

**Sam K. C. Chang, PhD.**  
IFT-Certified Food Scientist (CFS)  
Fellow of IFT, ACS-AGFD and IAFoST

### EDUCATION

Ph.D. Food Science and Technology, University of Nebraska-Lincoln.  
M.S. Food Science and Technology, University of Nebraska-Lincoln.  
B.A. Food and Nutrition, Chinese Culture University in Taiwan.

### ACADEMIC APPOINTMENT

2012-  
-present Professor, Dept. of Food Science, Nutrition and Health Promotion, and  
Director for Mississippi Center for Food Safety and Post-Harvest  
Technology, Mississippi State University (MSU).  
2012-2014 Head, Dept. of Food Science, Nutrition and Health Promotion.  
2011 (1 m) Visiting Professor, Jinan University, Guangzhou, China  
2000-2012 Professor, Department of Cereal and Food Sciences, NDSU.  
2002-2008 Director, NDSU Value-added Processing Center.  
1997-2012 Active participating faculty member in the interdisciplinary Cellular and  
Molecular Biology Ph.D. Program, NDSU.  
1997-2000 Professor, Department of Food and Nutrition with a joint appointment in  
the Department of Cereal Science. NDSU.  
1994-1997 Elected Coordinator, Intercollege Interdisciplinary Food Science  
Undergraduate Program, NDSU (20% administration appointment).  
1990-1997 Associate Professor with tenure, Department of Food and Nutrition with a  
joint appointment in the Department of Cereal Science, NDSU.  
1984-1990 Assistant Professor, Department of Food and Nutrition, College of Home  
Economics, NDSU.  
1984 (9 m) American Hearth Association Research Fellow, Department of Nutrition  
and Food Science, University of Arizona, Tucson.  
1981-1984 Associate Professor (81-82), Hwa-Kang University Professor (82-84), and  
Head (81-84), Department of Food and Nutrition, Chinese Culture  
University-Taiwan.  
1981-1983 Director, Graduate Institute of Home Economics, Chinese Culture  
University-Taiwan.  
1980-1981 Research Associate, Department of Food Science and Technology,  
University of Nebraska-Lincoln.  
1976-1980 Research and/or Teaching Assistant, Department of Food Science and  
Technology, University of Nebraska-Lincoln.

## TEACHING ACTIVITY

### Courses taught

Undergraduate Courses: Introduction to Food Science and Technology, Experimental Foods, Food Chemistry and Laboratory, Food Processing, Food Analysis, Nutritional Chemistry, Seminar, Field Trip to the Food Industry, Biochemistry.

Graduate Courses: Seminar, Experimental Foods, Proteins and Amino Acids in Foods and Diet, Food Chemistry, Food Analysis, Nutritional Chemistry, Flavors and Sensory Evaluation, Food Chemistry Laboratory.

## RESEARCH ACTIVITY

Major interest in in legume food science and technology, particularly on soybean and dry edible bean cultivar development, soymilk, tofu and fermented soy foods, canned beans, and utilization of pectin and fiber in sugar beets, sunflower, and carotenoids in dehydrated carrots. Recent interest in safety and quality of Mississippi products, including fish, peanut, rice, fruits and vegetables.

### Publications

*Refereed Journal Article: in press and in print.*

- Mahmoud, B., Nannapaneni, R., Chang, S., Coker, R. 2015. Effect of X-ray treatments on *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Shigella flexneri*, *Salmonella enterica* and inherent microbiota on whole mangoes. Letters in Applied Microbiology. Accepted.
- Mahmoud B. S. M., Nannapaneni, R., Chang, S., Wu, Y. W., and Coker, R. 2016. Improving the safety and quality of raw tuna fillets by X-ray irradiation. Food Control. 569-574.
- Helms, T. C., Nelson, B. D., and Chang, K. C. 2015. Registration of 'ND1406HP' Soybean. Journal of Plant Registrations (accepted).
- Chen, Y. and Chang, S. K. C. 2015. Macronutrients, phytochemicals, and antioxidant activity of soybean sprout germinated with or without light exposure. J. Food Sci. S1391-1398.
- Zhang, Y., Chang, S. K. C. and Liu, Z. 2015. Isoflavone profile in soymilk as affected by soybean variety, grinding and heat processing methods. J. Food Sci. 80:C983-988.
- Mahmoud, B.S.M., Chang, S., Wu, Y., Nannapaneni, R., Sharama, C., and Coker, R. 2015. Effect of X-ray treatments on *Salmonella enterica* and spoilage bacteria on skin-on chicken breast fillets and shell eggs. Food Control 57:110-114.

- Zou Y. P. and Chang, S. K. C. 2014. Antioxidant and antiproliferative properties of extract and fractions from small red bean (*Phaseolus vulgaris* L.). *J. Food Nutr.* 1:1-11.
- Xuan, C. L., Yao, F. R., Guo, L. R., Liu, Q., Chang, S. K. C., Liu, K. X, and Sun, C. W. 2013. Comparison of extracts from cooked and raw lentil in antagonizing angiotensin II-induced hypertension and cardiac hypertrophy. *Eur. Rev. Med. Pharmacol. Sci.* 17:2644-2653.
- Weerasinghe, S., Williams, J. B., Mukherjee, D., Tidwell, D. K., Chang, S. K. C., and Haque, Z. U. 2013. Quality and sensory characteristics of cubed beef steak dipped in edible protective solutions of thermized cheddar whey. *J. Food Quality* 36:77-90. DOI: 10.1111/jfq.12018
- Kong, F. B. and Chang, S. K. C. 2013. Changes in protein characteristics during soybean storage under adverse conditions as related to tofu making. *J. Agric. Food Chem.* 61:387-393. DOI:10.1021/jf3032606
- Manamperi, W. A. R., Chang, S. K. C., Wiesenborn, D. P., and Pryor, S. W. 2012. Impact of meal preparation method and extraction procedure on canola protein yield and properties. *Biological Engineering Transactions* 5:191-200.
- Zhang, Y., Guo, S. T., Liu, Z. S. and Chang, S. K. C. 2012. Off-flavor related volatiles in soymilk as affected by soybean variety, grinding and heat processing methods. *J. Agric. Food Chem.* 60:7457-7462.
- Xu, B. J. and Chang, S. K. C. 2012. Comparative study on anti-proliferation properties and cellular antioxidant activities of commonly consumed food legumes against nine human cancer cells. *Food Chem.* 134:1287-1296.
- Liu, Z. S. and Chang, S. K. C. 2012. Nutritional profile and physicochemical properties of commercial soymilk. *J. Food Processing Preservation.* April 17, DOI: 10.1111/j.1745-4549.2012.00696.x
- Liu, Z. S. and Chang, S. K. C. 2012. Characteristics of soymilk and tofu of five soybeans as affected by on-site storage. *J. Food Processing Preservation.* 36:525-530.
- Yao, F. R., Sun, C. W., and Chang, S. K. C. 2011. Lentil polyphenol extract prevents angiotensin II-induced hypertension, vascular remodeling and perivascular fibrosis. *Food and Function.* 3:127-133. DOI:10.1039/c1fo10142k. [www.rsc.org/foodfunction](http://www.rsc.org/foodfunction)
- Zou, Y. P. and Chang, S. K. C. 2011. Effect of black soybean extract on the suppression of the proliferation of human AGS gastric cancer cells via the induction of apoptosis. *J. Agric Food Chem.* 59:4597-4605.
- Zou, Y.P., Chang, S. K.C., Gu, A., and Qian, S. Y. 2011. Antioxidant activity and phenolic compositions of lentil (*Lens culinaris* var. Morton) extract and its fractions. *J. Agric Food Chem.* 59: 2268-2276.
- Manamperi, W. A., Wiesenborn, D. P., Chang, S. K.C., and Pryor, S. W. 2011. Effects of protein separation conditions on the functional and thermal properties of canola

