

Stéphanie JUNG, Ph.D.
Professor, Interim Department Head
Department of Food Science and Human Nutrition
California Polytechnic State University, San Luis Obispo

EDUCATION

Ph.D., Food Engineering/Food Processing, 2000, National School for Engineers in Agricultural and Food Science Industries, Nantes, France
M.S., Biotechnology and Food Industry, 1996, National Polytechnic Institute of Lorraine, Nancy, France
B.S., Biology, Biochemistry, Toxicology, 1995, University of Sciences, Metz, France

LEADERSHIP EDUCATION

Food Systems Leadership Institute, 2018/2020, Cohort 14, <https://fsli.org/>
Lead 21 Leadership for the 21st century, 2011/2012, <http://lead-21.org/>

POSITIONS HELD

Administrative

College of Agriculture, Food and Environmental Sciences (CAFES), California Polytechnic State University, San Luis Obispo

09/18-06/19 Faculty Fellow, Dean's Office

Department of Food Science and Nutrition (FSN), California Polytechnic State University, San Luis Obispo

Since 07/19 Interim Department Head

04/17-07/19 Graduate coordinator - blended BS/MS program in Food Science

09/15-07/19 Graduate coordinator - MS Agriculture, Specialization in Food Science

Department of Food Science and Human Nutrition (FSHN), Center for Crops Utilization Research (CCUR), Iowa State University

05/11 – 09/14 Director Of Graduate Education (DOGE), Food Science and Technology
Leader of the green technologies signature area

Academic

Department of Food Science and Nutrition (FSN), California Polytechnic State University, San Luis Obispo

Since 09/17 Professor

09/14 – 09/17 Associate professor

Department of Food Science and Human Nutrition (FSHN), Center for Crops Utilization Research (CCUR), Iowa State University

Since 11/14 Collaborator

08/10 – 09/14 Associate Professor

01/04 – 08/10 Assistant Professor

09/01 – 12/03 Postdoctoral Research Associate and Laboratory Manager

Faculty of Pharmacy, Strasbourg, France

09/00 – 08/01 Adjunct faculty

National School for Engineers in Agricultural and Food Science Industries (now ONIRIS), Nantes, France

09/96 - 08/00 Graduate Research Assistant

Institut National Polytechnique de Lorraine, Nancy, France

06/95 - 09/96 Graduate Research Assistant

AWARDS/HONORS

- Outstanding Service Award, Food Engineering Division, Institute of Food Technologists, 2018
- Outstanding Volunteer Award, Nonthermal Processing Division, Institute of Food Technologists, 2011
- Associate Editor, Journal Of American Oil Chemist's Society, 2012/2018

- Archer Daniels Midland (ADM)/Protein & co-products division award recipient, best scientific paper, category engineering/technology, 2013
- Iowa State University, College of Agriculture and Life Sciences (CALs) Early Achievement Research Award, 2009
- Iowa State University, College of Agriculture and Life Sciences (CALs) Excellence in Team Research Award, 2009

SOME IMPORTANT ACCOMPLISHMENTS/CONTRIBUTIONS

- More than \$8,400,000 in research as project director (PI), coPI and/or collaborators
- 62 peer-reviewed articles and book chapters

As graduate coordinator at Cal Poly:

- Development and launching of a MS in Food Science (to replace MS in Agriculture with a specialization of Food Science), Development and implementation of a new graduate level class. Starting date: Fall 2019
- Development and launching of a blended (4+1) food science program, the first one in the College of Agriculture, Food and Environmental Sciences at Cal Poly, Starting date: Fall 2017
- Principal investigator in a United States Department of Agriculture (USDA), NIFA, National Needs Graduate Fellowships, for training 6 graduate students including 4 minorities students on the topic of converting agricultural and food waste challenges into opportunities, 2017/2022 (\$250,000)

As faculty fellow in the College of Agriculture, Food and Environmental Sciences (CAFES):

- Diversity & Inclusion (D&I)
 - D&I representative of CAFES in the Excellence Inclusion Council (EIC), Liaison in the CAFES D&I committee, Development of a CAFES Diversity website
 - D&I Spring Event with CAFES Panel
- Onboarding
 - Developed and implemented some of the steps for a program for new faculty and staff: CAFES launch for success program, Survey to new faculty and staff to determine mentoring need

Others

- Talent acquisition contribution (Cal Poly)
 - Member of committees for recruitment of 2 Associate Deans and 4 Faculty members
- Leading the Food Science Assessment Initiative for IFT approval of the undergraduate program in Food Science (2019)
- National committee: Elected Chair of the Food Engineering Division of the Institute of Food Technologists (2015/2016)

ADDITIONAL TRAININGS

- Diversity and inclusion: Exposing Hidden Bias (December 2018)
- Assessment, course development, continuous improvement of teaching

GRANTS

1. **Jung S. (PI)** Enzyme-assisted oil extraction of tomato and peach seeds, California State University Agricultural Research Initiative. 2018/2021
2. **Jung S. (PI)**. Lathrop A. Converting agricultural and food waste challenges into opportunities, United States Department of Agriculture (USDA), NIFA, National Needs Graduate Fellowships, 2017/2022
3. Amin S., **Jung S. (CI)**. Carrot pomace as a source of carotenoids, nondigestible oligosaccharides, California State University Agricultural Research Initiative. 2018/2021
4. Amin S., **Jung S. (CI)**. Characterization of commercially produced carrot juice, California State University Agricultural Research Initiative. 2016/2018
5. **Jung S. (PI)**, Carroll J., Spierling, R. Converting olive oil wastes (pomace and water) into alternative fuel source, The Center for Applications in Biotechnology, Chevron Biotechnology Applied Research Endowment. 2016/2017
6. **Jung S. (PI)** From olive oil milling to the concept of an olive oil biorefinery, California State University Agricultural Research Initiative. New Investigator. 2015/2017
7. **Jung S. (PI)** Establishing High Pressure Processing Research at CalPoly, California State University Agricultural Research Initiative. Seed Grant. 2015/2016
8. **Jung S. (PI)** Acquisition of a Tornado stirring system for green enzymatic extraction of polyphenols from agricultural by-products (waste). SCIFTS award 2015
9. **Jung S. (PI)** Advancing next generation bioproduction with integrated corn/soybean biorefineries, U.S. Department of Agriculture via Iowa State University (9/1/14 to 8/31/16)

