listeria monocytogenes*. 91st Annual Meeting of the International Association for Food Protection; August 8-11, 2004; Phoenix, AZ. Poster #120.
63. Sams C., Zivanovic S., Charron C., Wu T., Blodgett A., Conway C. 2004. Fungal chitin extracts are as effective in reducing decay caused by *Botrytis cinerea*, *Penicillium expansum* and *Penicillium solitum* as commercial seashell chitin extracts. 2004 Annual Meeting of the American Phytopathological Society, July 31 – August 4, 2004. Anaheim, CA. Abstract 59B.
64. Chi S., Zivanovic S., Weiss J., Draughon F.A. 2003. Antimicrobial properties of chitosan films enriched with essential oils. Institute of Food Technologists Annual Meeting; June 12-16, 2003; Chicago, IL. Abstract 29F-15. p 78.
65. Basurto C., Zivanovic S., Davidson P.M., Chi S., Weiss J. 2003. Molecular weight and concentration influences antimicrobial activity of chitosan in oil-in-water emulsions. Institute of Food Technologists Annual Meeting; June 12-16, 2003; Chicago, IL. Abstract 29G-12. p 83.
66. Chi S., Zivanovic S., Davidson P.M., Basurto C., Weiss J. 2003. Influence of molecular weight and concentration of chitosan on physicochemical stability of O/W emulsions. Institute of Food Technologists Annual Meeting; 2003 June 12-16; Chicago, IL. Abstract 29B-23. p 60.
67. Malone S.C., Zivanovic S., Sams C.E., Mount J.R. 2003. Effect of gaseous ozone on antioxidant content and color of sliced tomatoes. Institute of Food Technologists Annual Meeting; June 12-16, 2003; Chicago, IL. Abstract 104C-4. p 263.
68. Moreno V., Mount J.R., Zivanovic S., Weiss J. 2003. Protein additives to modify texture of retorted egg products. Institute of Food Technologists Annual Meeting; June 12-16, 2003; Chicago, IL. Abstract 14F-32. p 42.
69. Baxter S., Zivanovic S., Weiss J. 2003. Effects of ultrasonication on physicochemical characteristics of chitosan. 12th World Congress of Food Science and Technology. 2003 June 16-20; Chicago IL. Abstract 7D-20.