- protein isolates. *J. Food Sci.* 76(3):266-273.
- Xu, B. J. and Chang, S. K. C. 2011. Reduction of antiproliferative capacities, cell-based antioxidant capacities and phytochemical contents of common beans and soybeans upon thermal processing. *Food Chem.* 129:974-981.
- Xu, B. J., Chang, S. K. C., Liu, Z. S., Yuan, S. H., Zou, Y. P. and Tan, Y. Y. 2010. Comparative studies on the chemical and cell-based antioxidant activities, anti-tumor cell proliferation properties of soymilk produced by conventional and commercial UHT methods. *J. Agric. Food Chem.* 58: 3558–3566.
- Yao, F. R., Sun, C. W. and Chang, S. K. C. 2010. Morton lentil extract attenuated angiotensin II-induced cardiomyocyte hypertrophy via inhibiting intracellular reactive oxygen species levels *in vitro*. *J. Agric. Food Chem.* 58:10382–10388
- Liu, Z. S. and Chang, S. K. C. 2010. Chemical characteristics of low-fat soymilk prepared by low-speed centrifugal fractionation of the raw soymilk. *J. Food Sci.* 75:C420-427.
- Manamperi, W. A., Chang, S. K.C., Ulven, C., and Pryor, S. W. 2010. Plastics from an improved canola protein isolate: Preparation and properties. *J. Amer. Oil Chem. Soc* 87:909-915.
- Xu, B. J. and Chang, S. K. C. 2010. Phenolic substances characterization and chemical, cell-based antioxidant activities of 11 lentils grown in Northern United States. *J. Agric. Food Chem.* 58:1509-1517.
- Song, D. F., Chang, S. K. C., Ibrahim, S. A. 2009. Descriptive sensory characteristics of non-flatulence pinto bean. *J. Food Quality.* 32:775-792.
- Xu, B. J. and Chang, S. K. C. 2009. Phytochemical profiles and health-promoting effects of cool season food legumes as influenced by thermal processing. *J. Agric. Food Chem.* 57: 10718–10731.
- Zhao, Y. H., Chang, S. K. C., Qu, G., Li, T. W., and Cui, H. B. 2009. Beta-sitosterol inhibits cell growth and induces apoptosis in SGC-7901 human stomach cancer cells. *J. Agric. Food Chem.* 57:5211-5218.
- Xu, B. J. and Chang, S. K. C. 2009. Total phenolics, phenolic Acids, anthocyanins, flavan-3-ols, flavonols profiles and antioxidant properties of pinto and black beans (*Phaseolus vulgaris* L.) as affected by thermal processing. *J. Agric. Food Chem.* 57:4754-4764.
- Xu, B. J. and Chang, S. K. C. 2009. Isoflavones, flavane-3-ols, phenolic acids, total phenolic profiles and antioxidant capacities of soymilk as affected by UHT and traditional processing methods. *J. Agric. Food Chem.* 57: 4706–4717.
- Kong, F. B., and Chang, S. K. C. 2009. Statistical and kinetic studies of soybean quality during storage as related to soymilk and tofu making. *J. Food Sci.* 74:S81-S89.
- Song, D. F. and Chang, S. K. C. 2009. Effect of fermentation substrates on enzyme production and degradation of oligosacchrides in pinto bean flour as affected by particle size. *J. Food Processing and Preservation* 33:527-546.

- Xu, B. J. and Chang, S. K.C. 2008. Antioxidant capacity of seed coat, dehulled bean and whole black soybean in relation to their distribution of total phenolics, phenolic acids, anthocyanins and isoflavones. *J. Agric. Food Chem.* 56:8365-8373.
- Xu, B. J. and Chang S. K.C. 2008. Total phenolics, phenolic acids, isoflavones, and anthocyanins and antioxidant properties of yellow and black soybeans as affected by thermal processing. *J. Agric. Food Chem.* 56:7165-7175.
- Xu, B. J. and Chang S. K.C. 2008. Characterization of phenolic substances and antioxidant properties of food soybeans grown in North Dakota-Minnesota region. *J. Agric. Food Chem.* 56:9102-9113.
- Yuan S. H. and Chang S. K.C, Liu, Z.S. and Xu, B. J. 2008. Elimination of trypsin inhibitor activity and beany flavor in soymilk by consecutive blanching and UHT processing. *J. Agric. Food Chem.* 56:7957-7963.
- Zhao, B. and Chang, S. K. C. 2008. Evaluation of the effect of soaking and blanching on the quality of the dehydrated pea, lentil and chickpea. *J. Food Processing and Preservation* 32: 517-532.
- Kong, F. B., Chang, S. K. C., Liu, Z., and Wilson, L. A. 2008. Changes of soybean quality during storage as related to soymilk and tofu making. *J. Food Sci.* 73:S134-144.
- Xu, B. J. and Chang, S. K. C. 2008. Total phenolic content and antioxidant properties of Eclipse black beans (*Phaseolus vulgaris* L.) as affected by processing methods. *J. Food Sci.* 73:H19-27.
- Xu, B. J. and Chang, S. K. C. 2008. Effect of soaking, boiling, and steaming on total phenolic content and antioxidant activities of cool season food legumes. *Food Chem.* 110:1-13.
- Tsai, S. L., Chang, S. K. C., Tang, C. W., and Chang, S. J. 2008. Beneficial effects of maternal vitamin E supplementation on the antioxidant system of the neonate chick brain. *Asian-Australasian J. Animal Sci.* 21(2): 225-231.
- Liu, Z. S .and Chang, S. K. C. 2008. Optimal coagulant concentration, soymilk and tofu quality as affected by a short-term model storage of Proto soybeans. *J. Food Processing and Preservation.* 32:39-59.
- Yuan S. H. and Chang, K. C. 2007. Selected odor compounds in soymilk as affected by soybean materials and direct steam injection. *J. Food Sci.* 72:S481-486.
- Tsai, S. L., Chang, S. K. C. and Chang, S. J. 2007. Antioxidant content and free radicals scavenging ability of fresh red pummelo (*Citrus grandis* L. *Osbeck*) juice and freeze-dried products. *J. Agric. Food Chem.* 55: 2867-2872.
- Liu, Z. S .and Chang, S. K. C. 2007. Soymilk viscosity as influenced by heating methods and soybean materials. *J. Food Processing and Preservation* 31: 320-333.
- Xu, B. J. Yuan, S. H., and Chang, S. K. C. 2007. Comparative studies on the antioxidant activities of the hydrophilic extracts of selected legumes against copper-induced human low-density lipoprotein oxidation *in vitro*. *J. Food Sci.* 72:S522-S527.