10. **Jung S. (PI)** Green approaches to promote accessibility to an untapped source of highly valuable healthy ingredients from fruits and vegetables waste, Research, Scholarship, and Creative Activities (RSCA), CalPoly, 2014/2015
11. **Jung S. (PI)** Franco-american alliance and student exchange to design next generation of sustainable, safe and nutritional food, Partner University Fund, 2013/2014 – year 2
12. Wen Z., Rosentrater K., Lamsal B., **Jung S.**, Tong W., Johnson L. (**CI**) Improving Economics of Corn and Soybean Conversion to Biofuels, State Biorenewable Initiative Fund (2013/2015)
13. **Jung S. (PI)** ISU ambassador, Graduate college, Cal State Poly, Pomona.
14. **Jung S. (PI)** Building research collaborations between FSHN, ISU and HNFS Cal State Poly, Pomona; Cyclone Research Grant, 2013/2015
15. Rosentrater K., Wang T., Johnson LA, **Jung S (CI)** Advancing next generation bioproduction with integrated corn/soybean biorefineries, Engineering, products, and processes program area priority, USDA-NIFA, 2013/2016
16. **Jung S. (PI)** Processing fruit juices by high pressure processing (Industrial contract, 2012-now)
17. **Jung S. (PI)** Franco-american alliance and student exchange to design next generation of sustainable, safe and nutritional food, Partner University Fund, 2012/2013 – year 1
18. Clark S., **Jung S.**, Grewell D. (**CI**) Feasibility of integrating ultrasound into high temperature short time processing for extended shelf life milk, Dairy Research Institute, 2012/2013
19. **Jung S. (PI)** Increasing minority students in the department of food science and human nutrition, ISU Recruit grant, Graduate college, September, 2012
20. **Jung S. (PI)** Sustainable production of bioenergy from agricultural and food waste, Leopold center for sustainable agriculture, Iowa State University, 2011/2012
21. Sebranek J.G., Dickson J.S., Brehm-Stecher B., **Jung S.**, Mendonca A. (**CI**), Reducing or preventing recovery of injured *Listeria monocytogenes* on ready-to-eat natural and organic “uncured” processed meats, American Meat Institute Foundation, 2011/2013
22. Wang T., Johnson L.A., **Jung S.**, Lamsal B.P., Grewell D., (**CI**), Evaluating strategies for clean fractionation of Algae oil, protein, and cell wall components, Iowa State University Bioeconomy Institute – ConocoPhillips, 2010/2012
23. **Jung S.**, Academic, research institute and industry partnership to address globalization of food science and nutrition at both undergraduate and graduate level, French Embassy, 2010 (**PI**)
24. Johnson L., Murphy P., **Jung S.**, Glatz C., Persia M., Wang T. (**CI**), Protein Utilization, IA: Advanced Soybean Biorefineries – Year 3, 2010/2011.
25. Johnson L.A., Murphy P.A., **Jung S.**, Glatz C.E., Wang T., Birschback P. (**CI**), Integrated soybean biorefineries for biofuels, chemicals and biomaterials, USDA/Special Research Grant, 2009/2010
26. **Jung S.**, Ahn D., Zeece M. (**PI**), Bioactive peptides from high pressure treated phosvitin, Iowa Egg Council 2008/2009
27. Boylston T.D., Mendonca A., **Jung S.**, Beattie S. (**CI**), Development of shelf-stable milk beverages using high-pressure and bacteriocins, Midwest Dairy Association 2008/2010
28. Johnson L.A., Murphy P.A., **Jung S.**, Glatz C.E., Kuo, M., Spurlock, M., Wang, T., Birschback P. (**CI**), Integrated soybean biorefineries for biofuels, chemicals and biomaterials, USDA/Special Research Grant 2008/2009
29. Zeece M., **Jung S. (CI)**, Enhanced international collaboration in food science education and research, USDA-ISE, 2008/2010
30. Zeece M., Kelly A., **Jung S. (CI)**, Enhanced egg white functionality by use of high hydrostatic pressure, Mussehl Poultry Research Endowment, 2008/2009
31. More than 30 participants over the world (**CI**), Integrating safety and environment knowledge in world food studies, European funding / ISEKI Mundus, 2007/2008
32. Johnson L.A., Murphy P.A., **Jung S.**, Glatz C.E., Meyers D.J., Penet C., Birschback P. (**CI**), Aqueous soybean processing: using industrial enzymes to enhance soybean value, USDA/Special Research Grant, 2007/2008
33. Beattie S., Wilson L., Mendonca A., **Jung S. (C)**, Strategies to stabilize locally grown produce for year round sales: a feasibility study, Leopold Center for Sustainable Agriculture, 2007/2008
34. Khanal S., Lamsal B., Grewell D., **Jung S. (CI)**, Ultrasonication in Soy Processing for Enhanced Protein and Sugar Yields and Subsequent Nisin Production, Growth Iowa Value Funds, 2006/2007
35. Johnson L.A., Murphy P.A., **Jung S.**, Glatz C.E., Meyers D.J., Stahly T., Penet C., Birschback P. (**CI**), Enzyme-assisted aqueous processing of soybeans, USDA/Special Research Grant, 2006/2007
36. **Jung S. (PI)**, High hydrostatic pressure process parameters impact on soy components extractability and characteristics, USDA NRI, 2005/2007
37. Mendonca A., Murphy P.A., Brehm-Stecher B., Beattie S., Boylston T., **Jung S.**, White P.J. (**CI**), Control of food-borne hazards without compromising food quality, USDA National Needs Fellowship in Food Science, 2005/2010
38. **Jung S.**, Wilson L.A., Murphy P.A. (**CI**), Improvement of thermal and alternative processes for foods, North Central Multistate Cooperative Project, NC-136 and 1023, 2005/2010
39. Johnson L.A., Murphy P.A., **Jung S.**, Glatz C.E., Meyers D.J., Stahly T., Penet C., Birschback P. (**CI**), Enzyme-assisted aqueous processing of soybeans, USDA/Special Research Grant, 2005/2006

40. Johnson L.A., Murphy P.A., **Jung S.**, Glatz C.E., Stahly T., Penet C., Emerson T. (**CI**), Enzyme-assisted aqueous processing of soybeans, USDA/Special Research Grant, 2004/2005
41. Johnson L.A., Roussel-Philippe C., Murphy P.A., **Jung S.**, Meyers D.J., Dias K., Penet C., Emerson T. (**CI**), Enzyme modification to enhance soy protein ingredients in food and industrial products, USDA/Special Research Grant, 2003/2004
42. Johnson L.A., Roussel-Philippe C., Murphy P.A., **Jung S.**, Meyers D.J., Dias K., Penet C., Emerson T. (**CI**), Use of enzymes to enhance soybeans in food and industrial products USDA/Special Research Grant, 2002/2003

RESEARCH

PUBLICATIONS

Refereed Journal Publications

Value-added food and agricultural waste - Enzyme-assisted bioprocessing

1. Tai, P., Spierling, R., Carroll, J., **Jung, S.** Biochemical methane potential of mechanically and enzymatically pretreated olive cake. *JAOCS, in preparation*
2. Cheng M.-H., Rosentrater K., Sekhon J., Wang T., Jung S., Johnson L.A. Economic feasibility of soybean oil production by enzyme-assisted aqueous extraction processing, *Food and Bioprocess Technology*, 1-12, 2019, <https://doi.org/10.1007/s11947-018-2228-9>
3. Sekhon, J.K., Maurer D., Wang, T., **Jung, S.**, Rosentrater. Ethanol production of soy fiber treatment and simultaneous saccharification and co-fermentation in an integrated corn-soy biorefinery, *Fermentation*, 4: 35-53, 2018.
4. Sekhon, J.K., Rosentrater, K., **Jung, S.**, Wang, T.. Effect of co-products of enzyme-assisted aqueous extraction of soybeans, enzymes, and surfactants on oil recovery from integrated corn-soy fermentation, *Industrial Crops and Products*, 121: 441-451, 2018
5. Sekhon, J.K., Maurer, D., Rosentrater, K., Wang, T., **Jung, S.** Effect of pretreatment of soy insoluble fiber and SSCF with *Saccharomyces cerevisiae* and *Escherichia coli KO11* on ethanol production in an integrated corn-soy biorefinery. *American Society of Agricultural and Biological Engineers Proceedings* (doi:10.13031/aim.20152190086), 2015
6. Sekhon, J.K., Wang, T., **Jung, S.**, Rosentrater, K., Johnson, L.A. Effect of co-products of enzyme-assisted aqueous extraction of soybeans on ethanol production in dry-grind corn fermentation. *Bioresource Technology*, 192, 451-460, 2015
7. Gerde JA, Wang T, Yao L, **Jung S**, Johnson LA, Lamsal B. Optimizing protein isolation from defatted and non-defatted *nannochloropsis* microalgae biomass, *Algal Research*, 2: 145-153, 2013
8. de Moura Bell, J.M.L.N, Maurer D., Yao L., Wang T., **Jung S.**, Johnson L.A. Characteristics of oil and skim in enzyme-assisted aqueous extraction of soybeans, *Journal of American Oil Chemists Society*, 90: 1079-1088, 2013
9. Karki B., Maurer D., Kim H., **Jung S.**, Ethanol production from soybean fiber, a co-product of soybean oil extraction, using aqueous ammonia soaking, *Journal of American Oil Chemists Society*, 89: 1345-1353, 2012
10. de Moura J.M.L.N., Maurer D., **Jung S.**, Johnson L.A. Pilot-plant proof-of-concept for countercurrent two-stage enzyme-assisted aqueous extraction processing of soybeans *Journal of American Oil Chemists Society*, 88: 1649-1658, 2011
11. de Moura J.M.L.N., Maurer D., **Jung S.**, Johnson L.A. Integrated countercurrent two-stage extraction and cream demulsification in enzyme-assisted aqueous extraction of soybeans *Journal of American Oil Chemists Society*, 88: 1045-1051, 2011
12. Karki B., Maurer D., **Jung S.**, Efficiency of pretreatments for optimal enzymatic saccharification of soybean insoluble fractions, *Bioresource Technology*, 102 :6522-6528, 2011
13. Campbell K.A., Glatz C.E., Johnson L.A., **Jung S.**, de Moura J.M.N., Kapchie V., Murphy P. Advances in aqueous extraction processing of soybeans, *Journal of American Oil Chemists Society*, 88 : 449-465, 2011
14. Karki B., Maurer D., Kim T.H., **Jung S.**, Comparison and optimization of enzymatic saccharification of soybean fibers recovered from aqueous extractions, *Bioresource Technology*, 102 :1228-1233, 2011
15. de Moura J.M.L.N., de Almeida N.M., **Jung S.**, Johnson L.A. Flaking as a pretreatment for enzyme-assisted aqueous extraction processing of soybeans, *Journal of American Oil Chemists Society*, 87 :1507-1515, 2010.
16. Yao L., **Jung S.** ³¹P NMR Phospholipids profiling of soybean emulsion recovered from aqueous extraction *Journal of Agricultural and Food Chemistry*, 58 :4866-4872, 2010.
17. **Jung S.**, Maurer D., Johnson L.A. Factors affecting emulsion stability and quality of oil recovered from enzyme-assisted aqueous extraction of soybeans, *Bioresource Technology*, 100: 5340-5347, 2009.

