



Jacek Jaczynski

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Education:

- Oregon State University, Food Science and Technology, Ph.D., 2002, dissertation: “Surimi seafood under thermal and e-beam processing”
- Oregon State University, Food Science and Technology, M.S., 1998, thesis: “Antimicrobial activity of nisin and hen lysozyme acting in tandem against *Listeria monocytogenes* on a model surface”
- Agricultural University of Poznan (Poland), Biotechnology, M.S., 1995, thesis: “Optimization of a high-cell density propionic acid fermentation in a continuous bio-reactor system with micro-carriers”

Work and Teaching Experience:

- Professor (teaching – 50%, research – 50%), West Virginia University, 2013 to present
- Associate Professor (teaching – 50%, research – 50%), West Virginia University, 2008-2013
- Assistant Professor (teaching – 50%, research – 50%), West Virginia University, 2002-2008
- Graduate Research Assistant, Oregon State University Seafood Laboratory, 1998-2002
- Graduate Research Assistant, Oregon State University, 1996-1998

Annual Teaching:

- HN&F 126 – Society and Food (HN&F – Human Nutrition and Food), 3 CR, fall and spring semesters, annual enrollment ~220, approved for General Education Foundation (GEF). I significantly modified this course and have enjoyed a steady increase in student enrollment from ~55 to 125 students per semester since I had started teaching it. The enrollment limitation is 125. I find this course very rewarding, because it provides me with a considerable challenge as a college educator to teach large group of diverse majors at their early college career (mainly freshmen). At WVU teaching is assessed by the Student Evaluation of Instruction (SEI). My average SEI’s for HN&F 126 is 4.76 (scale 0.00-5.00) ranging from 4.07 to 4.99.
- HN&F 126 online – Society and Food, 3 CR, summer semester available through WVU Distance Education, enrollment ~50, approved for GEF. I took my face-to-face HN&F 126 (above) to the online learning environment. I use a variety of digital media in the iLearn 9 format to enhance students’ educational experience and to sustain engaged learning. Teaching this online class has been a very positive and encouraging experience for me. College students who were born after the internet had become available actively seek quality online education and eagerly engage in it. This online class also allows me to reach students all around the globe as well as non-traditional students who otherwise would not be able to further their education. My average SEI’s for HN&F 126 online is 4.80 ranging from 4.64 to 4.98.
- FDST 200 – Food Science and Technology, 3 CR, fall semesters, enrollment ~70, approved for GEF. I developed this course at WVU. As I have continually upgraded this course, the student enrollment grew to ~70. The enrollment limitation is 70. I genuinely enjoy teaching FSDT 200 – a course that I developed from the ground up and always look forward to the start of each fall semester to meet my new FDST 200 class. My average SEI’s for FDST 200 is 4.86 ranging from 4.78 to 4.95.
- FDST 200 online – Food Science and Technology, 3 CR, summer semester available through WVU Distance Education, enrollment ~40, approved for GEF. Similar to my face-to-face HN&F 126 and HN&F 126 online, I took my face-to-face FDST 200 to the online learning environment and developed FDST 200 online. As with HN&F 126 online, I use the same online format and interactive/engaging concepts for my FDST 200 online. I truly enjoy teaching my online students who are literally scattered all over the world. My average SEI’s for FDST 200 online is 4.72 ranging from 4.66 to 4.78.



- FDST 445/545 – Food Microbiology, 3 CR, spring semesters, enrollment ~30. I developed this senior/graduate level course at WVU. Since the course approval, FDST 445/545 has experienced a steady increase in student enrollment and currently attracts ~30 senior/graduate level students from our college (various majors) as well as from the Medical School, Engineering, Biology, and Chemistry majors. FDST 445/545 is a senior/graduate level course in my area of research specialization; and therefore, I have an enthusiastic approach to teaching this course. My average SEI's for this class is 4.88 ranging from 4.71 to 4.98.

I enthusiastically enjoy face-to-face and online interaction with students and strive to provide a positive learning environment. I believe in interactive visual learning, which aids in comprehension of the complex scientific phenomena that are directly applicable to food science and nutrition. I have developed interactive audio/video DVDs for all of my face-to-face courses and I use them as course guides. Students who enroll in my face-to-face courses receive the DVD for free. I have expanded my teaching endeavor to the online environment. I utilize various interactive animations and cartoons in both my online and face-to-face classes. These interactive tools allow students grasping some of the complex concepts. I learned that the 21st century students expect these innovative techniques and truly enjoy this type of learning, which translates in their further desire for higher education. My teaching repertoire spans from entry-level freshman classes, through sophomore as well as senior and graduate-level courses. I teach more focused low enrollment classes as well as medium and large enrollment courses with General Education Curriculum status. I utilize face-to-face and online teaching environments to deliver the content of my classes. My teaching efforts provide education to above 400 students annually.

Professional Affiliations:

- Institute of Food Technologists
- American Chemical Society
- World Aquaculture Society
- Gamma Sigma Delta

Patents and Trademarks (* – denotes primary inventor):

- Jaczynski* J. 2010. Continuous protein and lipid recovery from food animal processing byproducts. U.S. Patent and Trademark Office. Patent number 7,763,717.
- Matak KE, Jaczynski* J. 2012. YumEGGa™ - ready-to-eat egg stick snack with nutraceutical properties. Patent and Trademark Office. Trademark number 4,169,256.

Book Chapters (* – denotes corresponding author):

2004

- Jaczynski* J, Park JW. 2004. Temperature, Color and Texture Prediction Models for Surimi Seafood Pasteurization. In: Shahidi F, Spanier A, Ho CT, Braggins T, editors. *Quality of Fresh and Processed Foods*. New York: Kluwer Academics/Plenum Publishing. p 121-34.
- Jaczynski* J, Park JW. 2004. Application of Electron Beam to Surimi Seafood. In: Komolprasert V, Morehouse K, editors. *Irradiation of Food and Packaging: Recent Developments*. Washington, DC: American Chemical Society. p 165-79.

2005

- Su* YC, Daeschel MA, Frazier J, Jaczynski J. 2005. Microbiology and Pasteurization of Surimi Seafood. In: Park JW, editor. *Surimi and Surimi Seafood*, 2nd ed. Boca Raton: CRC Press. p 583-648.
- Jaczynski* J, Hunt A, Park JW. 2005. Safety and Quality of Frozen Fish, Shellfish and Related Products. In: Sun DW, editor. *Handbook of Frozen Food Processing and Packaging*. Boca Raton: CRC Press. p 341-377.