70. Russell K., Weiss J., Morris W., Zivanovic S. 2002. Effect of glass shape on the concentration of polyphenolic compounds of Merlot wine. 224th American Chemical Society National Meeting; August 11-22, 2002; Boston, MA. Abstract #163 (Winner in undergraduate research competition of Agricultural and Food Chemistry section).
71. Mitchell S., Zivanovic S. 2002. Water permeability of edible films composed of chitosan and essential oils. McNair program, University of Tennessee, Knoxville. July 25, 2002.
72. Seshadri R., Zivanovic S., Weiss J. 2002. Effect of molecular weight and acid solvent on the thermo-mechanical properties of solution-cast chitosan films. 6th International Hydrocolloids Conference; July 15-19, 2002; Guelph, Canada. Abstract #P-41.
73. Zivanovic S., Buescher R.W., Kim S.K. 2002. Mushroom texture, cell wall composition, and ultrastructure as affected by pH and temperature. Institute of Food Technologists Annual Meeting; June 15-19, 2002; Anaheim, CA. Abstract #100C-19.
74. Dias P.N., Zivanovic S., Howell T.A., Meullenet J-F., Buescher R.W. 2002. Rheological characterization of pickle relish brines. Institute of Food Technologists Annual Meeting; June 15-19, 2002; Anaheim, CA. Abstract 30E-2.
75. Russell K., Weiss J., Zivanovic S., Morris W. 2002. Effect of glass shape and storage temperature on the concentration of polyphenolic compounds in Merlot. Institute of Food Technologists Annual Meeting; June 15-19, 2002; Anaheim, CA. Abstract 61B-28.
76. Seshadri R., Zivanovic S., Weiss J. 2002. Effect of acid solvent on the glass transition of solution-cast chitosan films. Society of Plastic Engineers Southern Regional Meeting. November 2002, Knoxville, TN.
77. Zivanovic S., Buescher R.W. 2001. Alteration of texture and yield of processed mushrooms (*Agaricus bisporus*). Institute of Food Technologists Annual Meeting; 2001 June 24-28; New Orleans, LA. Abstract 88E-24.
78. Zivanovic S., Howard L.R., Buescher R.W. 2000. Effect of proteolytic enzymes on mushroom texture. 220th ACS National Meeting; 2000 August 20-24; Washington, D.C. Abstract 68-AGFD.
79. Buescher R.W., Hamilton C., Howard L.R., Zivanovic S. 2000. Treatment of pickle brines with semectite clay to remove peroxidase and polygalacturonase activity. 220th ACS National Meeting; 2000 August 20-24; Washington, D.C. Abstract 69-AGFD.
80. Niksic M., Zivanovic S., Buescher R. 2000. Effect of added sucrose and starter cultures on preservation of *Agaricus bisporus* by lactic acid fermentation. International Society for Mushroom Science Congress 2000; 2000 May 15-19; Maastricht, The Netherlands; Quality Control, Session 7.
81. Zivanovic S., Buescher R. 1999. Textural changes in mushrooms (*Agaricus bisporus*) associated with changes in cell wall composition and ultrastructure. Institute of Food Technologists Annual Meeting; 1999 July 24-28; Chicago, Ill; p 80. Abstract 37A-21.
82. Zivanovic S., Sutic M. 1995. Effect of chloramphenicol on aflatoxin production. VII Yugoslav Congress of Microbiology; 1995 June 12-16; Herceg Novi, Yugoslavia, VI -15.
83. Zivanovic S., Sutic M. 1994. Influence of honey on *Aspergillus flavus* growth and sporulation and aflatoxin accumulation. 7th International Congress of Bacteriology and Applied Microbiology Division, 7th International Congress of Mycology Division; 1994 July 3-8; Prague, Czech Republic; MS - 15/15.

Invited presentations without published abstract

- Zivanovic S. 2007. Functional and biodegradable chitosan-based films. Institute of Food Technology and Biochemistry. University of Belgrade. Belgrade, Serbia. July 5, 2007.
- Zivanovic S. 2005. Chitin: A Value-Added Product from FWP Shells U.S. Freshwater Prawn & Shrimp Growers Association Annual meeting. Tunica, MS. December 9-10, 2005.
- Zivanovic S. 2005. Functional polysaccharides. Materials Science Seminar Series. Department of Materials Science, College of Engineering, University of Tennessee. October 11, 2005.
- Zivanovic S. 2005. Production, properties, and applications of chitosan. College of Technology. University of Novi Sad. Novi Sad, Serbia. February 23, 2005.
- Zivanovic S. 2005. Physicochemical basis of biopolymers functionality. Institute of Food Technology

- and Biochemistry. University of Belgrade. Belgrade, Serbia. March 2, 2005.
- Zivanovic S. Hill T. 2004. Chitin and chitosan - extractions and uses. U.S. Freshwater Prawn and Shrimp Growers Association Annual Meeting. Tunica, MS. January 16 – 17, 2004.
- Zivanovic S. 2003. Biopolymers in active packaging. A case study: chitosan films. R&DA Fall 2003 meeting: "Research goals and improved support to US military forces". Biloxi, MS. November 3-5, 2003.
- Zivanovic S. 2003. Chitin and chitosan – value added products in shrimp production. Prawn production conference. The University of Tennessee. October 16 - 17, 2003.
- Zivanovic S. 2003. Functional carbohydrates from fungal sources. Penn State University. March 6, 2003.
- Weiss J., Zivanovic L. 2002. The food chemistry and biophysics laboratories at the University of Tennessee – Insights into the physicochemical basis of food engineering and processing. Icelandic Fisheries Laboratories. July 11, 2002. Reykjavik, Iceland.