18. **Jung S.** Aqueous extraction of lupin, a comparison with soybean. *Journal of Food Processing and Preservation*, 33: 547-559, 2009.
19. **Jung S.**, Mahfuz A., Maurer D. Structure, protein interactions and *in vitro* protease accessibility of extruded and pressurized full-fat soybean flakes. *Journal of American Oil Chemists Society*, 86 :475-483, 2009.
20. **Jung S.**, Mahfuz A. Low temperature dry extrusion and high-pressure processing prior to enzyme-assisted aqueous extraction of full fat soybean flakes *Food Chemistry*, 114: 947-954, 2009.
21. Wu J., Johnson L.A., **Jung S.** Demulsification of oil-rich emulsion from enzyme-assisted aqueous extraction of extruded soybean flakes, *Bioresource Technology*, 100: 527-533, 2009.
22. de Moura J.M.L.N., Mahfuz A., Campbell K., **Jung S.**, Glatz C.E., Johnson L.A. Enzyme-assisted aqueous extraction of oil and proteins from soybeans and cream de-emulsification, *Journal of American Oil Chemists Society*, 85 : 985-995, 2008.
23. Chabrand R.M., Kim H.-J., Zhang C., Glatz C.E., **Jung S.** 2008 Destabilization of emulsion formed during aqueous extraction of soybean oil, *Journal of American Oil Chemists Society*, 85:383-390, 2008.
24. Lamsal B.P. **Jung S.**, Johnson L.A. Rheological properties of soy protein hydrolysates obtained from limited enzymatic hydrolysis, *Food Science and Technology*, 40:1215-1223, 2007.
25. **Jung S.**, Lamsal B.P., Stepien V., Johnson L.A., Murphy P.A. Functionality of soy protein produced by enzyme-assisted extraction. *Journal of American Oil Chemists Society*, 83:71-78, 2006.
26. **Jung S.**, Murphy P.A., Johnson L.A. Physicochemical and functional characteristics of different soy protein hydrolysates obtained with an endo-protease. *Journal of Food Science* 70:180-187, 2005.
27. **Jung S.**, Roussel-Philippe C., Briggs J., Murphy P.A., Johnson L.A. Functional properties of protease-modified soy flour. *Journal of American Oil Chemists Society* 81:953-960, 2004.
28. **Jung S.**, Rickert D.A., Deak N.A., Aldin E.D., Recknor J., Johnson L.A., Murphy P.A. Comparison of Kjeldahl and Dumas methods for determining protein contents of soybeans products. *Journal of American Oil Chemists Society* 80:1169-1173, 2003.
29. **Jung S.**, Coulon D., Girardin M., Ghoul M. Structure and surface-active property determinations of fructose monooleates. *Journal of Surfactants and Detergents* 1:53-57, 1998.

High pressure processing and other alternative processing technologies

30. Chao D., **Jung S.**, Aluko R.E. Structural and functional properties of high pressure-treated isolated, *Innovative Food Science and Emerging Technologies*, 179-185, 2018
31. Girgih A. T., Chao D., Lin L., He R., **Jung S.**, Aluko R.E. Enzymatic protein hydrolysates from high pressure-treated isolated pea proteins have better antioxidant properties than similar hydrolysates produced from heat pretreatment, *Food Chemistry*, 188:510-516, 2015
32. Villamonte, G., Jury V., **Jung S.**, de Lamballerie M. Influence of xanthan gum on the structural characteristics of myofibrillar proteins treated by high pressure. *Journal of Food Science*, 80, C522-C531, 2015
33. Lavieri N.A., Sebranek J.G., Brehm-Stecher B.F., Cordray J.C., Dickson J.S., Horsch A.M., Jung S., Larson E.M., Manu D.K., Mendonca, A.F. Investigating the control of *Listeria monocytogenes* on a ready-to-eat ham using natural antimicrobial ingredients and post-lethality interventions, *Foodborne Pathogens and Disease*, 11, 462-467, 2014
34. Lavieri N.A., Sebranek J.G., Cordray J.C., Dickson J.S., Horsch A.M., Jung S., Manu D.K., Mendonca, A.F. Effects of different nitrite concentrations from a vegetable source with and without high hydrostatic pressure on the recovery and growth of *Listeria monocytogenes* on ready-to-eat restructured ham, *Journal of Food Protection*, 77: 781-787, 2014
35. Lavieri N.A., Sebranek J.G., Cordray J.C., Dickson J.S., Horsch A.M., Jung S., Manu D.K., Mendonca, A.F. Evaluation of the thin agar layer (TAL) method for the recovery of heat-injured and pressure-injured *Listeria monocytogenes*, *Journal of Food Protection*, 77: 828-831, 2014
36. Lavieri N.A., Sebranek J.G., Brehm-Stecher B.F., Cordray J.C., Dickson J.S., Horsch A.M., Jung S., Larson E.M., Manu D.K., Mendonca, A.F. Investigating the control of *Listeria monocytogenes* on alternatively-cured frankfurters , - using natural antimicrobial ingredients or post-lethality interventions, *Meat Science*, 97: 568-574, 2014
37. Chao D., He R., **Jung S.**, Aluko R.E., Effect of pressure or temperature pretreatment of isolated pea protein on properties of the enzymatic hydrolysates, *Food Research International*, 1528-1534, 2013
38. Hoppe A., **Jung S.**, Patnaik A., Zeece M.G. Effect of high pressure treatment on egg white protein digestibility and peptide products *Innovative Food Science and Emerging Technologies*, 17: 54-62, 2013
39. Acero-Lopez A., Ullah A., **Jung S.**, Wu J. Effect of high pressure treatment on ovotransferrin, *Food Chemistry*, 135 : 2245-2252, 2012.
40. Volk S.P., Ahn D.U., Zeece M., **Jung S.** Structure, ACE inhibition and antioxidant activity of dephosphorylated and pressurized egg phosvitin *Journal of Science of Food and Agriculture*, 92: 3095-3098, 2012.
41. Speroni F., **Jung S.**, de Lamballerie M., Thermal gelation of high-pressure treated soy protein. *Journal of Food Science*, 75: E30-38, 2010.

42. Karki B., Lamsal B., **Jung S.**, van Leeuwen J.H., Grewell D., Pometto A.L., Khanal S.K., Enhancing protein and sugar release from defatted soy flakes using ultrasound technology, *Journal of Food Engineering*, 96: 270-278, 2010.
43. Smith K., Mendonca A., **Jung S.** Impact of high-pressure processing on microbial shelf-life and protein stability of refrigerated soymilk. *Food Microbiology*, 26: 794-800, 2009.
44. Karki B., Pometto A.L., Lamsal B., Grewell D., van Leeuwen J.H., Khanal S.K., **Jung S.** Functional properties of soy protein isolates produced by ultrasound pretreated defatted soy flakes. *Journal of American Oil Chemists Society*, 86: 1021-1028, 2009.
45. **Jung S.**, Mahfuz A., Maurer D. Structure, protein interactions and *in vitro* protease accessibility of extruded and pressurized full-fat soybean flakes. *Journal of American Oil Chemists Society*, 86 :475-483, 2009.
46. **Jung S.**, Mahfuz A. Low temperature dry extrusion and high-pressure processing prior to enzyme-assisted aqueous extraction of full fat soybean flakes *Food Chemistry*, 114: 947-954, 2009.
47. **Jung S.**, Murphy P.A., Sala I. Conversion and water-extractability of isoflavones during high-pressure processing of soymilk and soybeans, *Food Chemistry*, 111, 592-598, 2008.
48. Lakshmanan R., de Lamballerie-Anton M., **Jung S.** Effect of soybean-to-water ratio and pH on pressurized soymilk properties, *Journal of Food Science* 71:E384-391, 2006.
49. Horvatovich P., Werner D, **Jung S.**, Miesch M., Delincee H., Hasselmann C., Marchioni E. Determination of 2-alkylcyclobutanones with electronic impact and chemical ionization gas chromatography/mass spectrometry (GC/MS) in irradiated foods. *Journal of Agricultural and Food Chemistry* 54:1990-1996, 2006.
50. de Lamballerie-Anton M., Peroon J., Chapleau N., **Jung S.** Effect of high pressure on the reaction between bovine myofibrils and cathepsin D. *High Pressure Research* 23:77-80, 2003.
51. **Jung S.**, Ghou M, de Lamballerie-Anton M. Influence of high pressure parameters on the color and microbial quality of raw beef. *Food Science and Technology* 36:625-631, 2003.
52. **Jung S.**, Ghou M, de Lamballerie-Anton M. Changes in lysosomal enzyme activities and shear values of high pressure treated meat during ageing. *Meat Science* 56:239-246, 2000.
53. **Jung S.**, de Lamballerie-Anton M., Taylor R.G., Ghou M. High pressure effects on lysosome integrity and lysosomal enzyme activity in bovine muscle. *Journal of Agricultural and Food Chemistry* 48:2467-2471, 2000.
54. **Jung S.**, Ghou M., de Lamballerie-Anton M. Modifications of ultrastructure and myofibrillar protein of post-rigor beef treated by high pressure. *Food Science and Technology* 33:313-319, 2000.
55. **Jung S.**, Ghou M., de Lamballerie-Anton M. Textural changes in bovine meat treated with high pressure. *High Pressure Research* 19:69-74, 2000.
56. Chapleau N, **Jung S.**, de Lamballerie-Anton M., Ghou M. High pressure effects on myofibrillar proteins. *High Pressure Research* 19:61-68, 2000.