2007



- Torres* JA, Chen YC, Rodrigo-García J, Jaczynski J. 2007. Recovery of By-products from Seafood Processing Streams. In: Shahidi F, editor. *Maximizing the Value of Marine By-products*. Boca Raton: CRC Press. p 65-90.
2008
- Jaczynski* J. 2008. Protein and Lipid Recovery from Food Processing By-products Using Isoelectric Solubilization/Precipitation. In: Papadopoulos KN, editor. *Food Chemistry Research Developments*. Hauppauge: Nova Science Publishers. p 167-198.
2009
- Jaczynski* J. 2009. Application of Electron Beam to Food Processing with Emphasis on Seafood Products: Inactivation of Food-borne Pathogens and Effects on Food Quality. In: Bellinghouse VC, editor. *Food Processing: Methods, Techniques, and Trends*. Hauppauge: Nova Science Publishers. p 211-247.
- Jaczynski* J, Chen YC, Velazquez G, Torres JA. 2009. Procesamiento con haz de Electrones. In: Legarreta IG, Rosmini MA, Armenta R, editors. *Tecnologia de Productos de Origen Acuatico Pescado*. Mexico City: Editorial Limusa, S.A. de C.V. p 405-426.
- Jaczynski* J, Chen YC, Velazquez G, Torres JA. 2009. Recuperacion de Proteinas y Lipidos. In: Legarreta IG, Rosmini MA, Armenta R, editors. *Tecnologia de Productos de Origen Acuatico Pescado*. Mexico City: Editorial Limusa, S.A. de C.V. p 461-474.
- Matak KE, Jaczynski* J. 2009. Food Preservation with Electron Beam. In: Hulsen I, Ohnesorge E, editors. *Food Science Research and Technology*. Hauppauge: Nova Science Publishers. p 229-246.
2010
- Rodrigo-García J, Jaczynski J, Torres* JA. 2010. Recovery and Utilization of Proteins from Surimi Processing Water. In: Bechtel PJ, Smiley S, editors. *A Sustainable Future: Fish Processing Byproducts*. Fairbanks: Alaska Sea Grant, University of Alaska. p 147-160.
- Gehring CK, Gigliotti JC, Tou JC, Moritz JS, Jaczynski* J. 2010. The Biochemistry of Isoelectric Processing and Nutritional Quality of Proteins and Lipids Recovered with This Technique. In: Haugen S, Meijer S, editors. *Handbook of Nutritional Biochemistry: Genomics, Metabolomics and Food Supply*. Hauppauge: Nova Science Publishers. p 255-288.
2011
- Tahergorabi R, Hosseini SV, Jaczynski* J. 2011. Seafood Proteins. In: Phillips GO, Williams PA, editors. *Handbook of Food Proteins*. Cambridge: Woodhead Publishing Ltd. p 116-149.
2012
- Jaczynski* J, Tahergorabi R, Hunt A, Park JW. 2012. Safety and Quality of Frozen Aquatic Food Products. In: Sun DW, editor. *Handbook of Frozen Food Processing and Packaging*, 2nd ed. Boca Raton: CRC Press. p 343-385.
2013
- Su* YC, Daeschel MA, Frazier J, Jaczynski J. 2013. Microbiology and Pasteurization of Surimi Seafood. In: Park JW, editor. *Surimi and Surimi Seafood*, 3rd ed. Boca Raton: CRC Press. p 375-410.
2014
- Tahergorabi R, Jaczynski J, Matak* KE. 2014. Electron Beam Inactivation of Foodborne Pathogens with an Emphasis on *Salmonella*. In: Gomez-Lopez VM, Bhat R, editors. *Practical Food Safety: Contemporary Issues and Future Directions*. Hoboken: Wiley Blackwell Publishing. p 451-471.
- Tahergorabi R, Jaczynski* J. 2014. Isoelectric Solubilization/Precipitation as a Means to Recover Protein and Lipids from Seafood By-products. In: Kim SK, editor. *Seafood Processing By-Products: Trends and Applications*. New York: Springer Publishing Company. p 101-124.
2015



- Jaczynski* J, Tahergorabi R. 2015. Isoelectric Processing of Seafood Products: Amino Acid and Fatty Acid Profiles. In: Preedy VR, editor. *Processing and Impact on Active Components in Food*. New York: Elsevier Academic Press. p 417-427.

2016

- Tahergorabi R, Jaczynski* J. 2016. Seafood Proteins and Human Health. In: Raatz S, Bibus D, editors. *Fish and Fish Oil in Health Promotion and Disease Prevention*. New York: Elsevier Academic Press. p 323-331.
- Tahergorabi R, Matak KE, Jaczynski* J. 2016. Inactivation Kinetics of Foodborne Pathogens with Electron Beam Emphasizing *Salmonella*. In: Jaiswal AK, editor. *Food Processing Technologies: Impact on Product Attributes*. Boca Raton: CRC Press. p 671-691.

2017

- Zhong T, Oporto* GS, Jaczynski J. 2017. Antimicrobial Food Packaging with Cellulose-Copper Nanoparticles Embedded in Thermoplastic Resin. In: Grumezescu A, editor. *Food Preservation: Nanotechnology in the Agri-Food Industry*. New York: Elsevier Academic Press. p 671-702.
- Tahergorabi R, Jaczynski* J. 2017. Nutraceutical Egg Products. In: Hester P, editor. *Egg Innovations and Strategies for Improvement*. New York: Elsevier Academic Press. p 271-280.

Peer-Reviewed Publications (* – denotes corresponding author and in some instances co-corresponding authors; impact factors and journal rankings based on 2015 Journal Citation Reports[®]):

2002

- Jaczynski J, Park* JW. 2002. Temperature prediction during thermal processing of surimi seafood. *Journal of Food Science* 67(8):3053-3057 (impact: 1.649, rank: 49/125).

2003

- Jaczynski J, Park* JW. 2003. Predictive models for microbial inactivation and texture degradation in surimi seafood during thermal processing. *Journal of Food Science* 68(3):1025-1030 (impact: 1.649, rank: 49/125).
- Jaczynski J, Park* JW. 2003. Physicochemical properties of surimi seafood as affected by electron beam and heat. *Journal of Food Science* 68(5):1626-1630 (impact: 1.649, rank: 49/125).
- Jaczynski J, Park* JW. 2003. Microbial inactivation and electron penetration in surimi seafood during electron beam processing. *Journal of Food Science* 68(5):1788-1792 (impact: 1.649, rank: 49/125).

2004

- Jaczynski J, Park* JW. 2004. Physicochemical changes in Alaska pollock surimi and surimi gel as affected by electron beam. *Journal of Food Science* 69(1):53-57 (impact: 1.649, rank: 49/125).

2005

- Moritz* JS, Parsons AS, Buchanan NP, Baker NJ, Jaczynski J, Gekara OJ, Bryan WB. 2005. Synthetic methionine and feed restriction effects on performance and meat quality of organically reared broiler chickens. *Journal of Applied Poultry Research* 14:521-535 (impact: 0.576, rank: 38/58).

2006

- Black JL, Jaczynski* J. 2006. Temperature effect on inactivation kinetics of *Escherichia coli* O157:H7 by electron beam in ground beef, chicken breast meat, and trout fillets. *Journal of Food Science* 71(6):M221-227 (impact: 1.649, rank: 49/125).
- Chen YC, Nguyen J, Semmens K, Beamer S, Jaczynski* J. 2006. Enhancement of omega-3 fatty acid content in rainbow trout (*Oncorhynchus mykiss*) fillets. *Journal of Food Science* 71(7):C383-389 (impact: 1.649, rank: 49/125).

2007

- Chen YC, Nguyen J, Semmens K, Beamer S, Jaczynski* J. 2007. Physicochemical changes in omega-3-enhanced farmed rainbow trout (*Oncorhynchus mykiss*) muscle during refrigerated storage. *Food Chemistry* 104(3):1143-1152 (impact: 4.052, rank: 7/125).