- Xu, B. J., Yuan, S. H. and Chang, S. K. C. 2007. Comparative analyses of phenolic composition, antioxidant capacity and color of cool season legumes and other selected food legumes. *J. Food Sci.* 72:S167-177.
- Xu, B. J. and Chang, S. K. C. 2007. A comparative study on phenolic profiles and antioxidant activities of legumes as affected by extraction solvents. *J. Food Sci.* 72:S159-166.
- Yuan, S. H. and Chang, S. K. C. 2007. Selected beany odors in soymilk as affected by chemical composition, and lipoxygenases in five soybean materials. *J. Agric. Food Chem.* 55:426-427.
- Yuan, S. H. and Chang, K. C. 2007. Texture profile of tofu as affected by Instron parameters and sample preparation, and correlations of Instron hardness and springiness with sensory scores. *J. Food Sci.* 72:S136-145.
- Helms, T.C., Nelson, B. D., Goos, R. J., and Chang, K. C. 2006. Registration of 'ProSoy' soybean. *Crop Sci.* 46:470-471.
- Song, D. and Chang, K. C. 2006. Enzymatic degradation of oligosaccharides in pinto bean flour. *J. Agric. and Food Chem.* 54: 1296-1301.
- Wiesenborn, D., Kangas, N., Tostenson, K., Hall, C., Chang, K. C. 2005. Sensory and oxidative quality of screw-pressed flaxseed oil. *J. Amer. Oil Chem. Soc.* 82: 887-892.
- Zhao, Y. H., Manthey, F. A, Chang, K. C., Hou, H. J., Yuan, S. H. 2005. Quality characteristics of spaghetti as affected by green and yellow pea, lentil and chickpea flours. *J. Food Sci.* 70:S371-376.
- Liu, J. B., Chang, K. C., Wiesenborn, D. P. 2005. Antioxidant properties of soybean isoflavone extract and tofu *in vitro* and *in vivo*. *J. Agric. Food Chem.* 53:2333-2340.
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- Hou, H. J. and Chang, K. C. 2004. Storage affects color and chemical composition and tofu making quality. *J. Food Processing and Preservation.* 28:473-488.
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- Liu, Z. S., Chang, S. K. C., Li, L., and Tatsumi, E 2004. Effect of selective thermal denaturation of soybean proteins on soymilk viscosity and tofu's physical properties. *Food Res. Int'l.* 37:815-822.
- Hou, H. J. and Chang, K. C. 2004. Structural characteristics of purified glycinin from soybeans stored under various conditions. *J. Agric. Food Chem.* 52: 3792-3800.
- Liu, Z. S. and Chang, K. C. 2004. Effect of soymilk characteristics and cooking conditions on optimal coagulant concentration for making filled tofu. *J. Agric. Food Chem.* 52: 3405-3411.
- Liu, Z. S. and Chang, K. C. 2003. Development of a titration method for predicting the

- optimal concentrations of coagulants for making filled tofu. *J. Agric. Food Chem.* 51:5214-5221.
- Hou, H. J. and Chang, K. C. 2003. Yield and textural properties of soft tofu as affected by changes of phytate content during soybean storage. *J. Food Sci.* 68:1185-1191.
- Hou, H. J. and Chang, K. C. 2002. Interconversion of isoflavones in soybeans as affected by storage. *J. Food Sci.* 67:2083-2089.
- Cao, Y. M. and Chang, K. C. 2002. Edible film making from water extract of soybeans. *J. Food Sci.* 67:1449-1454.
- Su, G. and Chang, K. C. 2002. Trypsin inhibitor activity, *in vitro* digestibility and sensory quality of meat-like yuba products as affected by processing. *J. Food Sci.* 67:1260-1266.
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- Ji, M. P., Chang, K. C., and Cai, T. D. 1999. Tofu yield and textural properties of three soybean cultivars as affected by varying ratios of 7S and 11S proteins. *J. Food Sci.* 64:763-767.
- Helms, T. C. and Chang, K. C. 1999. Registration of 'Norpro' soybean. *Crop Sci.* 39:591.
- Grafton, K. F., Venette, J., Chang, K. C. 1999. Registration of 'Frontier' pinto bean. *Crop Sci.* 39:876-877.
- Cai, T. D. and Chang, K. C. 1999. Processing effect on soybean storage proteins and their relationship with tofu quality. *J. Agric. Food Chem.* 47:720-727.
- Wiesenborn, D. P., Wang, J., Chang, K. C., Schwarz, J. G., and Tostenson, K. 1999. Comparison of continuous and batch processes which extract pectin from sunflower heads. *Industrial Crops and Products.* 19:171-181.
- Hou, H. J. and Chang, K. C. 1998. Yield and quality of soft tofu as affected by soybean physical damage and storage. *J. Agric. and Food Chem.* 46:4798-4805.
- Cai, T. D. and Chang, K. C. 1998. Characteristics of production-scale tofu as affected by soymilk coagulation method: propeller blade size, mixing time and coagulant concentration. *Food Research International* 31:289-295.
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- Wang, J., Wiesenborn, D. P., Schwarz, J. G., Chang, K. C. 1997. Continuous,

- countercurrent extraction of pectin from sunflower heads. *Amer. Soc. Agric. Engin.* 40:1649-1654.
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- Cai, T. D. and Chang, K. C. 1997. The effect of coatings and processing methods on dehydrated precooked whole pinto bean quality. *J. Food Quality.* 20:315-329.
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- Lu, W. and Chang, K. C. 1996. Correlations between canning quality and chemical composition of navy bean (*Phaseolus vulgaris* L.). *Cereal Chem.* 73:788-790.
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### ***Book Edited***

\*Cadwallader, K. and Chang, S. K. C. (Eds.) 2010. *Chemistry, Texture, and Flavor of Soy*. ACS Symposium Series 1059. American Chemical Society. Washington, DC.

\*This symposium is an international effort financially supported by ND Soybean Council, Illinois Soybean Association and American Chemical Society. A collaborative work of about 30 world-class soybean food scientists, led by Dr. Chang and Dr. Cadwallader of the University of Illinois-UC.