Book Chapter

Value-added food and agricultural waste - Enzyme-assisted bioprocessing

1. **Jung S.**, de Moura J.M.N., Campbell K.A, Johnson, L.A. 2011. Enzyme-assisted aqueous extraction of oilseeds in Enhancing Extraction Processes in the Food Industry, Edited by: Nikolai Lebovka, Eugene Vorobiev, and Farid Chemat, Series on "Contemporary Food Engineering", Taylor & Francis, 477-519

High pressure processing and other alternative processing technologies

2. Lawrence I., **Jung S.** High Pressure processing as an innovation tool for healthy foods, in Present and future of high pressure processing; a tool for developing innovative, sustainable, safe and healthy foods, Editors: Barba F., Tonello-Samson C., Puertolas E., Lavilla M., In press
3. **Jung S.**, Tonello-Samson C. High Hydrostatic Pressure Food Processin: Potential and Limitation, in Alternatives to Conventional Food Processing, RSC Green Food Science and Technology, Second edition, 251-315, 2018
4. **Jung S.**, Chapter 10. Applications and opportunities for pressure-assisted extraction, In High Pressure Processing in Food: Technology, Principles and Applications, Editors: Balasubramaniam V.M., Barbosa-Canovas G.V., Lelieveld H.L.B., Springer publication, Food Engineering Series, 2016, pp. 173-192
5. **Jung S.**, Tonello-Samson C., de Lamballerie-Anton M. High Hydrostatic Pressure Food Processing, in Alternatives to Conventional Food Processing, RSC Green Food Science and Technology, 2010, pp. 254-306.
6. Duranton F., Simonin H., Guyon C., **Jung S.**, de Lamballerie M., High pressure processing of meats and seafood, In Emerging technologies for food processing, Second edition, Publisher Elsevier, Editor Da-Wen Sun, 2014, pp. 35-63.

Refereed Conference Abstracts and Presentations The (*) identifies invited paper/conference.

Value-added food and agricultural waste - Enzyme-assisted bioprocessing

1. Lehman, R., **Jung, S.** Fate of peach cyanid during peach pit processing; CAFES' SURP, August 31, Cal Poly San Luis Obispo, 2019
2. Duval, A., **Jung, S.**, Amin, S., The effect of enzymatic pretreatments on the extraction of carotenoids, soluble sugar, and oligosaccharides from commercially produced carrot mash" Institute of Food Technologists Annual Meeting, June 2-5, 2019, New Orleans, Louisiana
3. Tai, P., Spierling, R., Carroll, J., **Jung, S.** Prediction of biochemical methane potential (BMP) of pretreated olive by-product and comparison using multiple statistical models; Institute of Food Technologists Annual Meeting, 2018, July 15-18, Chicago, Illinois
4. Tai, P., Spierling, R., Carroll, J., **Jung, S.** Biochemical methane potential of enzymatically pre-treated and destoned olive cake; 30th CSU Annual Biotechnology Symposium; January 11-13, 2018, Santa Clara
5. Tai, P., Spierling, R., **Jung, S.** Olive pomace by-product biorefinery: A focus on methane production; 31st EFFoST International Conference; November 23-26, 2017, Sitges, Spain
6. Tai, P., Spierling, R., **Jung, S.** Biochemical methane potential of pretreated olive pomace; 1st Annual ARI PI Meeting, September 07, 2017, Sacramento
7. Neumayr, N., Lundberg, L., Tai, P., **Jung, S.** Enzymatic treatment of olive pomace for bio-methane production; CAFES' SURP, August 31, Cal Poly San Luis Obispo, 2017
8. Lundberg, L., Tai, P., Neumayr, N., **Jung, S.** Effect of olive pit removal from olive pomace for methane production; CAFES' SURP, August 31, Cal Poly San Luis Obispo, 2017
9. Amin, S., **Jung, S.**, Pena, C., Lau, D., Neilson, J., Flores, A. Selected properties of commercially produced carrot pomace compared to lab produced pomace. Research Chefs Association (RCA) Annual Conference and Culinology Expo, March 14-17, San Juan, 2017
10. **Jung S.** and Yang F., Optimization of enzymatic treatment and multistage extraction of olive pomace for maximum recovery of soluble carbohydrates and pit removal, Institute of Food Technologists Annual Meeting, Las Vegas, 2017
11. **Jung S.** and Schluter O., Engineering Sustainability and Water Conservation in Food Production, Symposium at the Institute of Food Technologists Annual Meeting, Chicago, 2016
12. Uitterhaegen, E., Schlossareck, C., Evon, P., Merah, O., Talou, T., Stevens, C.V., **Jung, S.** Enzyme-assisted aqueous extraction of coriander vegetable oil from a twin-screw extrusion press cake, Institute of Food Technologists Annual Meeting, Chicago, 2016
13. **Jung, S.**, Robin, A., Carroll, J. Treatments of olive oil pomace for maximum conversion and recovery, Institute of Food Technologists Annual Meeting, Chicago, 2016
14. Sekhon, J. K., Rosentrater, K. A., Jung, S., Wang, T., & Johnson, L. A. Advancing next generation biofuels production with integrated corn-soy biorefineries. Corn Utilization and Technology Conference, St. Louis, Missouri. 2016
15. Sekhon, J. K., Rosentrater, K. A., Jung, S., Wang, T., & Johnson, L. A. Maximizing oil recovery from corn-soy slurry after fermentation with *Saccharomyces cerevisiae*. 107th Annual AOCS meeting, Salt Lake City, Utah. 2016
16. Sekhon, J.K., Rosentrater, K., **Jung, S.**, Wang, T., Johnson, L.A. Effect of pretreatment of soy insoluble fiber with *Escherichia coli* KO11 on ethanol production in an integrated corn-soy biorefinery, American Society of Agricultural and Biological Engineers (ASABE), 2015 Annual International Meeting, Jul 26-29, 2015, New Orleans, Louisiana
17. Sekhon, J.K., Rosentrater, K., **Jung, S.**, Wang, T., Johnson, L.A. Effect of co-products of enzyme-assisted aqueous extraction of soybeans on ethanol production in dry-grind corn fermentation. 106th AOCS Annual Meeting and Expo, Orlando, Florida, 2015.
18. **Jung, S.***, Is landfill the best way to dispose of our food waste? Conference of Food Engineering, April 7-9, 2014
19. **Jung S.**, Conversion of food scrap - an urgent necessity, IFT annual meeting, New Orleans, 2014
20. Grewall-Sekhon, J., Yao, L., Johnson, L., Wang, T., Rosentrater, K., **Jung, S.** Optimizing ethanol production, oil partitioning and DDGS quality in integrated corn/soybean biorefineries, 105th AOCS Annual Meeting and Expo, San Antonio, 2014.
21. Jung S. Plate food waste: a valuable source of energy, 2013 AIChE Annual Meeting, San Francisco, CA, November 3-8, 2013
22. L. Johnson, J. Nobrega de Moura, T. Wang, **S. Jung.** Recent advances in enzyme-assisted aqueous extraction of soybeans, 104st AOCS Annual Meeting and Expo, Montreal, Canada, April 28-May 1, 2013.
23. Bolek K.J., Lemoine R., Wang T., **Jung S.**, Persia M.E. Nutritional evaluation of alternative soy processing technologies for poultry, 2012 Poultry Science Association Annual Meeting, Athens, Georgia, July 9-12, 2012
24. Meyers A., Augereau C., **Jung S.** Impact of rheological properties of soybean cellulosic biomass on ethanol production, 103rd AOCS Annual Meeting and Expo, Long Beach, CA, April 20-May 2, 2012.
25. Maurer D., Box S., de Moura J., Johnson L.A., **Jung S.** Optimization of saccharification/fermentation and scale-up of cellulosic biomass conversion to ethanol, 103rd AOCS Annual Meeting and Expo, Long Beach, CA, April 20-May 2, 2012.