- Chen YC, Jaczynski* J. 2007. Gelation of protein recovered from whole Antarctic krill (*Euphausia superba*) by isoelectric solubilization/precipitation as affected by functional additives. *Journal of Agricultural and Food Chemistry* 55(5):1814-1822 (impact: 2.857, rank: 20/125).
- Tou* JC, Jaczynski J, Chen YC. 2007. Krill for human consumption: nutritional value and potential health benefits. *Nutrition Reviews* 65(2):63-77 (impact: 5.591, rank: 4/80).
- Chen YC, Jaczynski* J. 2007. Protein recovery from rainbow trout (*Oncorhynchus mykiss*) processing by-products via isoelectric solubilization/precipitation and its gelation properties as affected by functional additives. *Journal of Agricultural and Food Chemistry* 55(22):9079-9088 (impact: 2.857, rank: 20/125).
- Chen YC, Tou JC, Jaczynski* J. 2007. Amino acid, fatty acid, and mineral profiles of materials recovered from rainbow trout (*Oncorhynchus mykiss*) processing by-products using isoelectric solubilization/precipitation. *Journal of Food Science* 72(9):C527-535 (impact: 1.649, rank: 49/125).
- Black JL, Jaczynski* J. 2007. Effect of ionic strength on inactivation kinetics of *Escherichia coli* O157:H7 by electron beam in ground beef, chicken breast meat, and trout fillets. *International Journal of Food Science and Technology* 42(7):894-902 (impact: 1.504, rank: 60/125).
- Chalise PR, Hotta E, Matak KE, Jaczynski* J. 2007. Inactivation kinetics of *Escherichia coli* by pulsed electron beam. *Journal of Food Science* 72(7):M280-285 (impact: 1.649, rank: 49/125).
- 2008**
- Black JL, Jaczynski* J. 2008. Effect of water activity on inactivation kinetics of *Escherichia coli* O157:H7 by electron beam in ground beef, chicken breast meat, and trout fillets. *International Journal of Food Science and Technology* 43(4):579-586 (impact: 1.504, rank: 60/125).
- Sommers* CH, Rajkowski KT, Jaczynski J, Matak KE. 2008. Letter to the editor: Radiation sensitivity of *Escherichia coli* JM109 and DH5a. *Journal of Food Science* 73(1):vii-viii (impact: 1.649, rank: 49/125).
- Levanduski L, Jaczynski* J. 2008. Increased resistance of *Escherichia coli* O157:H7 to electron beam following repetitive irradiation at sub-lethal doses. *International Journal of Food Microbiology* 121(3):328-334 (impact: 3.445, rank: 14/125).
- Chen YC, Nguyen J, Semmens K, Beamer S, Jaczynski* J. 2008. Effects of dietary alpha-tocopheryl acetate on lipid oxidation and alpha-tocopherol content of novel omega-3-enhanced farmed rainbow trout (*Oncorhynchus mykiss*) fillets. *LWT – Food Science and Technology* 41(2):244-253 (impact: 2.711, rank: 23/125).
- Chen YC, Nguyen J, Semmens K, Beamer S, Jaczynski* J. 2008. Chemical changes in omega-3-enhanced farmed rainbow trout (*Oncorhynchus mykiss*) fillets during abusive-temperature storage. *Food Control* 19(6):599-608 (impact: 3.388, rank: 15/125).
- Gigliotti JC, Jaczynski J, Tou* JC. 2008. Determination of the nutritional value, protein quality and safety of krill protein concentrate isolated using an isoelectric solubilization/precipitation technique. *Food Chemistry* 111(1):209-214 (impact: 4.052, rank: 7/125).
- 2009**
- Chen YC, Tou JC, Jaczynski* J. 2009. Amino acid and mineral composition of protein and other components and their recovery yields from whole Antarctic krill (*Euphausia superba*) using isoelectric solubilization/precipitation. *Journal of Food Science* 74(2):H31-39 (impact: 1.649, rank: 49/125).
- Taskaya L, Chen YC, Beamer S, Tou JC, Jaczynski* J. 2009. Compositional characteristics of materials recovered from whole gutted silver carp (*Hypophthalmichthys molitrix*) using isoelectric solubilization/precipitation. *Journal of Agricultural and Food Chemistry* 57(10):4259-4266 (impact: 2.857, rank: 20/125).
- Taskaya L, Jaczynski* J. 2009. Flocculation-enhanced protein recovery from fish processing by-products by isoelectric solubilization/precipitation. *LWT – Food Science and Technology* 42(2):570-575 (impact: 2.711, rank: 23/125).



- Taskaya L, Chen YC, Jaczynski* J. 2009. Functional properties of proteins recovered from whole gutted silver carp (*Hypophthalmichthys molitrix*) by isoelectric solubilization/precipitation. *LWT – Food Science and Technology* 42(6):1082-1089 (impact: 2.711, rank: 23/125).
- Taskaya L, Chen YC, Beamer S, Jaczynski* J. 2009. Texture and colour properties of proteins recovered from whole gutted silver carp (*Hypophthalmichthys molitrix*) using isoelectric solubilisation/precipitation. *Journal of the Science of Food and Agriculture* 89(2):349-358 (impact: 2.076, rank: 37/125).
- Gehring CK, Davenport MP, Jaczynski* J. 2009. Functional and nutritional quality of protein and lipid recovered from fish processing by-products and underutilized aquatic species using isoelectric solubilization/precipitation. *Current Nutrition and Food Science* 5(1):17-39 (impact: NA, rank: NA).
- Gehring CK, Jaczynski J, Moritz* JS. 2009. Improvement of pellet quality with proteins recovered from whole fish using isoelectric solubilization-precipitation. *Journal of Applied Poultry Research* 18:418-431 (impact: 0.576, rank: 38/58).
- Lansdowne L, Beamer S, Jaczynski J, Matak* KE. 2009. Survival of *Listeria innocua* after isoelectric solubilization and precipitation of fish protein. *Journal of Food Science* 74(4):M201-205 (impact: 1.649, rank: 49/125).
- Lansdowne L, Beamer S, Jaczynski J, Matak* KE. 2009. Survival of *Escherichia coli* after isoelectric solubilization/precipitation of fish. *Journal of Food Protection* 72(7):1398-1403 (impact: 1.609, rank: 50/125).

2010

- James DL, Jaczynski J, Matak* KE. 2010. Electron beam irradiation on nalidixic acid-resistant *Salmonella* Montevideo in cooked tomato puree of various pH values. *Journal of Food Safety* 30(3):515-525 (impact: 0.915, rank: 79/125).
- Hvizdzak AL, Beamer S, Jaczynski J, Matak* KE. 2010. Use of electron beam irradiation for the reduction of *Salmonella enterica* serovars Typhimurium and Tennessee in peanut butter. *Journal of Food Protection* 73(2):353-357 (impact: 1.609, rank: 50/125).
- Matak* KE, Hvizdzak AL, Beamer SK, Jaczynski J. 2010. Recovery of *Salmonella enterica* serovars Typhimurium and Tennessee in peanut butter after electron beam exposure. *Journal of Food Science* 75(7):M462-467 (impact: 1.649, rank: 49/125).
- Taskaya L, Chen YC, Jaczynski* J. 2010. Color improvement by titanium dioxide and its effect on gelation and texture of proteins recovered from whole fish using isoelectric solubilization/precipitation. *LWT – Food Science and Technology* 43(3):401-408 (impact: 2.711, rank: 23/125).
- Kassis N, Drake SR, Beamer SK, Matak KE, Jaczynski* J. 2010. Development of nutraceutical egg products with omega-3-rich oils. *LWT – Food Science and Technology* 43(5):777-783 (impact: 2.711, rank: 23/125).
- Kassis N, Beamer SK, Matak KE, Tou JC, Jaczynski* J. 2010. Nutritional composition of novel nutraceutical egg products developed with omega-3 rich oils. *LWT – Food Science and Technology* 43(8):1204-1212 (impact: 2.711, rank: 23/125).
- Bridges KM, Gigliotti JC, Altman S, Jaczynski J, Tou* JC. 2010. Determination of digestibility, tissue deposition, and metabolism of omega-3 fatty acid content of krill protein concentrate in growing rats. *Journal of Agricultural and Food Chemistry* 58(5):2830-2837 (impact: 2.857, rank: 20/125).