### ***Book Chapters***

- Chang, S. K. C., 2015. Chapter 35. Science and Technology of Soymilk and Tofu Manufacture. In *Handbook of Vegetable Preservation and Processing*. 2<sup>nd</sup> edition. Y. H. Hui (ed.). Y. H. Hui (editor). CRC Press. Boca Raton, FL. (in press).
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### ***Review Articles and Proceedings***

- Manamperi, W. A., Pryor, S. W., Chang, S. K.C. Separation and evaluation of canola meal and protein for industrial bioproducts. Proceeding of the ASABE/CSBE North Central Intersectional Conference in Fargo, ND. Sponsored by the Red River Valley Section of ASABE. Oct.12-13, 2007.
- \*Chang, K. C., Liu, Z. S., Hou, H. J. and Wilson, L. A. 2004. Influence of storage on the characteristics of soybean, soymilk and tofu. Proceedings of the IIV World Soybean Research Conference, IV International Soybean Processing and Utilization Conference and III Brazilian Soybean Congress. P. 977-983. Feb. 29-March 5, 2004. Foz do Iguassu, PR, Brazil.
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### ***Variety Release***

I have cooperated with two legume breeders (Drs. Ken Grafton and Ted Helms) in the Department of Plant Sciences on the evaluation of the culinary quality of dry edible bean, and food soybean. Five edible bean cultivars (Norstar navy, 1992; Hatton pinto, 1994; Maverick pinto 1996; Frontier pinto, 1997, and Arthur navy, 2000) and four food soybean cultivars (Danatto for natto making, 1995; NorPro for tofu making, 1998; ProSoy for tofu making, 2005 and ND1406HP soybean for soymilk and tofu making, 2015), which have excellent agronomic traits and good food quality, have been released from the cooperative research. These bean varieties are widely grown in millions of acres in ND and MN and have produced hundreds of million dollar sales each year to the producers.

### ***Abstracts and Scientific Meeting Presentation. \*Marked are international presentations***

- Chang, SKC and Shi, M. Effect of growing environment on the characteristics of soybeans for food uses. Invited to present orally in the Symposium of 'Environmental Effect on Plant Volatile Formation & Nonvolatile Composition.' ACS Annual meeting, Aug, 2015. Boston, MA.
- \*Chang, S.K.C. 2015. Quality of food-grade soybeans for soy food manufacturing. The Second North Dakota-China Better Ingredients for Health Food Conference in Qingdao, Shandong Province, China. March 30-31, 2015.
- Shi M., Gillen, A., Chang, SKC., Zhang, Y. Quality testing and selection of soybean varieties grown in Mississippi for soymilk and tofu making. Accepted for presentation in 2015 IFT meeting in Chicago in July 11-14.
- Gu, C.M, and Chang, SKC. Effect of high-pressure homogenization on physical characteristics of soymilk during storage. Accepted for presentation in 2015 IFT meeting in Chicago in July 11-14.

- Kumari, S. and Chang, SKC. A Comparative study of polyphenolic content and antioxidant properties of soybean products as affected by fermentation and non-fermentation processing techniques. Accepted for presentation in 2015 IFT meeting in Chicago in July 11-14.
- Zhang, Y. and Chang, SKC. Antioxidant activity and ACE inhibitory activity of proteolytic digests from three phenolic-rich legume varieties as affected by thermal processing. Accepted for presentation in 2015 IFT meeting in Chicago in July 11-14.
- Zhang, Y. and Chang, SKC. Purification and identification of angiotensin I-converting enzyme inhibitory peptides from *in vitro* gastrointestinal simulation digestion of three phenolic-rich legume varieties. Accepted for presentation in 2015 IFT meeting in Chicago in July 11-14.
- Zhang, Y., Tan, Y.Q., Stringer, S., Haque, Z., Kumari, S., and Chang, S. K. C. 2014. Phenolic substances and antioxidant properties of thirteen varieties of muscadine grape. Presented in the 75<sup>th</sup> Annual Meeting of the Institute of Food Technologists in New Orleans, LA. June 20-24, 2014.
- Yu, H., Kumari, K., Zhang, Y., Chang, S. K.C. 2014. Improved small-scale methods for evaluating pressed tofu and filled tofu. Presented in the 75<sup>th</sup> Annual Meeting of the Institute of Food Technologists in New Orleans, LA. June 20-24, 2014.
- \*Chang, S.K.C. 2014. Quality of food-grade soybeans for soy food manufacturing. North Dakota-China Better Ingredients for Health Food Conference in Qingdao, Shandong Province, China. March 20, 2014.
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- Zhang, Yan and Chang, S K. C. 2014. Phenolic compounds and antioxidant properties of lentil, black turtle, black soybean as affected by thermal processing. Paper no. 223. Presented in the Agricultural and Food Chemistry Division of the 248<sup>th</sup> American Chemical Society National Meeting and Exposition. San Francisco, CA. Aug 10-14, 2014.
- \*Chang, S. K. C. 2013. Soybean storage and processing factors affect the quality of soymilk and tofu. The Americas: International Conference on Soybean Utilization. Bento Goncalves, RS, Brazil. Oct 22-24, 2013.
- Haque, Z., Mukherjee, D., Yan, J., Abessinio, H., Chang, SKC. 2014. Enhancement of Radical Quenching Ability of Cheddar Whey: Mutual Supplementation with Green Tea Extract. (Presented at the 78<sup>th</sup> Annual Meeting of the Mississippi Academy of Sciences, Hattiesburg, MS. March 6, 2014.
- Haque, Z., Mukherjee, D., Shao, W., Abessinio, H., Chang, SKC. 2014 Enhancement of Radical Quenching Ability of Cheddar Whey: Mutual Supplementation with Black Tea Extract.