26. De Moura J.M.L.N., De Almeida N.M., **Jung S.**, Wang T., Johnson L.A. Integrating enzyme-assisted aqueous extraction processing in the dry-grind ethanol plants, 103rd AOCS Annual Meeting and Expo, Long Beach, CA, April 20-May 2, 2012.
27. Gerde J.A., Yao L., **Jung S.**, Lamsal B., Johnson L.A., Wang T. Microalgal protein isolation from *Nannochloropsis spp.* defatted biomass, 103rd AOCS Annual Meeting and Expo, Long Beach, CA, April 20-May 2, 2012.
28. de Moura, J.M.L.N., Maurer D., **Jung S.**, Johnson L.A. State-of-the-art in enzyme-assisted aqueous extraction of soybeans. World Conference on Oilseed Processing, Fats and Oils Processing, Biofuels and Applications, American Oil Chemists Society, Izmir, Turkey, June 21-23, 2011.
29. Johnson, L.A., de Moura J.M.L.N., **Jung S.**, Wang T. Advances in enzyme-assisted aqueous extraction of soybeans. International Soybean Processing and Utilization Conference IV. St. Louis, MO, Nov. 1-2, 2011. Invited.
30. Karki B., Maurer D., Kim T.H., **Jung S.** Pretreatment of soybean fiber by soaking in aqueous ammonia prior to saccharification, 102nd AOCS Annual Meeting and Expo, Cincinnati, OH, May 1-4, 2011.
31. De Moura J.M.L.N., Maurer D., **Jung S.**, Johnson L.A. Proof-of-concept of two-stage countercurrent enzyme-assisted aqueous extraction processing of soybeans, 102nd AOCS Annual Meeting and Expo, Cincinnati, OH, May 1-4, 2011.
32. ***Jung S.**, de Moura J.M.L.N., Johnson, L.A. Enzyme-assisted aqueous extraction of soybean oil: sustainable alternative to hexane extraction? 6th International CIGR Technical symposium, April 18-20, 2011, Nantes, France
33. Volk S., Ahn D., Zeece M., **Jung S.** Impact of enzymatic dephosphorylation on formation of peptides from egg phosphatidylcholine, Annual Meeting and Food Exposition of the Institute of Food Technologists, Chicago, IL, July 17-20, 2010.
34. Karki B., Maurer D., Kim T.H., **Jung S.** Enzymatic saccharification of soybean fiber. 101st AOCS Annual Meeting and Expo, Phoenix, AZ, May 16-19, 2010.
35. de Moura J.M.L.N., de Almeida N.M., **Jung S.**, Johnson, L.A. Advances in enzyme-assisted aqueous extraction of soybeans. 101st AOCS Annual Meeting and Expo, Phoenix, AZ, May 16-19, 2010.
36. ***Jung S.** Recent development on the uses of environmentally-friendly technology to improve soyfood processing and quality, University of College Cork, Ireland, January 8, 2010.
37. ***Jung S.** Novel green environmentally friendly food processing technology: a focus on high-pressure processing and aqueous extraction of oilseeds, Food Safety and Food Security workshop, Central Institute of Agricultural Engineering (CIAE), Bhopal, and Haryana Agricultural University (HAU), Hisar, India, November 3-5, 2009.
38. **Jung S.**, Mahfuz A. High-pressure processing of soybean cream emulsion recovered from aqueous extraction. 100th AOCS Annual Meeting and Exposition, Orlando, FL, May 3-6, 2009.
39. Yao L, **Jung S.** ³¹P nuclear magnetic resonance phospholipids profile of soybean emulsion recovers from aqueous extraction. 100th AOCS Annual Meeting and Exposition, Orlando, FL, May 3-6, 2009.
40. **Jung S.** Extrusion and high-pressure processing prior to aqueous extraction of soybean flakes, 1st International ISEKI Food conference, Porto, Portugal, September 10-12 2008.
41. **Jung S.** Functionality of soy protein submitted to extrusion and high-pressure prior to enzyme-assisted aqueous extraction, 99th AOCS Annual Meeting and Exposition, Seattle, WA, May 18-21, 2008.
42. Maurer D., Johnson L.A., **Jung S.** Enzymatic destabilization of natural occurring soy emulsion and oil quality, 99th AOCS Annual Meeting and Exposition, Seattle, WA, May 18-21, 2008.
43. Wu J., Johnson L.A., **Jung S.** Methods for de-emulsification of soycream obtained during enzyme-assisted aqueous extraction of soybean oil, 98th AOCS Annual Meeting and Exposition, Quebec City, Canada, May 13-16, 2007.
44. Mahfuz A., **Jung S.** Characterization of isolated soy protein obtained during enzyme-assisted aqueous extraction of soybean oil using extrusion or high pressure processing, 98th AOCS Annual Meeting and Exposition, Quebec City, Canada, May 13-16, 2007.
45. Morales R., Kim H.-J., Zhang C., Glatz C., **Jung S.** Protease demulsification of emulsion from the aqueous extraction of soy flour. 98th AOCS Annual Meeting and Exposition, Quebec City, Canada, May 13-16, 2007.
46. Kim H.-J., **Jung S.** Destabilization of emulsion formed during aqueous extraction of soybean oil, 97th AOCS Annual Meeting and Exposition, St Louis, MO, April 30 - May 3, 2006.
47. Lamsal B.P., **Jung S.**, Murphy P.A., Johnson L.A. Rheological properties of soy protein hydrolysates IFT Annual Meeting and Food Exposition, New Orleans, LA. July 16-20, 2005.
48. * **Jung S.**, Lamsal B., Stepien V., Johnson L.A., Murphy P. Enzyme-assisted extraction and functionality of soy proteins from defatted flakes on laboratory- and pilot-scale. 96th AOCS Annual Meeting and Exposition, Salt Lake City, UT, May 1-4, 2005.
49. * **Jung S.** Impact of substrate composition on functional properties of protease-modified soy proteins. American Chemistry Society, 36th Great Lakes Regional Meeting, Peoria, IL, October 17-20, 2004.
50. **Jung S.**, Rickert D., Deak N., Aldin E., Recknor J., Johnson L.A., Murphy P.A. Comparison of Kjeldahl and Dumas Methods for Protein Content Determination in Soy Products for ISS and Planetary Outpost Missions, NASA Food Technology Commercial Space Center Symposium, Ames, IA. 2004.

51. **Jung S.**, Murphy P., Johnson L.A. Functional properties of soy protein modified by an endoprotease at low degrees of hydrolysis, Annual Meeting of the American Association of Cereal Chemists, Portland, OR, September 28- October 2, 2003.
52. **Jung S.**, Murphy P., Johnson L.A. Pectinase and proteases: effects on protein and functional properties of soy protein ingredients IFT Annual Meeting and Food Exposition, Chicago, IL, July 13-16, 2003.
53. **Jung S.**, Johnson L.A., Murphy, P.A. Protein extractability from soyflakes by use of enzymes: cellulases, pectinase, protease. 94th AOCS Annual Meeting and Exposition, Kansas City, MO, May 4-7, 2003.
54. **Jung S.**, Rickert D., Deak N., Aldin E., Recknor J., Johnson L.A., Murphy P.A. Comparison between Kjeldahl and Dumas methods for protein determination in soy products. 94th AOCS Annual Meeting and Exposition, Kansas City, MO, May 4-7, 2003.