Presentations without published abstract

- Kit K., Zivanovic S., Davidson P.M., Weiss J. 2005. Nanostructured Membranes for Filtration, Disinfection, and Remediation of Aqueous and Gaseous Systems. Nanotechnology and the environment: Applications and implementations progress review workshop III. October 26 – 28, 2005. Arlington, VA.
- Zivanovic S. 2005 Functional carbohydrates – chitosan. Presented to Danisco Research Group. October 10, 2005. Knoxville, TN.
- Zivanovic S. 2005. Structure and functionality of food polysaccharides. Nutrition Science Institute West High School. June 13 – 17, 2005. Knoxville, TN.
- Zivanovic S. 2004. Overview of Food Chemistry Research in the Department of Food Science and Technology. First Advisory Council Meeting. Department of Food Science and Technology, University of Tennessee. September 24, 2004. Knoxville, TN.
- Zivanovic S. 2004. Functional carbohydrates. Large Animal Clinic Seminar, College of Veterinary Medicine, University of Tennessee. April 14, 2004. Knoxville, TN.
- Zivanovic S., Mount J. 2005. Quality improvements of cheese spread. Coranet 2, Workshop #13. June 30, 2005. Natick MA.
- Zivanovic S. 2004. Chitosan - multifunctional and reusable polysaccharide. NASA FTSCS Meeting; April 21, 2004. Huston, TX.
- Weiss J., Zivanovic S., Mount J. 2003. Rapid retort processing of eggs – recipe formulation and ingredient optimization. Natick Soldier System Center – Egg Umbrella Workshop. January 2003, Natick, MA.
- Zivanovic S. 2003. Cultivation of shiitake mushrooms. UT Vegetable initiative meeting. December 09, 2003. Knoxville, TN.
- Zivanovic S., Mount J., Weiss J. 2002. Modification of commercial pressure-cooked egg product by use of variation in ingredients. CoraNet II Workshop #3. National Center for Food Safety and Technology, Chicago, IL. June 27-28, 2002.
- Russell K., Weiss J., Zivanovic S., Morris W. 2002. Effect of glass shape and storage temperature on the concentration of polyphenolic compounds in Merlot. Winner in undergraduate research competition of agricultural section, UT.
- Zivanovic S. Tenure Track Seminar – Overview of research and teaching plans in the area of functional carbohydrates. Department of Food Science and Technology. February 26, 2002. Knoxville, TN.

GRANTS AND CONTRACTS

Funded, Completed (July 2009 over \$1.5 million)

- NATO ATC (Advanced Training Course): Food Safety and Security- Rapid detection methods, policy making and emergency response. Zivanovic S., Niksic M. NATO Science For Peace And Security Programme. May 18-22, 2009. Belgrade, Serbia. EUR 50,000 (~ \$66,000).