2011

- Gigliotti JC, Smith AL, Jaczynski J, Tou* JC. 2011. Consumption of krill protein concentrate prevents early renal injury and nephrocalcinosis in female Sprague-Dawley rats. *Urolithiasis* 39(1):59-67 (impact: 1.454, rank: 49/77).
- Gigliotti JC, Davenport MP, Beamer SK, Tou JC, Jaczynski* J. 2011. Extraction and characterization of lipids from Antarctic krill (*Euphausia superba*). *Food Chemistry* 125(3):1028-1036 (impact: 4.052, rank: 7/125).

- Gehring CK, Gigliotti JC, Moritz JS, Tou JC, Jaczynski* J. 2011. Functional and nutritional characteristics of proteins and lipids recovered by isoelectric processing of fish by-products and low-value fish: A review. *Food Chemistry* 124(2):422-431 (impact: 4.052, rank: 7/125).
- Tahergorabi R, Beamer SK, Matak KE, Jaczynski* J. 2011. Effect of isoelectric solubilization/precipitation and titanium dioxide on whitening and texture of proteins recovered from dark chicken-meat processing by-products. *LWT – Food Science and Technology* 44(4):896-903 (impact: 2.711, rank: 23/125).
- Pietrowski BN, Tahergorabi R, Matak KE, Tou JC, Jaczynski* J. 2011. Chemical properties of surimi seafood nutrified with ω -3 rich oils. *Food Chemistry* 129(3):912-919 (impact: 4.052, rank: 7/125).
- Simmons CA, Turk P, Beamer S, Jaczynski J, Semmens K, Matak* KE. 2011. The effect of a flaxseed oil-enhanced diet on the product quality of farmed brook trout (*Salvelinus fontinalis*) fillets. *Journal of Food Science* 76(3):S192-197 (impact: 1.649, rank: 49/125).
- Otto RA, Paker I, Bane L, Beamer S, Jaczynski J, Matak* KE. 2011. Survival of *Listeria innocua* after isoelectric solubilization/precipitation with acetic and citric acids. *Journal of Food Protection* 74(8):1348-1352 (impact: 1.609, rank: 50/125).
- Otto RA, Beamer S, Jaczynski J, Matak* KE. 2011. The effect of using citric or acetic acid on survival of *Listeria monocytogenes* during fish protein recovery by isoelectric solubilization and precipitation process. *Journal of Food Science* 76(8):M579-583 (impact: 1.649, rank: 49/125).
- Tesfai AT, Beamer SK, Matak KE, Jaczynski* J. 2011. Radioresistance development of DNA repair deficient *Escherichia coli* DH5 α in ground beef subjected to electron beam at sub-lethal doses. *International Journal of Radiation Biology* 87(6):571-578 (impact: 1.779, rank: 3/32).
- Tesfai AT, Beamer SK, Matak KE, Jaczynski* J. 2011. Microbial radio-resistance of *Salmonella* Typhimurium in egg increases due to repetitive irradiation with electron beam. *Radiation Physics and Chemistry* 80(4):591-596 (impact: 1.270, rank: 7/32).

2012

- Tahergorabi R, Matak KE, Jaczynski* J. 2012. Application of electron beam to inactivate *Salmonella* in food: Recent developments. *Food Research International* 45(2):685-694 (impact: 3.182, rank: 18/125).
- El-Rawass AL, Hvizdzak A, Davenport MP, Beamer SK, Jaczynski J, Matak* KE. 2012. Electron beam irradiation on quality indicators of peanut butter over a storage period. *Food Chemistry* 133(1):212-219 (impact: 4.052, rank: 7/125).
- Tahergorabi R, Sivanandan L, Beamer SK, Matak KE, Jaczynski* J. 2012. A three-prong strategy to develop functional food using proteins isolates recovered from chicken processing by-products with isoelectric solubilization/precipitation. *Journal of the Science of Food and Agriculture* 92(12):2534-2542 (impact: 2.076, rank: 37/125).
- Tahergorabi R, Sivanandan L, Jaczynski* J. 2012. Dynamic rheology and endothermic transitions of proteins recovered from chicken-meat processing by-products using isoelectric solubilization/precipitation and addition of TiO₂. *LWT – Food Science and Technology* 46(1):148-155 (impact: 2.711, rank: 23/125).
- Pietrowski BN, Tahergorabi R, Jaczynski* J. 2012. Dynamic rheology and thermal transitions of surimi seafood enhanced with ω -3-rich oils. *Food Hydrocolloids* 27(2):384-389 (impact: 3.858, rank: 9/125).
- Tahergorabi R, Jaczynski* J. 2012. Physicochemical changes in surimi with salt substitute. *Food Chemistry* 132(3):1281-1286 (impact: 4.052, rank: 7/125).
- Tahergorabi R, Beamer SK, Matak KE, Jaczynski* J. 2012. Salt substitution in surimi seafood and its effects on instrumental quality attributes. *LWT – Food Science and Technology* 48(2):175-181 (impact: 2.711, rank: 23/125).
- Tahergorabi R, Beamer SK, Matak KE, Jaczynski* J. 2012. Functional food products made from fish protein isolate recovered with isoelectric solubilization/precipitation. *LWT – Food Science and Technology* 48(1):89-95 (impact: 2.711, rank: 23/125).
- Tahergorabi R, Beamer SK, Matak KE, Jaczynski* J. 2012. Isoelectric solubilization/precipitation as a means to recover protein isolate from striped bass (*Morone saxatilis*) and its physicochemical properties in a



nutraceutical seafood product. *Journal of Agricultural and Food Chemistry* 60(23):5979-5987 (impact: 2.857, rank: 20/125).

- Kassis N, Gigliotti JC, Beamer SK, Tou JC, Jaczynski* J. 2012. Characterization of lipids and antioxidant capacity of novel nutraceutical egg products developed with omega-3-rich oils. *Journal of the Science of Food and Agriculture* 92(1):66-73 (impact: 2.076, rank: 37/125).
- Sedoski HD, Beamer SK, Jaczynski J, Partington S, Matak* KE. 2012. Sensory evaluation and quality indicators of nutritionally-enhanced egg product with omega-3 rich oils. *LWT – Food Science and Technology* 47(3):459-464 (impact: 2.711, rank: 23/125).

2013

- Paker I, Beamer S, Jaczynski J, Matak* KE. 2013. The effect of organic acids on gelation characteristics of protein gels made from silver carp (*Hypophthalmichthys molitrix*) protein recovered by isoelectric solubilization and precipitation. *LWT – Food Science and Technology* 53(1):37-43 (impact: 2.711, rank: 23/125).
- Paker I, Beamer S, Jaczynski J, Matak* KE. 2013. Compositional characteristics of materials recovered from headed gutted silver carp (*Hypophthalmichthys molitrix*) by isoelectric solubilization and precipitation using organic acids. *Journal of Food Science* 78(3):E445-451 (impact: 1.649, rank: 49/125).
- Zhong T, Oporto* GS, Jaczynski J, Tesfai A, Armstrong J. 2013. Antimicrobial properties of the hybrid copper nanoparticles-carboxymethyl cellulose. *Wood and Fiber Science* 45(2):215-222 (impact: 0.790, rank: 10/21).
- Tahergorabi R, Beamer SK, Matak KE, Jaczynski* J. 2013. Chemical properties of ω -3 fortified gels made of protein isolate recovered with isoelectric solubilisation/precipitation from whole fish. *Food Chemistry* 139(1-4):777-785 (impact: 4.052, rank: 7/125).
- Debusca A, Tahergorabi R, Beamer SK, Partington S, Jaczynski* J. 2013. Interactions of dietary fibre and omega-3-rich oil with protein in surimi gels developed with salt substitute. *Food Chemistry* 141(1):201-208 (impact: 4.052, rank: 7/125).