- Presented at the 78<sup>th</sup> Annual Meeting of the Mississippi Academy of Sciences, Hattiesburg, MS. March 6, 2014.
- Mukherjee, D., Haque, Z., Chang, SKC. 2014. Use of casein hydrolyzate and tea extracts in thermized whey-based edible coating solutions to reduce oxidative degradations of cubed beef steak. Presented at the 78<sup>th</sup> Annual Meeting of the Mississippi Academy of Sciences, Hattiesburg, MS. March 6, 2014
- \*Chang, S. K. C. 2012. Biochemical characteristics of soybeans as related to soymilk and tofu making, and potential health benefits. International Food Innovation Conference II. Dec. 13-15, 2012. Hangzhou, Zhejiang, China.
- Liu, Z. S. and Chang, S. K. C. 2012. Phytate, saponins, minerals, sugars, total phenolics and antioxidant capacity in centrifugal fractions of water extract of soybeans. Annual Meeting of the Institute of Food Technologists. June 25-28, 2012. Las Vegas, NV.
- Xuan, C.L., Yao, F., Guo, L., Chang, S., Liu, K., Sun, C. 2012. Oral administration of lentil extracts attenuated angiotensin II-induced cardiac hypertrophy and hypertension in normotensive rats. Hypertension 60:A300. American Heart Association.
- Zhang, Y., Chang, S. K. C. 2012. Soymilk isoflavone profiles as affected by soybean varieties, grinding and heating methods. Annual Meeting of the Institute of Food Technologists. June 25-28, 2012. Las Vegas, NV.
- Zhang, Y., Chang, S. K. C., Liu, Z. S. 2012. Protease inhibitor activity in soymilk as affected by soybean variety, grinding and heating methods. Annual Meeting of the Institute of Food Technologists. June 25-28, 2012. Las Vegas, NV.
- Liu, Z. S. and Chang, S. K. C. 2011. Beany flavor intensity, trypsin inhibitors and isoflavones contents in soymilk centrifugal fractions. Annual Meeting of the Institute of Food Technologists. June 11-14, 2011. New Orleans, LA.
- Ou, Y. Q., Chang, S. K. C. 2011. Modification of a rapid titration method for determining suitable concentrations of calcium sulfate as a coagulant for making pressed tofu. Annual Meeting of the Institute of Food Technologists. June 11-14, 2011. New Orleans, LA.
- Ou, Y. Q., Chang, S. K. C., Herman, K., Uhr, J. 2011. Comparison of a rapid dye-binding method with the Kjeldhal and NIR methods for determining protein content in soybean and soymilk. Annual Meeting of the Institute of Food Technologists. June 11-14, 2011. New Orleans, LA.
- Zou, Y. P. and Chang, S. K. C. 2011. Antioxidant and antiproliferative properties of extracts and fractions from small red bean (*Phaseolus vulgaris* L.). Annual Meeting of the Institute of Food Technologists. June 11-14, 2011. New Orleans, LA.
- Zhang, Y., Chang, S. K. C., and Liu, Z. S. 2011. Effect of grinding and heating with vacuum-evaporation methods on the elimination of beany odor from soymilk. Annual Meeting of the Institute of Food Technologists. June 11-14, 2011. New Orleans, LA.
- Zhang, Y., Chang, S. K. C., and Liu, Z. S. 2011. Effect of variety, grinding and heating methods on soymilk antioxidant profile. Annual Meeting of the Institute of Food Technologists. June 11-14, 2011. New Orleans, LA.

- Yao, F. R., Sun, C. W., Chang, S. K. C. 2010. Lentil polyphenol extract prevents angiotensin II-induced hypertension, vascular remodeling and perivascular fibrosis. 64<sup>th</sup> Annual Meeting of the Council for High Blood Pressure Research. American Heart Association. October 13-16, 2010. Washington, DC.
- \*Zhang, Y., Chang, S. K. C., Yuan, S. H., and Liu, Z. 2010. Soymilk isoflavone profiles as affected by selected soybean cultivars and processing methods. Paper PO171. 15<sup>th</sup> World Congress of Food Science and Technology. August 20-25, 2010. Cape Town, South Africa.
- \*Zhang, Y., Chang, S. K. C., Yuan, S. H., and Liu, Z. S. 2010. Isoflavone profiles and kinetic changes of isoflavones during ultra-high temperature processing. Paper PO173. 15<sup>th</sup> World Congress of Food Science and Technology. August 20-25, 2010. Cape Town, South Africa.
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- Liu, Z. Y. and Chang, S. K. C. 2010. Particle size distribution of raw soymilk. Paper 233-25. Annual Meeting of the Institute of Food Technologists. July 17-20. 2010. Chicago, IL.
- Zou, Y. P. and Chang, S. K. C. 2010. Effect of black soybean extract on suppression of the proliferation of human AGS gastric cancer cells via the induction of apoptosis. Paper 295-21. Annual Meeting of the Institute of Food Technologists. July 17-20. 2010. Chicago, IL.
- Yao, F. R., Sun, C. W. and Chang, S. K. C. 2010. Morton lentil extract inhibited angiotensin II-induced cardiomyocytes hypertrophy via decreasing intracellular reactive oxygen species *in vitro*. Paper 295-69. Annual Meeting of the Institute of Food Technologists. July 17-20. 2010. Chicago, IL.
- \*Chang, S. K. C. 2009. Effect of storage on color, biochemical composition and food quality of soybeans. Paper F1-002. Presented in the Symposium on Storage and Logistics. World Soybean Research Conference VIII. August 10-15, 2009. Beijing, China.
- Chang, S. K. C. and Liu, Z. S. 2009. Characteristics of soymilk manufactured from food-grade soybeans grown in North Dakota-Minnesota region. Paper 153-30. Presented in the 70<sup>th</sup> Annual Meeting of the Institute of Food Technologists. June 6-9, 2009. Anaheim, CA.
- Chang, S. K. C., Yuan, S. H. and Liu, Z. S., Lei, Q., Boatright, W. L. 2009. Soy odor in soymilk as affected by soy variety and ultra-high temperature processing methods. Paper 153-32. Presented in the 70<sup>th</sup> Annual Meeting of the Institute of Food Technologists. June 6-9, 2009. Anaheim, CA.
- Manamperi, W. A., Pryor, S. W., Chang, S. K. C., and Ulven, C. A. 2009. Canola proteins in



- bioplastics: Protein characterization and product formulation. Presented at the 100th AOCS Annual Meeting & Expo. May 3-6, 2009. Orlando, FL.
- Yao, F., Sun, C. W., Chang, S. K.C. 2009. Morton lentil inhibited cardiomyocyte hypertrophy via the mechanism of Ang-II induced reactive oxygen species reduction. Annual meeting of the Western Pean and Lentil Growers Association. December, 2009. Moscow, ID.
- Chang, S. K.C. 2008. Characterization of health-promoting phytochemicals in pea, lentil and chickpea. Annual meeting of the Western Pean and Lentil Growers Association. December 10, 2008. Moscow, ID.
- Xu, B. J. and Chang, S.K. C. 2008. Total phenolics, phenolic acids, isoflavones, flavanol profiles and antioxidant capacity of soymilk as affected by traditional and UHT processing. 235<sup>th</sup> ACS Meetings. March 26-30, 2008. New Orleans, LA.
- Song, D.F., Chang, S. K. C., and Ibrahim, S. 2008. Effect of fermentation substrates on enzyme production and degradation of oligosaccharides in pinto bean flour as affected by particle size. 235<sup>th</sup> ACS Meetings. March 26-30, 2008. New Orleans, LA.
- \*Chang, S.K.C. 2008. Storage-induced biochemical changes of soybeans as related to soymilk and tofu making. Presented in the 14<sup>th</sup> World Congress of Food Science and Technology. Oct 19-23, 2008. Shanghai, China
- \*Yuan, S.H., Chang, S. K. C., Liu, Z.S. and Xu, B. J. 2008. Effect of thermal processing on trypsin inhibitor activity of soymilk. Presented in the 14<sup>th</sup> World Congress of Food Science and Technology. Oct 19-23, 2008. Shanghai, China
- \*Manamperi, W. A., Chang, S. K.C., Pryor, S. W. 2008. Thermal and functional properties of canola meal proteins precipitated at different pH values. Presented in 2008 North Central ASABE/CSBE Conference. September 19-20, 2008. Winnipeg, Manitoba, Canada.
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- Yuan, S.H., Chang, S. K. C., Liu, Z.S. and Xu, B. J. 2008. Trypsin inhibitor and soy odor as affected by ultra-high temperature heating processes. Presented in the 69<sup>th</sup> annual meeting of the Institute of Food Technologists. Paper 133-33. June 28-July 1, 2008. New Orleans, LA.
- Chang, K.C. 2008. Storage-induced protein structural changes of soybean as related to soymilk and tofu making. Presented in the ACS Symposium on Chemistry, Texture and Flavor of Soy. Division of Agricultural and Food Chemistry. The 236<sup>th</sup> Annual ACS Convention. August 17-19, 2008. Philadelphia, PA.
- Yuan, S. H. and Chang, K. C. 2008. Trypsin inhibitor activity and soy odor in soymilk as affected by soy materials and thermal processing methods. Presented in the ACS Symposium on Chemistry, Texture and Flavor of Soy. Division of Agricultural and Food Chemistry. The 236<sup>th</sup> Annual ACS Convention. August 17-19, 2008. Philadelphia, PA.
- Yuan, S. H. and Chang, K. C. 2008. Instrumental and sensory evaluation of the textural properties of tofu. Presented in the ACS Symposium on Chemistry, Texture and Flavor