- Seed support for Food Biopolymers and Nanotechnology Center. Harte F., Zivanovic S., Zhong Q. University of Tennessee Institute of Agriculture. 07/01/07 – 06/30/09. \$349,100.
- Improving Switchgrass Stand Establishment through Seed Technology. Sun Grant. Chen S., Zivanovic S., Zale J. 06/16/2007 – 01/15/2009. \$60,000.
- Evaluation of cycling storage temperatures on quality of cheese spread in military rations. Zivanovic S. (P.I.), Mount J.R. Extension of the STP#2018 project. Defense Logistics Agency, CORANET2. 12/12/06 – 12/31/08. \$11,500.
- Improving quality of cheese spread in military rations. Zivanovic S. (P.I.), Mount J.R. Defense Logistics Agency, CORANET2. 03/23/05 – 12/31/08. \$126,686.
- Harte, F. (Co-PI), Zivanovic, S. (Co-PI), and Zhong, Q. (Co-PI). Research equipment funds: Calorimetry set. University of Tennessee – Institute of Agriculture. 2007. \$160,000.
- Nanostructure membranes for filtration, disinfection, and remediation of aqueous and gaseous system. Kit K., Zivanovic S. (co-PI), Davidson P.M., Weiss J. US Environmental Protection Agency (EPA). 08/01/05 – 07/31/08. \$349,200.
- ISEKI_MUNDUS Integrating Safety and Environment Knowledge In World Food Studies. Silva C. and collaborators from 35 universities worldwide. 11/01/2007 - 09/30/2008.
- Zivanovic S. Travel Grant for 2006-2008. Office of Naval Research. 01/10/2006 – 10/31/2008. \$30,000.
- Mechanism of calcium binding in fruit, vegetable, and mushroom tissue. Zivanovic S. (P.I.), Sams C.E., Beelman R. USDA / CSREES / NRI CGP 71.1 Improving Food Quality and Value. 08/01/05 - 08/15/07. \$125,000.
- Ultrasonic extraction and sonochemical modification of chitin and chitosan. Weiss J., Zivanovic S. (co-P.I.) USDA/NRI 71.1. Food Characterization. 01/01/05 - 12/31/07. \$250,938; UT part \$119,184.
- Efficacy of post-processing interventions for the reduction of *Listeria monocytogenes* on frankfurters. Golden D.A., Sumner S., Zivanovic S. (co-PI), Davidson P.M. USDA/NIFSI (through subcontract with VA Tech). 09/15/05 - 9/14/07. \$599,895; UT part: \$269,835.
- Identification of opportunities for production of ingredients based on further processes fresh mushrooms, off-grade mushrooms, bi-products, and waste materials. Zivanovic S. (P.I.). Mushroom council. 09/01/05 – 05/31/06. \$29,441.
- Novel technologies for improving corn dehulling. Zivanovic S. (P.I.), Harte F., Zhong Q., Mount J. Bush Brothers and Co. 10/17/05 – 01/30/06. \$8,000.
- Multifunctional biodegradable food packaging films and coatings. Zivanovic S. (P.I.). NASA FTCS Seed Grant. 06/01/04 – 08/31/04. \$6,000.
- Characterization of biodegradable antimicrobial chitosan films. Zivanovic S. (P.I.), Weiss J. Oak Ridge National Laboratories, High-Temperature Materials Laboratories. 11/01/04 – 01/31/07. User proposal – all equipment use fees waived.
- Acquisition of Spin coater. Zivanovic S. (P.I.). NASA FTCS Equipment Grant. 03/08/04. \$6,000.
- Optimization of chitosan coatings to extend shelf life of fresh fruits. Zivanovic S. (P.I.), Mount J.R., Draughon F.A., Sams C.E. Southern Region Small Fruit Consortium. 03/01/04 - 08/30/04. \$5,000.
- Chitosan films for accelerated wound healing in humans and animals. Zivanovic S. (P.I.), Draughon F.A., Oliver S.P. Food Safety Center of Excellence, University of Tennessee. 09/05/03 – 08/31/04. \$26,000.
- Edible chitosan coatings in ensuring food safety of fresh small berry fruits. Mount J.R., Zivanovic S. (co-PI), Draughon F.A. Food Safety Center of Excellence, University of Tennessee. 09/01/03 – 08/31/04. \$22,000.
- Chitosan delivery systems for ensuring safety of drinking water and provision of nutrients. Draughon F.A., Zivanovic S. (co-PI), Weiss J. Food Safety Center of Excellence, University of Tennessee. 06/01/03 – 05/31/04. \$38,750.
- Edible chitosan coatings as novel effective biopesticide. Zivanovic S. (P.I.), Mount J.R., Draughon A.F., Sams C.E. Southern Region Small Fruit Consortium. 03/01/03-08/30/03. \$ 5,000.
- Improving antimicrobial activity and quality of chitosan via high-intensity ultrasound assisted extraction. Weiss J., Zivanovic S. (co-PI), Hill T. Food Safety Center of Excellence, University of Tennessee. 01/10/03 - 09/01/04. \$9,000.