2014

- Debusca A, Tahergorabi R, Beamer SK, Matak KE, Jaczynski* J. 2014. Physicochemical properties of surimi gels fortified with dietary fiber. *Food Chemistry* 148:70-76 (impact: 4.052, rank: 7/125).
- Tesfai A, Beamer SK, Matak KE, Jaczynski* J. 2014. Effect of electron beam on chemical changes of nutrients in infant formula. *Food Chemistry* 149:208-214 (impact: 4.052, rank: 7/125).

2015

- Paker I, Beamer S, Jaczynski J, Matak* KE. 2015. pH-shift protein recovery with organic acids on texture and color of cooked gels. *Journal of the Science of Food and Agriculture* 95(2):275-280 (impact: 2.076, rank: 37/125).
- Tahergorabi R, Matak KE, Jaczynski* J. 2015. Fish protein isolate: Development of functional foods with nutraceutical ingredients. *Journal of Functional Foods* 18:746-756 (impact: 3.973, rank: 8/125).
- Sell C, Beamer S, Jaczynski J, Matak* KE. 2015. Sensory characteristics and storage quality indicators of surimi franks nutritionally enhanced with omega-3 rich flaxseed oil and salmon oil. *International Journal of Food Science and Technology* 50(1):210-217 (impact: 1.504, rank: 60/125).
- Matak KE, Tahergorabi R, Jaczynski* J. 2015. A review: Protein isolates recovered by isoelectric solubilization/precipitation processing from muscle food by-products as a component of nutraceutical foods. *Food Research International* 77(4):697-703 (impact: 3.182, rank: 18/125).
- Zhong T, Oporto* GS, Jaczynski J, Jiang C. 2015. Nanofibrillated cellulose and copper nanoparticles embedded in polyvinyl alcohol films for antimicrobial applications. *Biomed Research International* Article ID: 456834 (impact: 2.134, rank: 82/161).

2016



- Jiang C, Oporto* GS, Zhong T, Jaczynski J. 2016. TEMPO nanofibrillated cellulose as template for controlled release of antimicrobial copper from PVA films. *Cellulose* 23(1):713-722 (impact: 3.195, rank: 1/21).
- Ronaghi M, Beamer S, Jaczynski J, Matak* KE. 2016. A comparison of the bactericidal effectiveness of hydrochloric and acetic acid on *Staphylococcus aureus* in silver carp during a pH-shift protein recovery process. *LWT – Food Science and Technology* 66:239-243 (impact: 2.711, rank: 23/125).
- 2017**
- Paker I, Jaczynski J, Matak* KE. 2017. Calcium hydroxide as a processing base in alkali-aided pH-shift protein recovery process. *Journal of the Science of Food and Agriculture* 97(3):811-817 (impact: 2.076, rank: 37/125).
- Walker K, Jaczynski J, Matak* KE. 2017. *In vitro* antimicrobial effectiveness of citrus essential oils and organic acids against *Salmonella* and *Listeria monocytogenes*. *CyTA – Journal of Food* (impact: 0.769, rank: 88/125). Under Review.
- Shi L, Beamer S, Tao Y, Matak KE, Yang H, Jaczynski* J. 2017. Mass balance for isoelectric solubilization/precipitation of carp, chicken, menhaden, and krill. *LWT – Food Science and Technology* (impact: 2.711, rank: 23/125). Under Review.
- Shi L, Beamer S, Yang H, Jaczynski* J. 2017. Micro-emulsification/encapsulation of krill oil by complex coacervation with krill protein isolated using isoelectric solubilization/precipitation. *Journal of Functional Foods* (impact: 3.973, rank: 8/125). Under Review.

Conference Abstracts:

2002

- Jaczynski J, Park JW, Zinn CA. 2002. Non-thermal electron beam affects gelation properties of fish proteins. Abstract #44-2. Institute of Food Technologists, Anaheim, CA.
- Jaczynski J, Park JW, Zinn CA. 2002. Electron beam penetration in seafood. Abstract #76E-1. Institute of Food Technologists, Anaheim, CA.

2003

- Kamireddy N, Kenny PB, Jaczynski J, Slider SD, Kiser RA. 2003. Time and temperature affect storage stability of rainbow trout fillets. Abstract #76A-25. Institute of Food Technologists, Chicago, IL.

2004

- Kamireddy N, Kenney PB, Jittinandana S, Slider SD, Kiser RA, Mazik PM, Hankins JA, Jaczynski J. 2004. Effect of vitamin E supplementation on storage stability of rainbow trout (*Oncorhynchus mykiss*) fillets. Abstract #49B-1. Institute of Food Technologists, Las Vegas, NV.
- Jaczynski J, Beamer S. 2004. Protein and lipid recovery from rainbow trout (*Oncorhynchus mykiss*). Abstract #83A-20. Institute of Food Technologists, Las Vegas, NV.

2005

- Jaczynski J, Black J. 2005. Assurance of food safety/security and shelf-life extension of aquatic foods using non-thermal electron beam. Abstract #190. World Aquaculture Society, New Orleans, LA.
- Jaczynski J, Beamer SK. 2005. Development of value-added human foods from aquatic foods processing by-products. Abstract #191. World Aquaculture Society, New Orleans, LA.
- Chen YC, Jaczynski J. 2005. Gelation of proteins recovered from krill. Abstract #89B-20. Institute of Food Technologists, New Orleans, LA.
- Chen YC, Nguyen J, Semmens K, Beamer SK, Jaczynski J. 2005. Storage stability of omega-3-enhanced rainbow trout (*Oncorhynchus mykiss*): 1. Refrigerated storage temperature. Abstract #89A-38. Institute of Food Technologists, New Orleans, LA.