- of Soy. Division of Agricultural and Food Chemistry. The 236<sup>th</sup> Annual ACS Convention. August 17-19, 2008. Philadelphia, PA.
- Manamperi, W. A., Pryor, S. W., Chang, S. K.C. 2007. Separation and evaluation of canola meal and protein for industrial bioproducts. Proceeding of the ASABE/CSBE North Central Intersectional Conference. Sponsored by the Red River Valley Section of ASABE. Oct.12-13, 2007. Fargo, ND.
- Liu, Z. S. and Chang, S. K. C. 2007. Soymilk and tofu characteristics as affected by soybean storage on farm production sites. Presented in the 68<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 28-August 1, 2007. Chicago, IL.
- Liu, Z. S. and Chang, S. K. C. 2007. Effect of grinding conditions on soymilk fractions obtained by low speed centrifuging. Presented in the 68<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 28-August 1, 2007. Chicago, IL.
- Yuan, S. H., Chang, S. K. C. and Liu Z. S. 2007. Selected soy odor compounds in soymilk as affected by ultra-high temperature and conventional processing methods. Presented in the 68<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 28-August 1, 2007. Chicago, IL.
- Yuan, S. H. and Chang, S. K. C. 2007. Comparative studies on the lipoxygenase activities in four food legume classes. Presented in the 68<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 28-August 1, 2007. Chicago, IL.
- Kong, F. B. and Chang, S. K. C. 2007. Changes in protein characteristics during soybean storage under selected adverse conditions. Presented in the 68<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 28-August 1, 2007. Chicago, IL.
- Xu, B. J. and Chang, S. K. C. 2007. Total phenolic content and antioxidant properties of black beans (*Phaseolus vulgaris* L.) as affected by processing methods. Presented in the 68<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 28-August 1, 2007. Chicago, IL.
- Xu, B. J. and Chang, S. K. C. 2007. Effect of soaking, cooking and steaming on antioxidant properties of cool season food legumes. Presented in the annual ACS meetings, August 19-23, 2007. Boston, MA.
- Yuan, S. H., Chang, S. K. C., Liu, Z. S., and Xu, B. J. 2007. Trypsin inhibitor activity and isoflavones in soymilk processed by different methods. Presented in the annual ACS meetings, August 19-23, 2007. Boston, MA.
- Kong, F. B. and Chang, K. C. 2006. Developing mathematical models for monitoring quality deterioration of soybeans for soymilk and tofu making. Abstract 078F-01. Presented in the 67<sup>th</sup> Annual Meetings of the Institute of Food Technologists, June 24-28, 2006. Orlando, FL.
- Liu, Z. S. and Chang, K. C. 2006. Separation of lipids and proteins in raw soymilk by centrifugal fractionation. Abstract 039-7. Presented in the 67<sup>th</sup> Annual Meetings of the Institute of Food Technologists, June 24-28, 2006. Orlando, FL.
- Liu, Z. S. and Chang, K. C. 2006. Selected physicochemical properties of commercial

- soymilk and beverages. Abstract 039-11. Presented in the 67<sup>th</sup> Annual Meetings of the Institute of Food Technologists, June 24-28, 2006. Orlando, FL.
- Song, D. F. and Chang, K. C. 2006. Descriptive sensory characteristics of no-flatulence pinto bean paste. Abstract 078F-33. Presented in the 67<sup>th</sup> Annual Meetings of the Institute of Food Technologists, June 24-28, 2006. Orlando, FL.
- Yuan, S. H. and Chang, K. C. 2006. Soybean lipid and fatty acid compositions and their relationships with beany flavor generation in soymilk. Abstract 039G-33. Presented in the 67<sup>th</sup> Annual Meetings of the Institute of Food Technologists, June 24-28, 2006. Orlando, FL.
- Xu, B. J. and Chang, K. C. 2006. Effects of extraction solvent on phenolic profiles and antioxidant activity of food legumes. Abstract 039G-05. Presented in the 67<sup>th</sup> Annual Meetings of the Institute of Food Technologists, June 24-28, 2006. Orlando, FL.
- Xu, B. J. and Chang, K. C. 2006. Analyses of phenolic compounds and antioxidant properties of the cool season legumes. Abstract 039G-22. Presented in the 67<sup>th</sup> Annual Meetings of the Institute of Food Technologists, June 24-28, 2006. Orlando, FL.
- Xu, B. J. and Chang, K. C. 2006. Antioxidant activities of selected legume extracts against in vitro copper-induced human low density lipoprotein oxidation. Abstract 003E-21. Presented in the 67<sup>th</sup> Annual Meetings of the Institute of Food Technologists, June 24-28, 2006. Orlando, FL.
- Song, D. F., Chang, K. C. and Cui, H. B. 2005. Effect of genistein on iNOS expression and its relation to proliferatory inhibition of gastric carcinoma cells. Presented in the 6th International Symposium on the Role of Soy in Preventing and Treating Chronic Disease. AOCS. Oct 28-Nov 2, 2005. Chicago.
- Yuan, S. H. and Chang, K. C. 2005. Comparison of beany flavor compounds in soymilk produced from five soybean varieties. Paper 171. Division of Agricultural and Food Chemistry. Presented in the 230<sup>th</sup> American Chemical Society Meeting. August 28-Sept 1. Washington, DC.
- Chang, K. C. and Yuan, S. H. 2005. Ultrastructural properties of various types of tofu. Ab. 54B-4. Presented in the 66<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 16-20, 2005. New Orleans, LA.
- Yuan, S. H. and Chang, K. C. 2005. Characterization of the Instron textural properties of various types of tofu. Ab. 54-B1. Presented in the 66<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 16-20, 2005. New Orleans, LA.
- Song, D. F. and Chang, K. C. 2005. Enzymatic degradation of oligosaccharides in pinto bean flours. Ab. 36E-34. Presented in the 66<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 16-20, 2005. New Orleans, LA.
- Yuan, S. H. and Chang, K. C. 2005. Off-flavor compounds in soymilk as affected by soybean variety and processing methods. Ab. 36E-59. Presented in the 66<sup>th</sup>