High pressure processing and other alternative processing technologies

54. **Jung S.*** Microbial safety, functionality and tenderness of pressurized meat products. V International Congress of Food Science and Technology, Cordoba, Argentina, November 17-19th, 2014.
55. **Jung S.**, de Lamballerie M., David-Briand E., Anton M. Effect of high pressure processing on the digestibility of unabsorbed proteins surrounding soybeans oleosome, 8th International Conference on High pressure Bioscience and Biotechnology, July 15-18th 2014, Nantes, France
56. Villamonte, G., Jury V., **Jung S.**, de Lamballerie M. Effect of xanthan gum on the structural modifications of myofibrillar proteins by high pressure, 8th International Conference on High pressure Bioscience and Biotechnology, July 15-18th 2014, Nantes, France
57. Shaw, A., A. Svoboda, A. Mendonca, and **S. Jung**. Search for a natural intervention against *L. monocytogenes* in Wheatgrass Juice. International Association for Food Protection Annual Meeting. Indianapolis, IN, 2014.
58. Lipkie T., Jin L., McKnight M., Ferruzzi M., **Jung S.** Evaluating the bioavailability and extractability of bioactive components in pressurized fresh fruits and vegetables beverages, Annual Meeting and Food Exposition of the Institute of Food Technologists, Chicago, IL, June 25-28, 2012.
59. Chao D., **Jung S.**, Aluko R. Properties of pea protein isolate with pressure treatment and thermal treatment, 102nd AOCS Annual Meeting and Expo, Cincinnati, OH, May 1-4, 2011.
60. ***Jung S.** High pressure processing of meat: what's next? Department of Animal Science, Meat Science Seminar Series, Iowa State University, March 22, 2011
61. ***Jung S.** High pressure processing of foods: beyond microbial inactivation. University of Arkansas, November 15, 2010.
62. ***Jung S.** Benefits and challenges of applying high pressure processing to meat products. 5th Innovative Foods Conference – Higher Values Foods, FIESTA, August 18-19, 2010, Melbourne, Australia.
63. Volk S., Ahn D., Zeece M., **Jung S.** Impact of enzymatic dephosphorylation on formation of peptides from egg phosphitin, Annual Meeting and Food Exposition of the Institute of Food Technologists, Chicago, IL, July 17-20, 2010.
64. Vijayakumar S., Grewell D., **Jung S.**, Clark S. Protease inactivation in milk by thermosonication and impact on milk characteristics, 39th Annual Ultrasonic Industry Association (UIA) symposium, April 12-14, 2010, Cambridge, MA.
65. ***Jung S.** Recent development on the uses of environmentally-friendly technology to improve soyfood processing and quality, University of College Cork, Ireland, January 8, 2010.
66. ***Jung S.** Novel green environmentally friendly food processing technology: a focus on high-pressure processing and aqueous extraction of oilseeds, Food Safety and Food Security workshop, Central Institute of Agricultural Engineering (CIAE), Bhopal, and Haryana Agricultural University (HAU), Hisar, India, November 3-5, 2009.
67. ***Jung S.** Modifying properties of protein-rich systems by high-pressure processing, Annual Meeting and Food Exposition of the Institute of Food Technologists, Anaheim, CA, June 6-10, 2009.
68. Volk S., Deterre S., **Jung S.** Effect of high-pressure processing on the composition and quality of soymilk and tofu. Annual Meeting and Food Exposition of the Institute of Food Technologists, Anaheim, CA, June 6-10, 2009.
69. **Jung S.**, Mahfuz A. High-pressure processing of soybean cream emulsion recovered from aqueous extraction. 100th AOCS Annual Meeting and Exposition, Orlando, FL, May 3-6, 2009.
70. ***Jung S.** Water absorption and lipoxygenase activity of soybean treated by high pressure, Conference of Food Engineering (CoFE), Columbus, OH, April 5-8, 2009.
71. **Jung S.** Extrusion and high-pressure processing prior to aqueous extraction of soybean flakes, 1st International ISEKI_Food conference, Porto, Portugal, September 10-12 2008.
72. Dutilly D.K., Manu D., **Jung S.**, Brehm-Stecher B., Mendonca A. Viability of *Listeria monocytogenes* in artificially inoculated turkey breast roll treated with lauric arginate and high hydrostatic pressure and stored at 4°C, International Association for Food Protection Annual Meeting, August 3-6, 2008, Columbus, OH.
73. Swedberg B., Jones S., **Jung S.**, Zeece M. Effects of high pressure treatment on two beef muscles, 61st Reciprocal Meat Conference, American Meat Science Association, Gainesville, FL, June 22-25, 2008.

74. Smith K., Ericksen A., Mendonca A., **Jung S.** Microbial shelf-life of pressurized soymilk, IFT, New Orleans, LA, June 27-July 2, 2008.
75. Sala I., **Jung S.** Activity of thermal- and pressure-treated lipooxygenase, β -glucosidase and trypsin inhibitors, IFT, New Orleans, LA, June 27-July 2, 2008.
76. **Jung S.** Functionality of soy protein submitted to extrusion and high-pressure prior to enzyme-assisted aqueous extraction, 99th AOCS Annual Meeting and Exposition, Seattle, WA, May 18-21, 2008.
77. Speroni F., **Jung S.**, de Lamballerie M. Effect of calcium and high pressure treatment on soy protein gelation properties, Food Colloids, Creating structure, delivering functionality, Le Mans, April 6-9, Le Mans, France, 2008.
78. Mendonca A., **Jung S.**, Sebraneck J. Combined efficacy of lactic acid, lauric arginate and high hydrostatic pressure in inactivating *Listeria monocytogenes* in vacuum-packaged cooked ham, International Association for Food Protection Meeting, Lake Buena Vista, FL, July 8-11, 2007.
79. Mahfuz A., **Jung S.** Characterization of isolated soy protein obtained during enzyme-assisted aqueous extraction of soybean oil using extrusion or high pressure processing, 98th AOCS Annual Meeting and Exposition, Quebec City, Canada, May 13-16, 2007.
80. * **Jung S.** High Pressure Treatment of Foods. 4th Annual Nebraska Food Research Symposium. April 14 2007, Lincoln, Nebraska. **(Invited seminar).**
81. * **Jung S.** Effect of water-to-soybean ratio and pH on pressurized soymilk properties and characteristics, ACS symposium on Nonthermal Processing: Food Quality and Chemistry, 231st ACS National Meeting, Atlanta, GA, March 26-30, 2006.
82. Newton J., **Jung S.** Effects of high pressure processing on soymilk viscosity and tofu characteristics, Association of Research Director Biennial Research Symposium, Atlanta, GA, April 1-5, 2006.
83. Robbins K.L, Lakshmanan R., Sebranek J.G, **Jung S.** Efficiency of rosemary and BHA/BHT antioxidant to delay lipid and color deterioration of pressurized meat products, IFT Annual Meeting and Food Exposition, FL, June 25-27, 2006.
84. * **Jung S.** Effect of high-pressure processing on soybean food. ENITIAA, November 2006, Nantes, France.
85. Sala I., **Jung S.** High pressure processing effects on enzyme activity and protein characteristics of soymilk, IFT Annual Meeting and Food Exposition, New Orleans, LA. July 16-20, 2005.
86. de Lamballerie-Anton M., Cheret R., **Jung S.**, Chapeau N. Effect of high pressure on colour of muscle food (meat & fish). 42nd European High Pressure Research Group Meeting, Lausanne, Switzerland, September 1-4, 2004.
87. de Lamballerie-Anton M., Perron J., Chapeau N., **Jung S.** Effect of high pressure on the reaction between bovine myofibrils and Cathepsin D. 40th European High Pressure Congress, September 2002.
88. **Jung S.**, Horvatovich P., Miesch M., Tisserand N., Hasselmann C., Marchioni E. Detection of 2-alkylcyclobutanones in irradiated foods. 19th Informal Meeting on Mass Spectrometry, Budapest, Hungary, April 29-May 3, 2001.
89. **Jung S.**, Ghoul M., de Lamballerie-Anton M. Effect of high pressure on food enzyme activities: behavior of cathepsin D. 1st International Conference on High Pressure Bioscience and Biotechnology, Tokyo, Japan, November 2000.
90. Chapeau N., **Jung S.**, de Lamballerie-Anton M. High hydrostatic pressure effects on myofibrillar proteins, European high pressure research group, Montpellier, France, September 9-11, 1999.