- Chen YC, Nguyen J, Semmens K, Beamer SK, Jaczynski J. 2005. Storage stability of omega-3-enhanced rainbow trout (*Oncorhynchus mykiss*): 2. Abusive storage temperature. Abstract #89A-24. Institute of Food Technologists, New Orleans, LA.
 - Chen YC, Nguyen J, Semmens K, Beamer SK, Jaczynski J. 2005. Omega-3 fatty acid and total fat contents in omega-3-enhanced farmed rainbow trout (*Oncorhynchus mykiss*). Abstract #89A-20. Institute of Food Technologists, New Orleans, LA.
 - Chen YC, Nguyen J, Semmens K, Beamer SK, Jaczynski J. 2005. Effects of dietary alpha-tocopheryl acetate on lipid oxidation of omega-3-enhanced farmed rainbow trout (*Oncorhynchus mykiss*). Abstract #89A-23. Institute of Food Technologists, New Orleans, LA.
 - Chen YC, Jaczynski J. 2005. Gelation of proteins recovered from rainbow trout (*Oncorhynchus mykiss*) processing by-product. Abstract #89B-19. Institute of Food Technologists, New Orleans, LA.
 - Taskaya L, Jaczynski J. 2005. Flocculation-enhanced protein recovery from trout processing by-products by isoelectric solubilization/precipitation. 7th Joint Meeting 50th Annual Atlantic Fisheries Technology Conference and 29th Annual Seafood Science and Technology Society of the Americas, Norfolk, VA.
- 2006**
- Jaczynski J, Black J. 2006. Temperature effect on inactivation kinetics of *Escherichia coli* O157:H7 by electron beam in ground beef, chicken breast meat, and trout fillets. Abstract #0391I-23. Institute of Food Technologists, Orlando, FL.
 - Jaczynski J, Black J. 2006. Effect of water activity on inactivation kinetics of *Escherichia coli* O157:H7 by electron beam in ground beef, chicken breast meat, and trout fillets. Abstract #0391I-24. Institute of Food Technologists, Orlando, FL.
- 2007**
- Semmens K, Jaczynski J, Chen YC, Nguyen J, Beamer S. 2007. Enhancing diet with flaxseed oil increased omega-3 fatty acid content of rainbow trout fillets. Abstract #405. World Aquaculture Society, San Antonio, TX.
 - Gehring CK, Jaczynski J, Moritz JS. 2007. Muscle proteins recovered from trout frames: potential pellet binding agent and source of essential amino acids. Abstract #22181. Poultry Science Association, San Antonio, TX.
 - Gigliotti JC, Tou JC, Jaczynski J. 2007. Isolation and nutritional analysis of krill protein concentrate. Abstract #010-08. Institute of Food Technologists, Chicago, IL.
 - Taskaya L, Jaczynski J. 2007. Quality of gel developed from protein recovered from fish processing by-products via flocculation-enhanced isoelectric solubilization/precipitation. Abstract #003-09. Institute of Food Technologists, Chicago, IL.
 - Taskaya L, Jaczynski J. 2007. Texture and color properties of gel developed from rainbow trout protein recovered via isoelectric solubilization/precipitation from freezing-abused processing by-products. Abstract #003-05. Institute of Food Technologists, Chicago, IL.
 - Levanduski L, Jaczynski J. 2007. Increased resistance of *Escherichia coli* O157:H7 to electron beam following repetitive irradiation at sub-lethal doses. Abstract #189-06. Institute of Food Technologists, Chicago, IL.
 - James DL, Jaczynski J, Matak KE. 2007. Effect of electron beam irradiation on acid-resistant *Salmonella enterica* subsp. *enterica* serotype Montevideo in tomato. Abstract #P1-41. International Association for Food Protection, Lake Buena Vista, FL.
 - James DL, Parsons ER, Jaczynski J, Matak KE. 2007. Effect of different initial growth media on growth parameters of *Cryptosporidium parvum* ATCC 30772. Abstract #010-20. Institute of Food Technologists, Chicago, IL.
- 2008**

- Lansdowne L, Beamer SK, Jaczynski J, Matak KE. 2008. The survival of *Escherichia coli* in rainbow trout byproducts (*Oncorhynchus mykiss*) processed using isoelectric solubilization/precipitation. Abstract #P5-65. International Association for Food Protection, Columbus, OH.
- Lansdowne L, Beamer SK, Jaczynski J, Matak KE. 2008. The survivability of *Listeria innocua* in rainbow trout filets (*Oncorhynchus mykiss*) processed using isoelectric solubilization/precipitation. Abstract # 091-40. Institute of Food Technologists, New Orleans, LA.
- Gigliotti JC, Tou J, Jaczynski J. 2008. Determination of the safety aspects of krill protein concentrate isolated using an isoelectric solubilization/precipitation technique for human consumption. Abstract #136-06. Institute of Food Technologists, New Orleans, LA.
- Gigliotti JC, Jaczynski J, Tou JC. 2008. Comparison of different protein diets on renal function and bone health in normal growing female rats. Abstract #8226. Federation of American Societies for Experimental Biology, San Diego, CA.
- Taskaya L, Chen YC, Beamer SK, Jaczynski J. 2008. Development of restructured food products based on proteins recovered from whole gutted silver carp (*Hypophthalmichthys molitrix*) using isoelectric solubilization / precipitation. Abstract #091-05. Institute of Food Technologists, New Orleans, LA.
- Taskaya L, Chen YC, Tou JC, Beamer SK, Jaczynski J. 2008. Composition of materials recovered from whole gutted silver carp (*Hypophthalmichthys molitrix*) using isoelectric solubilization / precipitation. Abstract #091-35. Institute of Food Technologists, New Orleans, LA.
- Taskaya L, Beamer SK, Jaczynski J. 2008. Color improvement of restructured fish products. Abstract #091-46. Institute of Food Technologists, New Orleans, LA.

2009

- Gehring CK, Davenport MP, Beamer SK, Jaczynski J. 2009. Selective concentration of muscle fractions using isoelectric solubilization/precipitation in a model chicken system. Abstract #155-02. Institute of Food Technologists, Anaheim, CA.
- Davenport MP, Jaczynski J. 2009. Increasing the efficiency of dewatering trout protein isolates. Abstract #119-25. Institute of Food Technologists, Anaheim, CA.
- Davenport MP, Jaczynski J. 2009. Comminution of trout processing by-products for direct utilization in food products. Abstract #155-03. Institute of Food Technologists, Anaheim, CA.
- Gigliotti JC, Davenport MP, Beamer SK, Tou JC, Jaczynski J. 2009. Extraction and characterization of lipids from Antarctic krill (*Euphausia superba*). Abstract #119-34. Institute of Food Technologists, Anaheim, CA.
- Gigliotti JC, Jaczynski J, Tou JC. 2009. Characterizing different oil sources of the health beneficial omega-3 polyunsaturated fatty acids. Abstract #059-25. Institute of Food Technologists, Anaheim, CA.
- Tesfai A, Beamer SK, Matak KE, Jaczynski J. 2009. Microbial radio-resistance of *Salmonella* Typhimurium in whole egg subjected to electron beam. Abstract #156-26. Institute of Food Technologists, Anaheim, CA.
- Tesfai A, Beamer SK, Matak KE, Jaczynski J. 2009. Microbial inactivation kinetics of *Escherichia coli* in ground beef exposed to repetitive electron beam. Abstract #123-27. Institute of Food Technologists, Anaheim, CA.
- Hvizdzak AL, Beamer SK, Jaczynski J, Matak KE. 2009. Use of electron beam irradiation for the reduction of *Salmonella enterica* serovars Typhimurium and Tennessee in peanut butter. Abstract #123-51. Institute of Food Technologists, Anaheim, CA.
- Hvizdzak AL, Beamer SK, Jaczynski J, Matak KE. 2009. Fate of *Salmonella enterica* serovar Tennessee in peanut butter after electron beam exposure. Abstract # 125-32. Institute of Food Technologists, Anaheim, CA.
- Inan D, Beamer SK, Jaczynski J, Matak KE. 2009. Docosahexaenoic acid production by the marine alga *Cryptocodinium cohnii* in a continuous mode process. Abstract #120-07. Institute of Food Technologists, Anaheim, CA.



- Simmons C, Beamer SK, Jaczynski J, Semmens K, Matak KE. 2009. Effect of a flaxseed oil enhanced diet on the product quality of farmed Brook trout (*Salvelinus fontinalis*) filets. Abstract #119-28. Institute of Food Technologists, Anaheim, CA.

- Rodrigo-García J, Jaczynski J, Torres JA. 2009. Utilization and protein recovery from surimi processing water. A Sustainable Future: Fish Processing Byproducts, Alaska Sea Grant Meeting, Portland, OR.