- Annual Meetings of the Institute of Food Technologists, July 16-20, 2005. New Orleans, LA.
- \*Chang, K. C. 2004. Current issues in food, nutrition and health promotion in the USA: a food scientist's perspective. The 30<sup>th</sup> Annual Meeting of the Chinese Nutrition Society. P. 101, Program Book. May 28-29. Chung Shan Medical University, Taichung, Taiwan.
- \*Chang, K. C. 2004. Recent advances in science and technology of soy products. Proceedings of the International Symposium on the Development and Current Issues of Soy Protein Products. P. Ab. 2.1-Ab. 2.9. Providence University. May 20, 2004. Salu, Taichung, Taiwan.
- Liu, Z. S. and Chang, K. C. 2004. Soymilk viscosity as influenced by two-step heating. Presented in the 65<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 12-16, 2004. Las Vegas, NV.
- Xu, Y. Y., Chang, K. C. and Liu, Z. 2004. Trypsin inhibitor activities in commercial and lab-made soymilk. Presented in the 65<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 12-16, 2004. Las Vegas, NV.
- Kong, F. B., Chang, K. C., Wilson, L. A. and Liu, Z. S. Influence of soybean storage conditions on tofu making. Presented in the 65<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 12-16, 2004. Las Vegas, NV.
- Zhao, B. and Chang, K. C. 2004. Processing to improve quality of dehydrated precooked pea, chickpea and lentil. Presented in the 65<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 12-16, 2004. Las Vegas, NV.
- Kuan, J. A. L., Wilson, L. A. and Chang, K. C. 2004. Determination of soybean antioxidant potential under different storage conditions and its effects on soy food quality. Presented in the 65<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 12-16, 2004. Las Vegas, NV.
- Song, D. F. and Chang, K. C. 2004. Effect of soaking, cooking, autoclaving on oligosaccharide contents of pinto bean. Presented in the 65<sup>th</sup> Annual Meetings of the Institute of Food Technologists, July 12-16, 2004. Las Vegas, NV.
- Wiesenborn, D., Y. Zheng, N. Kangas, K. Tostenson, C. Hall III and K.C. Chang. 2004. Sensory and oxidative quality of screw-pressed flaxseed oil, session LOQ 4. Presented in the 95<sup>th</sup> American Oil Chemists Society Annual Meeting & Expo. May 9-12. Cincinnati, OH.
- Wiesenborn, D., Zheng, Y., Kangas, N., Tostenson, C., Hall III, C., and K. C. Chang, 2004. Quality of screw-pressed flaxseed oil. Proceedings of the 60<sup>th</sup> Annual Meetings of the US Flax Institute. March 18-19, 2004. Fargo, ND.
- Chang, K. C. 2003. The science and technology of tofu making. Presented in the 64<sup>th</sup> Annual Meetings of the Institute of Food Technologists. July 12-16, 2003. Chicago, IL.
- Liu, Z. S. and Chang, K. C. 2003. Effect of soymilk compositions and process conditions on the optimal concentrations of coagulant for making tofu. Presented in the 64<sup>th</sup>

- Annual Meetings of the Institute of Food Technologists. July 12-16, 2003. Chicago, IL.
- Liu, Z. S. and Chang, K.C. 2003. Influence of soybean storage on the processing of filled tofu. Presented in the 64th Annual Meetings of the Institute of Food Technologists. July 12-16, Chicago, IL.
- Hou, D. H. J. and Chang, K. C. 2003. Structural characteristics of beta-conglycinin in soybean as affected by storage. Presented in the 64th Annual Meetings of the Institute of Food Technologists. July 12-16, 2003. Chicago, IL.
- Zhao, Y. H, Manthey, F. A., Chang, K. C., and Hou, D. H. J. 2003. Fortification of spaghetti with legume flour. Presented in the 64th Annual Meetings of the Institute of Food Technologists. July 12-16, 2003. Chicago, IL.
- Hou, H. J. and Chang, K. C. 2002. The structures of glycinin in soybeans as affected storage conditions. Presented in the 63<sup>rd</sup> Annual Meetings of the Institute of Food Technologists. June 15-19, 2002. Anaheim, CA.
- Liu, Z. S. and Chang, K. C. 2002. Development of a rapid method for predicting optimum coagulant concentration for making filled tofu. Presented in the 63<sup>rd</sup> Annual Meetings of the Institute of Food Technologists. June 15-19, 2002. Anaheim, CA.
- Su, G., Liu, Z and Chang, K. C. 2001. Making meat-like products by soft tofu and gluten. Presented in the 62<sup>nd</sup> Annual Meetings of the Institute of Food Technologists. June 23-27, 2001. New Orleans, LA.
- Hou, H. J. and Chang, K. C. 2001. Interconversions of isoflavones in soybean as affected by storage. Presented in the 62<sup>nd</sup> Annual Meetings of the Institute of Food Technologists. June 23-27, 2001. New Orleans, LA.
- Chang, K. C., Liu, J., and Su, G. 2001. The antioxidant activity of soy extracts containing isoflavones. Presented in the 62<sup>nd</sup> Annual Meetings of the Institute of Food Technologists. June 23-27, 2001. New Orleans, LA.
- Hellevang, K., Osowski, C., Lee, T., Hanson, R., Chang, K. C. and Hou, H. J. 2001. Storage environment effect on pinto bean quality and resistance to air flow of pinto and navy beans. ASAE Meeting Presentation. Paper No. 01-6061.
- \*Wei, Q., Wolf-Hall, C., Chang, K. C. 2000. Characteristics of natto made from four American soybean cultivars. Presented in Third International Soybean Processing and Utilization Conference. Tsukuba, Ibaraki, Japan. October 15-20, 2000.
- Liu, J., Chang, K. C. and Cai, T. D. 2000. Interconversion of isoflavones during extraction. Presented in the 61<sup>st</sup> Annual Meetings of the Institute of Food Technologists. June 10-14, 2000. Dallas, Texas.
- Cao, Y. and Chang, K. C. 2000. Characteristics of soy films made by transglutaminase and film enhancers. Presented in the 61<sup>st</sup> Annual Meetings of the Institute of Food Technologists. June 10-14, 2000. Dallas, Texas.
- Hou, H. J. D. and Chang, K. C. 2000. Interactions between phytate and protein