- Rapid retort processing of eggs – Product development and ingredient optimization. Weiss J., Mount J., Zivanovic S. (co-P.I.), Penfield M. Defense Logistics Agency. 01/10/03 – 09/01/04. \$70,257.
- Developing of growing practice for shiitake mushrooms (*Lentinus edodes*) in Tennessee. Zivanovic S. (P.I.). Vegetable initiative, University of Tennessee. 09/01/02 – 08/31/04 (extended). \$3,000.
- Pesticide analyses in beans and greens. Zivanovic S. (P.I.). Bush Brothers and Co. 09/01/02 – 08/31/04. \$29,790.
- Lab supplies (glassware, solvents, standards). Zivanovic S. (P.I.). Bush Brothers and Co. 09/01/02. \$5,000 equivalent value.
- Antimicrobial activity of essential oils incorporated in chitosan films against *Listeria monocytogenes* and *Escherichia coli*. Zivanovic S. (P.I.), Draughon F.A., Weiss J. Food Safety Center of Excellence, University of Tennessee. 7/01/02 – 06/30/03. \$41,180.
- Prevention and control of food-borne pathogens in food emulsions using chitosan. Weiss J., Zivanovic S. (co-P.I.), Davidson P.M. Food Safety Center of Excellence, University of Tennessee. 07/01/02 – 06/30/03. \$12,200.

Funded, In Progress

- Extraction and characterization of beta-glucans from fungal sources. Zivanovic S., Golden D. UTIA. 11/15/09-03/15/11. \$25,000.
- Green technology for cleaning wood barrels. Young T., Zivanovic S., Taylor A. UTIA. 11/15/09 - 03/15/11. \$25,000.
- Chitosan as an eco-friendly approach for the control of foodborne viruses. D'Souza D., Zivanovic S. UTIA. 11/15/09 - 03/15/11. \$25,000.
- Heat stable micelles of glycated proteins for clear beverage and nanodelivery applications. Zhong Q., Zivanovic S., Hayes D. UTIA. 11/15/09 - 03/15/11. \$25,000.
- An optimization model for packaging Meal-Ready-to-Eat, Sawhney R., Wiley B., Zivanovic S. Defense Logistics Agency, CORANET3. 7/01/09 – 06/30/11 \$198,923.
- Evaluation of Retention, Stability, and Bioavailability of Commercially Available Encapsulated Vitamins and Their effects on Quality of MREs. Zivanovic S. Defense Logistics Agency, CORANET3. 12/23/08-02/04/11. \$229,657.
- Travel Grant for 2008-210. Zivanovic S., Mount J., Kit K., Wiley B. Office of Naval Research. 11/01/2008 – 10/31/2010. \$40,000.
- Quality Improvement of Applesauce Type VI and VII. Zivanovic S., Mount J., Sams C. Defense Logistics Agency, CORANET2. 08/20/08-08/20/11. \$229,702.
- Evaluation of Processes and Additives Improve Quality and Storage Life of Wet Pack Peaches. Mount J., Zivanovic S., Sams C. Defense Logistics Agency, CORANET2. 08/15/08-05/14/10. \$143,663.

OTHER ACTIVITIES

Profession

- Panel Member – Funding Agencies
 - USDA T-STAR
 - Ad-Hoc Referee/Reviewer – Funding Agencies
 - USDA/NRI Food Quality
 - Mississippi-Alabama Sea Grant Consortium
 - Center for Food and Nutrition Policy, USDA
- Ad-Hoc Referee/Reviewer – Journals
 - Biomacromolecules
 - ActaBioMaterialia
 - Food Chemistry
 - Food Hydrocolloids
 - Food Science and Technology International
 - Journal of Agricultural and Food Chemistry
 - Journal of Food Protection

Journal of Food Science

Journal Thermal Analysis and Calorimetry

Lebensmittel – Wissenschaft – und – Technologie (Food Science and Technology)