2010

- Pietrowski B, Tahergorabi R, Beamer SK, Matak KE, Jaczynski J. 2010. Nutrifaction of surimi seafood by incorporation of omega-3-rich oils. Abstract #225-01. Institute of Food Technologists, Chicago, IL.
- Tahergorabi R, Beamer SK, Matak KE, Jaczynski J. 2010. Conversion of dark chicken meat processing by-products to restructured white chicken meat food products by using isoelectric solubilization / precipitation and addition of titanium dioxide. Abstract #235-06. Institute of Food Technologists, Chicago, IL.
- Davenport MP, Gehring CK, Jaczynski J. 2010. Texture and color of chicken by-product isolates produced at elevated temperatures. Abstract #192-07. Institute of Food Technologists, Chicago, IL.
- Otto R, Beamer SK, Jaczynski J, Matak KE. 2010. Isoelectric solubilization and precipitation of fish protein using citric or acetic acid and its effect on survival of *Listeria monocytogenes*. Abstract #037-07. Institute of Food Technologists, Chicago, IL.
- Otto R, Beamer SK, Jaczynski J, Matak KE. 2010. Survival of *Listeria innocua* after isoelectric solubilization and precipitation protein recovery process using citric or acetic acid. Abstract #042-30. Institute of Food Technologists, Chicago, IL.
- El-Rawass AL, Hvizdzak A, Davenport MP, Beamer SK, Jaczynski J, Matak KE. 2010. The effects of nonthermal electron beam irradiation on the quality of peanut butter. Abstract #236-03. Institute of Food Technologists, Chicago, IL.

2011

- Tesfai A, Beamer SK, Matak KE, Jaczynski J. 2011. Protein and lipid changes in infant formula treated with electron beam. Abstract #158-27. Institute of Food Technologists, New Orleans, LA.
- Sedoski H, Beamer SK, Partington S, Jaczynski J, Matak KE. 2011. Quality indicators and sensory evaluation of nutritionally enhanced egg sticks with omega-3 rich oils. Abstract #099-10. Institute of Food Technologists, New Orleans, LA.
- Tahergorabi R, Beamer SK, Matak KE, Tou JC, Jaczynski J. 2011. Color and textural properties of surimi gels with salt substitute. Abstract #147-04. Institute of Food Technologists, New Orleans, LA.
- Tahergorabi R, Jaczynski J. 2011. Dynamic rheology and endothermic transitions of surimi with salt substitute. Abstract #053-11. Institute of Food Technologists, New Orleans, LA.
- Tahergorabi R, Beamer SK, Matak KE, Tou JC, Jaczynski J. 2011. Development of value-added fish products from protein isolates recovered with isoelectric solubilization/precipitation. Abstract #097-18. Institute of Food Technologists, New Orleans, LA.
- Tou JC, Altman S, Gigliotti JC, Jaczynski J. 2011. The effect of omega-3 fatty acids derived from different sources on apparent digestibility, tissue deposition, and tissue oxidative stability in young female rats. Abstract #089-42. Institute of Food Technologists, New Orleans, LA.
- Tahergorabi R, Jaczynski J. 2011. Dynamic rheology and endothermic transitions of proteins recovered from chicken-meat processing by-products using isoelectric solubilization/precipitation. Abstract #EPF248. International Association for Engineering and Food, Athens, Greece.
- Sivanandan L, Tahergorabi R, Jaczynski J. 2011. Poultry byproduct utilization using isoelectric processing for starting a business in West Virginia. Abstract #1110823. American Society of Agricultural and Biological Engineers Annual International Meeting, Louisville, KY.

- Sivanandan L, Jaczynski J, Hackney C, Tahergorabi R. 2011. Lab-to-community technology transfer initiative through chicken by-product utilization. Abstract #11-076. Northeast Agricultural and Biological Engineers, South Burlington, VT.

2012

- Tahergorabi R, Beamer SK, Matak KE, Jaczynski J. 2012. Optimization of isoelectric solubilization/precipitation targeting salt reduction. Abstract #145-07. Institute of Food Technologists, Las Vegas, NV.
- Debusca A, Tahergorabi R, Beamer SK, Matak KE, Partington S, Jaczynski J. 2012. Physicochemical properties of surimi gels nutrified with dietary fiber. Abstract #155-02. Institute of Food Technologists, Las Vegas, NV.
- Sell C, Beamer SK, Tou JC, Jaczynski J, Matak KE. 2012. Sensory characteristics and storage quality indicators of surimi franks nutritionally enhanced with omega-3 rich flaxseed oil and salmon oil. Abstract #144-48. Institute of Food Technologists, Las Vegas, NV.
- Paker I, Beamer SK, Jaczynski J, Matak KE. 2012. Functional properties of protein gels made from silver carp (*Hypophthalmichthys molitrix*) protein recovered by isoelectric solubilization and precipitation using organic acids. Abstract #153-03. Institute of Food Technologists, Las Vegas, NV.
- Paker I, Beamer SK, Jaczynski J, Matak KE. 2012. Compositional characteristics of materials recovered from whole gutted silver carp (*Hypophthalmichthys molitrix*) by isoelectric solubilization and precipitation using organic acids. Abstract #270-05. Institute of Food Technologists, Las Vegas, NV.
- Paker I, Beamer SK, Jaczynski J, Matak KE. 2012. Texture and color properties of protein gels made from silver carp (*Hypophthalmichthys molitrix*) protein recovered by isoelectric solubilization and precipitation using organic acids. Abstract #144-36. Institute of Food Technologists, Las Vegas, NV.

2013

- Oporto GS, Zhong T, Jaczynski J, Sabo R. 2013. Hybrid antimicrobial copper-cellulose based nanocomposite embedded in thermoplastic resin for active food packaging. Abstract #2134. TAPPI International Conference on Nanotechnology for Renewable Materials, KTH Royal Institute of Technology, Stockholm, Sweden.
- Harvey B, Paker I, Adelanwa V, Tappe A, Beamer SK, Matak KE, Jaczynski J. 2013. Comparative analysis of gels made from Alaska pollack surimi (*Theragra chalcogramma*) and Peruvian anchovy (*Engraulis ringens*) protein recovered by isoelectric solubilization/precipitation. Abstract #165-01. Institute of Food Technologists, Chicago, IL.
- Tesfai A, Beamer SK, Matak KE, Jaczynski J. 2013. Validation of electron beam processing for whole shell eggs. Abstract #208-09. Institute of Food Technologists, Chicago, IL.
- Ronaghi M, Beamer SK, Jaczynski J, Sivanandan L, Matak KE. 2013. Isoelectric solubilization and precipitation of silver carp protein with increasing formic and lactic acid concentrations and their bactericidal effectiveness on *Staphylococcus aureus*. Abstract #198-06. Institute of Food Technologists, Chicago, IL.

2014

- Smith A, Jaczynski J, Mallikarjunan PK, Sivanandan L, Kenney PB. 2014. Effect of processing parameters on the yield and process efficiency of drying blueberries. Abstract #024-105. Institute of Food Technologists, New Orleans, LA.
- Moriarty M, Jaczynski J, Semmens K, Bissonnette G. 2014. Effect of UV light treatment on total coliforms in water and internalization of *Escherichia coli* in lettuce in aquaponic systems. Abstract #174-71. Institute of Food Technologists, New Orleans, LA.
- Oporto GS, Zhong T, Jaczynski J, Sabo R. 2014. Microstructure, mechanical, thermal and antimicrobial properties of hybrid copper nanoparticles and cellulose based materials embedded in thermoplastic resins. Proceedings of the 57th International Convention of Society of Wood Science and Technology and 6th European Hardwood Conference, Zvolen, Slovakia.