TEACHING

COURSES TAUGHT

California Polytechnic State University, San Luis Obispo (2014/current)

- FSN 101 - Orientation to the Food Science and Nutrition majors
- FSN 230 – Elements of food processing (laboratory)
- FSN 330 - Introduction to food engineering (Lectures and laboratories)
- FSN 444 - Food engineering Lectures and laboratories)
- FSN 334 - Food packaging
- FSN 354 - Packaging functions – Food processing
- FSN 461 - Senior project
- FSN 462 - Senior project
- FSN 581 – Food Waste (new class)

Iowa State University (2004/2013)

Undergraduate courses

- FSHN 351 - Introduction to food engineering
- FSHN 471 - Food processing I
- FSHN 472 - Food processing II

Graduate courses

- FSHN 503 - Principles of food processing (2 credits) – both online and in class
- FSHN 695 - Grant writing (invited presentations)
- FSHN 613 - Food proteins (invited presentation)
- FSHN 680 - Introduction to food science and human nutrition research (invited presentations)

In France (1997/2001)

Undergraduate courses

- Food characterization laboratory (1997/1998)
- Food biochemistry laboratory (2000/2001)

PUBLICATIONS/PRESENTATIONS, SYMPOSIUM

- Jung S**, A glance at the undergraduate and graduate programs in food science and related discipline around the world, IFT Annual Meeting Session, June 2017, Submitted October 2016
- Jung S.**, Lathrop A., Converting food waste challenges into opportunities, USDA, Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship program, Submitted October 2016
- Zeece M., Zeece P., Bogue J., Kelly A., **Jung S**. Globalizing food science education: a summary of collaboration between US and Irish universities, 10th Hawaii International Education Conference, Honolulu, Hawaii, Jan 5-8, 2012
- Zeece M., Zeece P., Bogue J., Kelly A., **Jung S**. Enhancing international perspectives in food science education via study abroad: a collaborative effort between US and Irish universities, 8th Hawaii International Education Conference, Honolulu, Hawaii, Jan 7-10, 2010
- Jung S.**, Anderson J., Bassler E., Oldham A. and Reitmeier C. Assessment of student learning using electronic portfolios, 1st International ISEKI_Food conference, Porto, Portugal, September 10-12, 2008.

TEACHING related AWARD

- Jung S.**, Reddy M., Hollis J. (*PI*), Nutritional aspects of food processing – Development of an online undergraduate course, Iowa State University, College of Human Sciences Innovative Teaching Initiatives Grant, 2011/2013
- First place winner in the category Learning, teaching and assessment methodologies and approaches in higher education, professional training and life-long learning in the field of food studies for Assessment of Student Learning Using Electronic Portfolios" by S. Jung, J. Anderson, E. Bassler, A. Oldham, and C. Reitmeier. 1st International ISEKI_Food conference, Porto, Portugal, September 10-12, 2008

MENTORING AND PROMOTION AND TENURE COMMITTEE

	Thesis/Project title or School of origin for international scholars or current position after being in my lab, when applicable	Start year/end year
Visiting scientist (5)		
Dr. Yang Feng, Associate professor	School of Biological and Chemical Engineering, Guangxi University of Science and Technology	January 1st, 2016 to December 30, 2016
Dr. Xiane Ren, Assistant professor	School of Biological and Chemical Engineering, Guangxi University of Science and Technology	May 15, 2016 to December 30, 2016
Dr. Asiye Akyıldız, Assistant professor	Cukurova University, Department of Food Engineering, Balcali / Adana, Turkey. Recipient of a fellowship from the Turkish Republic, Council of Higher Education	Summer 2012
Dr. Dipika Agrahar, Senior scientist,	Soybean processing and utilization center, CIAE, Bhopal, India, Recipient of a Borlaug fellowships	October 2008, June /September 2010
Dr. Olive Li, Assistant professor	Cal Poly, Pomona	September 2013

Post-docs (7)		
Dr. Jasreen Grewal	Assistant Professor position in the Department of Culinary Arts & Food Science at Drexel University, Philadelphia	January 2014-August 2016
Dr. Bishnu Karki	Dept. of Agricultural and Biosystems Engineering, North Dakota State University, Service Center, Pilot Plant	2009/2010
Dr. Linxing Yao	Post-doctorate associate, Wang's laboratory, Iowa State University	August 2008 - 2010
Dr. Abdulah Mahfuz	Food chemist, Feed Energy Corporation, Des Moines, IA	2007/2008
Dr. Jianping Wu	Associate professor, University of Alberta, Edmonton, Canada.	2006/2007
Dr. Hyun-Jung Kim	Food lipid scientist, Unilever, The Netherlands.	2004/2005
Dr. Ramamorthi Lakshmanan	Post-doctoral research associate, Department of Food Science and Human Nutrition, University of Illinois, Champaign-Urbana, IL.	2004/2005
PhD		
Major or co-major professor (1)		
Bishnu Karki	Ph.D. degree, Department of Civil Construction and Environmental Engineering, Ultrasonication in soy processing for enhanced protein and sugar yields and subsequent nisin production	08/2006-12/2009
Committee members (9)		
<ul style="list-style-type: none"> • Benoit Igne, Ph.D., Department of Agricultural and Biosystems Engineering, Near-infrared instrument standardization by spectral movement (2006/2009). • Kerry A. Campbell, Ph.D., Department of Chemical and Biological Engineering (2006/2009). • Guang Wang, Ph.D. candidate, Department of Food Science and Human Nutrition, Oxidative stability of egg lecithin emulsion and restoring foaming properties of yolk-contaminated egg white by physical/chemical methods (2007/2009). • Devin Dutilly, Ph.D. candidate, Department of Food Science and Human Nutrition (2007/2010). • Himali Samaraweera, Ph.D., Department of Animal Science, Production and characterization of phosphopeptides from egg yolk phosvitin (2008/2012). • Sandra Majoni, Ph.D., Department of Food Science and Human Nutrition, Maximizing oil recovery from corn fermentation by-products (2006/2009) • Frederique Duranton, PhD (2009/2012), Potential of high pressure processing for the formulation of porc products, Oniris, France • Amanda Svoboda, PhD (2011/2014), Chemical and minimal processing interventions against foodborne pathogens on watermelon and cantaloupe surfaces • Gina Villamonte, PhD (2011/2014), ONIRIS, France, Life cycle assessment of high pressure processing as a texturation technology 		
Master/Blended		
Major professor or co-major professor (8)		
Caralyn Wong (Blended)	Use of peach pit in packaging	2018/2020
Patrick Tai	The effect of destoning and enzymatic pretreatments on the biofuel production from olive cake	2016/2018
Briana Heywood	Strategies for Increasing the Release of Pigments in Red Wine	2015/2016
Ileana Sala	Effects of high pressure processing on soymilk enzymes, proteins and isoflavones	01/2005-05/2006
Stephanie Volk	Effect of high pressure on tofu and phosvitin characteristics <i>*3rd place recipient of the IFT non-thermal processing division (2009)</i>	08/2007-12/2009
Andriy Chernyshov	Engineering aspects of high-pressure processing	01/2008-03/2009

Shannon Box	Effect of pretreatments, enzymes, and pentose-fermenting bacteria on sugar and ethanol production from soybean cellulosic fiber	08/2010-06/2012
Katherine Smith	Novel technologies in soy product production, processing, and applications	08/2007-06/2009
Committee members (10)		
Armando Vega-Osorno	Wine production	2018/2020
Matthew Reddell	Use of whole grape clusters in wine production	2018/2019
Ali Duval	Utilizing enzymatic pretreatments to enhance the extraction of carotenoids, dietary fiber, and oligosaccharides, in carrot processing waste	2017/2019
Michael Chen	An Electrolytic Method for Tartrate Stabilization in Chardonnay Wine	2015/2017
Member (before 2014)		
<ul style="list-style-type: none"> • Ramon Morales, M.S., Department of Chemical and Biological Engineering, Protease demulsification of emulsion from the aqueous extraction of soy flour (2005/2007). • Cindu Annand, M.S. candidate, Agricultural and Biosystems Engineering, Feasibility of integrating ultrasound into high temperature short time processing for extended shelf life milk (fall 2013/fall 2015) • Lilly Benner, M.S. candidate, FSHN, ultrasonication of milk (2013/2014) • Christopher Koza * recipient of the College of Agriculture and Life Sciences research award, Department of Civil Construction and Environmental Engineering, Application of solid-liquid separation technologies for bioprocessing effluents, 08/2010-12/2012 • Sakthi Vijayakumar, M.S., Effects of thermosonication on proteases and characteristics of milk and cream • Laurie Walker, M.S. (12/2011) Supplementation of laying hen feed with tocopherols and algal (<i>Haematococcus pluvialis</i>) astaxanthin for egg yolk nutrient enhancement and a novel use of egg yolk protein and lecithin in the formation of artificial oil bodies for stabilizing omega-3 oil 		
Temporary advisor (1/3 of a semester, rotation opportunity for incoming students at ISU) John Smith, Krisha Miller, Heidi Weinkauff, Valerie Rosburg, Angelica Gutierrez		
<i>Undergraduate mentoring – Two quarters – Cal Poly (19)</i>		
Two quarters – Cal Poly		
Caralyn Wong	Use of peach pit for packaging	
Isabella Lawrence	High pressure processing as a tool of producing healthy foods	
Evan Quigley, Tyger Cohen and Camden Reynolds	Impact of high pressure processing on fortified almond milk	
Josephina Cabral and Jody Chan	Oil extraction and ethanol production from peach processing waste	
Audrey Healy	A comparison of possible uses of olive oil byproducts	
Khadija Nafi	Sustainable conversion of food waste into bioethanol: comparison of amylase efficiency	
Kyle Failla	Product development of Bullets: a post workout protein supplement	
Geoffroy Elliot and Amelia Hogan	Celery and red bell pepper by-products: from a waste product to a value added-product	
Before Cal Poly (2014): Jumaane Newton (George Washington Carver fellow), Tae Hun Ha, Meredith Little, Lumeng Jin (CHS Louise Rosenfeld Undergraduate Research Recipient), Adrien Douady, Kathleen Greif, Lani Yunarto, Sarah Liewer		
<i>Teaching Assistant or FoodSter UG student (7)</i>		
Caralyn Wong	UG Food Science	April 2019 to June 2019
Isabella Lawrence	UG Food Science	September 2018 to March 2019
Patrick Tai	MS candidate (2016/2018)	September 2017 to June 2018
Courtney Schlossareck	UG Food Science	September 2015 to June 2016
Khadija Nafi	UG Food Science	September 2014 to June 2015
Katie Franki	UG Food Science	September 2015 to December 2015
Maria Handley	MS candidate (2016/2018)	Fall 2016
<i>Exchange international undergraduate and graduate students (13)</i>		
Ronnie		
Romane Friscia, MS candidate	AgroTech Paris, 5 months internship	March 01, to July 31, 2016