Mycology

- Technical Session Moderator:
 - IFT 2009 Institute of Food Technologists Annual Meeting
 - IFT 2008 Institute of Food Technologists Annual Meeting; 2008, June 28 – July 1; New Orleans, LA. Moderator for Session #167 Carbohydrate division paper competition.
 - IFT 2007 Institute of Food Technologists Annual Meeting; 2007, July 28 – August 1; Chicago, IL. Moderator for Session #075 Fruits and vegetables: Storage/processing/packaging.
 - IFT 2007 Institute of Food Technologists Annual Meeting; 2007, July 28 – August 1; Chicago, IL. Moderator for Session #137 Carbohydrates: Structure-function relationships of non-starch polysaccharides.
 - IFT 2006 Institute of Food Technologists Annual Meeting; June 24-28, 2006; Orlando, FL. Moderator for Session #014 Carbohydrates: analytical chemistry and functional properties.
 - IFT 2006 Institute of Food Technologists Annual Meeting; June 24-28, 2006; Orlando, FL. Moderator for Session #096 Carbohydrates: Starches and cereals – chemistry and functional properties.
 - IFT 2005 Institute of Food Technologists Annual Meeting; 2005, July 16-2; New Orleans, LA. Moderator for Session #32 Food Chemistry: Component interactions and processing effects.
 - IFT 2004 Institute of Food Technologists Annual Meeting; 2004, July 12-16; Las Vegas, NE. Moderator for Session #94 Food Chemistry: Chemical effects of food processing, preservation and formulation; networked with colleagues from academia and industry.
- Chair 2009/10, IFT Carbohydrate Division
- Member at Large, IFT Carbohydrate Division (2005 – 2009)
- Councilor, IFT Carbohydrate Division (2006 – 2007)
- Member at Large, IFT Fruit and Vegetable Produce Division (2005 – 2009)
- IFT Food Chemistry Division: Nominating and Long range planning committees (2002-2003)
- USDA National Organic Standards Board – served as an advisor on the policy process development for heparin use (2002)
- Member of Organization Committee for the II Yugoslav Symposium of Food Technologists (1995; more than one thousand attendants).

University

- Faculty Senate, UT (2007-10)
- Faculty Senate UT System Relations Committee (2009-10)
- Faculty Senate Appeals committee, UT (2007-10)
- Student Affairs Council (2008-10)
- UTIA Advisory Council (2007-10; Chair 2008/09)
- CASNR Academic Program Review Process Taskforce (2008)
- Search committee for UTIA Research Dean, UT (2007)
- Science Olympiad – organized event and judged the Food Science event for middle and high school competition (2006, 2007, 2008)
- Department of Food Science and Technology, UT: Safety committee, Newsletter committee, Awards committee, McLeod Hall renovation committee (2002-present)
- Search committee for Organic and Alternative Vegetable Production faculty position; Plant Sciences; UT (2005)
- Search committee for Food Biopolymer Chemist faculty position, Department of Food Science and Technology, UT (2004)
- Search committee for faculty position for Physicochemical properties of Food, Department of Food Science and Technology, UT (2004)
- Search committee for Vegetable Physiology faculty position; Plant Sciences, UT (2004)
- Search committee for Department Head for Department of Food Science and Technology, UT (2003)

- Search committee for Dean of the Dale Bumpers College of Agricultural, Food, and Life Sciences, University of Arkansas (2001)
- Grievance committee, University of Arkansas (2001)
- Organic production workshop, UT, Knoxville, TN (2004, 2005)
- Participated in the reception for CASNR students, varsity visit, UT (2002)
- Participated in the first Governor's School for Agricultural Sciences, Knoxville, TN (2004)
- Served as a judge on Sigma Xi (Society of Science and Engineering) graduate student competition, UT (2003)

Public

- Wine of the South - volunteer at the event; Knoxville, TN (2004-2009)
- Growing shiitake mushrooms in Tennessee - Flyer for Ag Day, UT; Knoxville, TN (2003, 2004)
- Shiitake Mushroom Cultivation – small scale production on natural logs. Steak & Potatoes Field Day. Plateau Experiment Station. Crossville, TN (2004)
- 51st and 52nd Annual Southern Appalachian Science and Engineering Fair, UT. Served as a judge (2003, 2004)
- Member of a team for the National Quality Control of Honey, Yugoslavia (1995, 1996).