- Demirtas N, Cakli S, Jaczynski J. 2014. Nutritional, chemical, and contaminants characteristics of lipids recovered with isoelectric solubilization/precipitation from different parts of gilthead sea bream (*Sparus aurata*) by-products. Proceedings of the 44th West European Fish Technologists Association Annual Meeting, Bilbao, Spain.

2015

- Adelanwa V, Beamer S, Jaczynski J. 2015. Comparative analysis of gels from Atlantic menhaden protein isolated with isoelectric solubilization/precipitation (ISP) with or without prior one-step lipid extraction. Abstract #046-031. Institute of Food Technologists, Chicago, IL.
- Smith AM, Kenney PB, Slider S, Jaczynski J, Sivanandan L. 2015. Effect of various process parameters to improve yield and efficiency of blueberry dehydration. Abstract #032-042. Institute of Food Technologists, Chicago, IL.
- Yikici I, Matak K, Jaczynski J. 2015. Protein and lipid recovery from black bullhead catfish (*Ameiurus melas*) using calcium hydroxide as the processing base in the pH-shift process. Abstract #046-132. Institute of Food Technologists, Chicago, IL.
- Jaczynski J. 2015. Inactivation of foodborne pathogens in seafood with electron beam. Abstract #058-003. Institute of Food Technologists, Chicago, IL.
- Zhong T, Oporto GS, Jaczynski J, Jiang C. 2015. Hybrid cellulose-copper nanoparticles embedded in polyvinyl alcohol for antimicrobial applications. In Proceedings of the 58th International Convention of Society of Wood Science and Technology, Jackson, WY.

2016

- Oporto GS, Zhong T, Hassanzadeh M, Jiang C, Jaczynski J., Gallagher J. 2016. Lignocellulosic raw material as effective template for inorganic nanoparticles for antimicrobial applications. International Conference on Nanotechnology for Renewable Materials, Grenoble, France.
- Jiang C, Oporto GS, Zhong T, Hassanzadeh M, Jaczynski J. 2016. Antimicrobial properties of cellulosic-copper nanoparticles from Appalachian hardwoods red oak and yellow poplar.
- Shi L, Hong Y, Matak K, Jaczynski J. 2016. Mass balance for isoelectric solubilization/precipitation of krill, menhaden, carp, and chicken. Institute of Food Technologists, Chicago, IL.
- Shi L, Hong Y, Matak K, Jaczynski J. 2016. Micro-emulsification/encapsulation of krill oil by coacervation with krill protein isolated with isoelectric solubilization/precipitation. Institute of Food Technologists, Chicago, IL.

2017

- Smith E, Beamer S, Matak K, Jaczynski J. 2017. Quality indicators of egg sticks with omega-3 fatty acids and lutein during storage. Institute of Food Technologists, Las Vegas, NV.
- Akharume F, Singh K, Sivanandan L, Jaczynski J, McGee W. 2017. Improving microbial shelf stability and quality of dried apple snacks. Institute of Food Technologists, Las Vegas, NV.
- Akharume F, Singh K, Sivanandan L, Jaczynski J, McGee W. 2017. Characteristics of liquid smoke infused osmotically dehydrated apples. Institute of Food Technologists, Las Vegas, NV.
- Warren D, Jaczynski J, Tou J, Matak K. 2017. Characterization of sarcoplasmic protein powder recovered from silver carp. Institute of Food Technologists, Las Vegas, NV.
- Warren D, Jaczynski J, Tou J, Matak K. 2017. Impact of protein recovery on nutritional quality of silver carp sarcoplasmic protein powders. Institute of Food Technologists, Las Vegas, NV.

Funded Research Projects (Total \$1,164,242):

- 2002 – Development of value-added food based on proteins and lipids recovered from trout processing by-products; Agency: USDA/CSREES; Amount funded: \$51,566; Role in project: co-PI.
- 2002 – Development of pH-driven protein recovery for trout processing waste; Agency: WVU Senate; Amount funded: \$12,076; Role in project: PI.

Division of Animal and Nutritional Sciences
Agricultural and Forestry Experiment Station



- 2002 – Omega-3 fortified trout as functional food; Agency: USDA/CSREES; Amount funded: \$28,960; Role in project: co-PI.
- 2003 – The effects of omega-3 fatty acid fortified fish on C-reactive protein levels; Agency: WVU Bridge Grants & Research Development Grants; Amount funded: \$11,741; Role in project: co-PI.
- 2003 – Development of value-added food based on proteins and lipids recovered from fish processing waste; Agency: WVU Research Corporation; Amount funded: \$27,895; Role in project: PI.
- 2004 – Protein and lipid recovery from fish processing by-products: Process scale-up from laboratory-batch to continuous semi-industrial application – part 1; Agency: USDA/CSREES; Amount funded: \$115,579; Role in project: co-PI.
- 2005 – Protein and lipid recovery from fish processing by-products: Process scale-up from laboratory-batch to continuous semi-industrial application – part 2; Agency: USDA/CSREES; Amount funded: \$144,798; Role in project: co-PI.
- 2006 – Production of brook trout and assessment of attributes for niche markets among distributors and restaurants; Agency: USDA/CSREES; Amount funded: \$16,902 (2006); Role in project: co-PI.
- 2006 – Processing strategies for the production of long-chain fatty acids by algae; Agency: USDA NRI; Amount funded: \$100,000; Role in project: co-PI.
- 2007 – Inactivation of *Escherichia coli* O157:H7 on ready-to-eat fresh vegetables with electron beam; Agency: WVU Research Corporation; Amount funded: \$26,860; Role in project: PI.
- 2007 – A high-speed centrifuge for the Division of Animal and Nutritional Sciences at West Virginia University; Agency: USDA NRI; Amount funded: \$54,700; Role in project: co-PI.
- 2007 – Enhanced lipid removal during isoelectric protein recovery from rainbow trout (*Oncorhynchus mykiss*) processing by-products; Agency: USDA/CSREES; Amount funded: \$43,699; Role in project: co-PI.
- 2008 – Application of dissolved-air-floatation (DAF) to protein recovery with isoelectric solubilization/precipitation; Agency: USDA/CSREES; Amount funded: \$40,213; Role in project: co-PI.
- 2008 – Investigating different structural forms and ratios of eicosapentaenoic and docosahexaenoic acid on tissue deposition and lipid responses; Agency: USDA NRI; Amount funded: \$112,000; Role in project: co-PI.
- 2008 – Protein recovery from food processing by-products invited lecture, Shenzhen, China; Agency: Davis College Faculty Development Awards; Amount funded: \$3,571; Role in project: PI.
- 2010 – Down-stream processing – development of nutraceutical fish sticks from trout processing by-products: A niche market opportunity for WV aquaculture; Agency: USDA/NIFA; Amount funded: \$44,147; Role in project: co-PI.
- 2012 – UV treatment of trout effluent to improve food safety of salad greens produced in a cold flowing water aquaponic system; Agency: USDA/Specialty Crop Block Grant; Amount funded: \$20,000; Role in project: PI.
- 2013 – Development of yumEGGa™ egg stick for industry partner; Agency: WVU Research Corporation; Amount funded: \$20,395; Role in project: PI.
- 2013 – Development of novel hybrid cellulose nanocomposite film with potent biocide properties utilizing low quality Appalachian hardwoods; Agency: USDA/NIFA; Amount funded: \$289,140; Role in project: co-PI.