Arthur Robin, MS candidate	ENSAIA, Nancy, France	March 9 to September 20, 2015
Johanna Carrey, MS candidate	PolyTech Montpellier, France	June 1st to August 28, 2015
Evelien Uitterhaegen, PhD candidate	ENSIACET, France	October 1st to November 30, 2015
Before Cal Poly (2014): PhD: Gina Villamonte, MS and UG: Lina Meyer, Benoît Angênieux, Astrid Lefur, Melanie Goering, Charlene Schmitt, Sophie Deterre, Alexandra Meyer, Clement Augereau, Robin Moulin		

Official Faculty Mentoring and Promotion and Tenure Committee (14)

Departmental Promotion Retention Committee at Cal Poly	Role	Year
Full professor		
Job Ubbink (Department head)	Chair	2018/2019 & 2017/2018
Scott Reaves	Chair	2018/2019
Associate professor		
Aydin Nazmi	Member	2018/2019
Angelos Sikalidis	Member	2018/2019
Assistant professor		
Samir Amin	Member	2018/2019
Kari Pilolla	Member	2018/2019
Michael La Frano	Member	2018/2019
Luis Castro	Chair	2018/2019 & 2017/2018
Lecturer		
Aleksandra Kristo	Member	2018/2019
Corinne Kohlen	Member	2018/2019
Shohreh Niku	Chair	2017/2018
Mentoring at Iowa State University		
Shaw Angela	Assistant professor	Fall 2012 – 2014

Personnel (2)

Technician	Years
Devin Maurer	2007/2014
Haining Lin	2004

SERVICE TO ACADEMIC INSTITUTIONS

External Reviewer

- External reviewer for the PhD thesis
Institute National Polytechnique, ENSIACET, Toulouse, France (June 2015)
- External reviewer for one case of Promotion and Tenure from Assistant to Associate with Tenure
University of Arkansas (2016), University of California, Davis (2015), Chapman University (2019)

Members of Various Committees

CalPoly University

- International Advisory Council (2014/2018)
- International Student Retention & Success Task Force (2014/2015)

CalPoly University - College - CAFES

- Associate Dean for Faculty and Student Affairs Search Committee (Summer 2018 - current)
- Associate Dean of Research and Graduate Study Search Committee (Summer 2016)
- Department Head Food Science and Nutrition Search Committee (Spring 2016)

- MS Graduate coordinator – MS in Agriculture with a specialization in Food Science and Nutrition (since September 2015)

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CalPoly University - Department - FSN

- Lifespan/Wellness Tenure-Track Search Committee, Serve as EEF (reopen, Fall 2016)
- Lifespan/Wellness Tenure-Track Search Committee, Serve as EEF (Summer 2016)
- Molecular Nutrition Tenure-Track Search Committee (Winter/Spring 2016)
- Food Science Planning Group (2014/2015)

Iowa State University

- Iowa State University Faculty senate (2013/2014)
- Iowa State University Judiciary and Appeals committee (2013/2014)
- Iowa State University ambassador, California State Polytechnic, Pomona (2013/2014)

Iowa State University College

- College of Human Sciences Budget Advisory Committee (2013/2014)

Iowa State University Department

- Reappointment committee for Dr. Ruth MacDonald, Chair of Food Science and Human Nutrition, Iowa State University (2014)
- FSHN Leader, Green technologies for food, feed and fuel (2013/2014)
- Faculty Search Committee, Member, Faculty position in Agricultural and Biosystems Engineering (Fall 2013)
- Faculty Search Committee, Chair, Open Rank Faculty position in FSHN (Spring/Fall 2013)
- Search Committee, Member, Accountant position II (Spring 2013)
- FSHN Graduate Education Committee, Chair (2011 to 2014)
- International Program Committee, member, (2013-)
- Strategic Planning, Member, 2013-2014
- Faculty Review, Member (2013-2014)
- FS Graduate Education Advisory Committee, Chair (2011 to 2013), Member (2013-)
- FS Graduate Admission Committee, Ex-officio Member, (2007 to 2014)
- Faculty Search Committee for associate/full professor position in food science in FSHN department Member, (2008/2009)
- Safety and Facilities Committee, Member (2008/2009)
- Graduate Recruitment Committee, Member (2006/2007), liaison to admission (2007/2008, 2008/2009)
- Outcomes Assessment Committee, Member (2005/2006)
- Undergraduate Recruitment Committee, Member (2006/2007)
- Food Science Club Advisor (2004/2005)

PROFESSIONAL ORGANIZATION

AWARDS

- Institute of Food Technologists (IFT), Food Engineering Division (FED), Outstanding Service Award (2018)
- Institute of Food Technologists (IFT), Food Engineering Division (FED), Outstanding Volunteer Award (2011)
- Institute of Food Technologists (IFT), Non-thermal Processing Division (NPD), Outstanding Volunteer Award (2011)

INVOLVEMENT

Institute of Food Technologists (www.ift.org)

Biotechnology Division involvement:

- Secretary (2017/2018)

Food Engineering Division involvement:

- Past chair (2016/2017)
- Elected chair (2015/2016)

- Elected vice-chair (2014/2015)
- Elected secretary (2013/2014)
- Member of the food engineering IFT subpanel (2010/2011)
- Newsletter Editor (2009/2011)
- Co-organizer and co-chair of symposium (2009, 2011)
- Graduate student competition reviewer (2012, 2015)

Non-Thermal Processing Division involvement:

- Member-at-large academia (2010/2013)
- Chair of the graduate student competition (2008/2011)
- Reviewer (2008/2010, 2013)
- Member of a committee charged to evaluate workshops organized by the NPD division (2008/2009)

Reviewer for the Iowa IFT Student Scholarship (2007-2009)

American Oil Chemist's Society (www.aocs.org)

Associate editor of the Journal of American Oil Chemist's Society since Spring 2012

Scientific committee for the 2013 Annual meeting

Supelco award committee (Fall 2012, Fall 2013, Fall 2014 - chair)

Protein and Co-products Division involvement:

- Chair (2013/2014)
- Vice-chair (2010/2011, 2011/2012, 2012/2013)
- Member-at-large academia (2008/2010)
- Organizer and co-chair of sessions (2008/2009, 2009/2010, 2010/2011, 2011/2012)
- Initiator and chair of the graduate student competition (2009)
- Reviewer for the ADM Best Paper Competition (2009)

EDITORIAL INVOLVEMENT

Co-Editor: Food Processing Principles and applications – 2nd edition – Editors S. Clark, S. Jung and B. Lamsal, Blackwell publishing – 2014 (24 chapters, 50 authors)

Associate editor: Journal of American Oil Chemist's Society, 2012/2018

Reviewers: Scientific journals: Journal of Food Science (JFS), Journal of Agriculture and Food Chemistry (JAFC), Journal of American Oil Chemistry Society (JAOCS), Food Science and Technology (LWT), Bioresource Technology (BT), Journal of Food Processing and Preservation (JFPP)