- coagulation on tofu quality as affected by storage of soybean. Presented in the 61<sup>st</sup> Annual Meetings of the Institute of Food Technologists. June 10-14, 2000. Dallas, Texas.
- Su, G. and Chang, K. C. 2000. Sensory attributes and nutritional quality of meat-like yuba products. Presented in the 61<sup>st</sup> Annual Meetings of the Institute of Food Technologists. June 10-14, 2000. Dallas, Texas.
- \*Chang, K. C. 1999. Processing effect and characterization of soybean for tofu making. Presented in the First International Conference on Oriental Foods. October 11-14. Beijing, China.
- Cai, T. D. and Chang, K. C. 1999. Trypsin inhibitory activity and in vitro protein digestibility of soymilk and tofu. Presented in the 60th Annual Meetings of the Institute of Food Technologists. July 24-28, 1999. Chicago, IL.
- Cao, Y. M. and Chang, K. C. 1999. Study on the optimum condition for soybean film making by deposition of film forming solution. Presented in the 60th Annual Meetings of the Institute of Food Technologists. July 24-28, 1999. Chicago, IL.
- Su, G. and Chang, K. C. 1999. Procedure and properties of making meat-like products using yuba as the main ingredient. Presented in the 60th Annual Meetings of the Institute of Food Technologists. July 24-28, 1999. Chicago, IL.
- Hou, H. J. and Chang, K. C. 1999. Molecular changes of soy proteins as affected by storage of soybeans. Presented in the 60th Annual Meetings of the Institute of Food Technologists. July 24-28, 1999. Chicago, IL.
- Ji, M., Chang, K. C., and Cai, T. D., 1998. Effect of 11S/7S protein ratio on the yield and textural properties of tofu made from three soybean cultivars. Presented in Soybean and Human Health Conference. July 13-14, 1998. Chicago, IL.
- Chang, K. C. 1998. Integration of food sciences and nutrition in university departments that offer both programs. Presented in the 59th Annual Meetings of the Institute of Food Technologists. June 20-24, 1998. Atlanta, GA.
- Cai, T. D. and Chang, K. C. 1998. Effect of soybean growing location on tofu yield and quality. Presented in the 59th Annual Meetings of the Institute of Food Technologists. June 20-24, 1998. Atlanta, GA.
- Cao, Y. M. and Chang, K. C. 1998. Effect of pH on selected properties of soy films modified with glutaraldehyde. Presented in the 59th Annual Meetings of the Institute of Food Technologists. June 20-24, 1998. Atlanta, GA.
- Ji, M., Chang, K. C., and T. D. Cai. 1998. Tofu quality and yields of soybean cultivars as affected by ratios of 7S and 11S proteins. Presented in the 59th Annual Meetings of the Institute of Food Technologists. June 20-24, 1998. Atlanta, GA.
- Su, G. And Chang, K. C. 1998. Making meat-like products using whole soybean. Presented in the 59th Annual Meetings of the Institute of Food Technologists. June 20-24, 1998. Atlanta, GA.
- Wei, Q., Wolf-Hall, C. E. and Chang, K. C. 1998. Natto food quality as affected by

- selected bacteria strains and processing conditions. Presented in the 59th Annual Meetings of the Institute of Food Technologists. June 20-24, 1998. Atlanta, GA.
- \*Mitek, M., Chang, K. C., Wiesenborn, D. 1997. The effect of extraction parameters on the yield and quality of sunflower pectin. XXVIII Scientific Session. "An Advance in Food Technology and Chemistry." Book of Abstract, p. 149-150. Committee of Food Technology and Chemistry Polish Academy of Science, Gdansk, Poland.
- Cai, T. D. and Chang, K. C. 1997. Processing to improve quality and protein yield of soymilk. Presented in the 58th Annual Meetings of the Institute of Food Technologists. June 14-18, 1997. Orlando, FL.
- Hou, H. J. and Chang, K. C. 1997. Quality of soymilk and tofu affected by Pistachio. Presented in the 58th Annual Meetings of the Institute of Food Technologists. June 14-18, 1997. Orlando, FL.
- Cai, T. D. and Chang, K. C. 1997. Accelerated storage study on dehydrated precooked pinto bean. Presented in the 58th Annual Meetings of the Institute of Food Technologists. June 14-18, 1997. Orlando, FL.
- Li, G. J. and Chang, K. C. 1997. Gelling characteristics of sunflower pectin as affected by chemical structure and heating. Presented in the 58th Annual Meetings of the Institute of Food Technologists. June 14-18, 1997. Orlando, FL.
- Wang, J., Wiesenborn, D. P., Chang, K. C., and Schwarz, J. G. 1997. Comparison of continuous, countercurrent extraction with batch extraction of pectin from sunflower heads. Presented in the 58th Annual Meetings of the Institute of Food Technologists. June 14-18, 1997. Orlando, FL.
- Pandey, R., Wiesenborn, D. P., Schwarz, J. G., and Chang, K. C. 1997. Continuous countercurrent washing of pectin gel from sunflower heads. Presented in the 58th Annual Meetings of the Institute of Food Technologists. June 14-18, 1997. Orlando, FL.
- Li, Y. and Chang, K. C. 1996. Binding of selected heavy metal ions using sunflower pectin. Presented in the Annual AACC Meetings. September 15-20, 1996. Baltimore, MD.
- Shi, X. Q., Chang, K. C., Schwarz, J. G. Shih, M. C., and Wiesenborn, D. 1996. Alkaline washing of sunflower heads before pectin extraction. Presented in the 57th Annual Meetings of the Institute of Food Technologists. June 22-25, 1996. New Orleans, LA.
- Shi, X. Q., Chang, K. C., Schwarz, J. G. Shih, M. C., Wiesenborn, D., Tostenson, K. and Wang, J. 1996. Low-methoxyl pectin extracted from sunflower heads, an industrial production approach. Presented in the 57th Annual Meeting of the Institute of Food Technologists. June 22-25, 1996. New Orleans, LA.
- Zhang, G. H. and Chang, K. C. 1996. Tofu quality as related to soybean and soymilk composition. Presented in the 57th Annual Meeting of the Institute of Food Technologists. June 22-25, 1996. New Orleans, LA.

- Hou, H. J., Chang, K. C., and Shih, M. C. 1996. The effect of damaged soybean ratio and storage time on yield and quality of soft-tofu. Presented in the 57th Annual Meeting of the Institute of Food Technologists. June 22-25, 1996. New Orleans, LA.
- Hou, H. J., Chang, K. C., Cai, T. D., and Shih, M. C. 1996. Chemical compositions of soymilk and tofu as influenced by soybean variety and processing scale. Presented in the 57th Annual Meeting of the Institute of Food Technologists. June 22-25, 1996. New Orleans, LA.
- Cai, T. D., Chang, K. C., Hou, H. J. and Shih, M. C. 1996. Processing methods, soybean storage proteins and tofu quality. Presented in the 57th Annual Meeting of the Institute of Food Technologists. June 22-25, 1996. New Orleans, LA.
- Cai, T. D., Chang, K. C., Hou, H. J. and Shih, M. C. 1996. Soybean variety and processing method affect the yield and quality of tofu. Presented in the 57th Annual Meeting of the Institute of Food Technologists. June 22-25, 1996. New Orleans, LA.
- Cai, T. D., Chang, K. C., Shih, M. C., and Hou, H. J. 1996. Effect of coagulant concentration and mixing mode on characteristics of production-scale produced tofu. Presented in the 57th Annual Meeting of the Institute of Food Technologists. June 22-25, 1996. New Orleans, LA.
- Wu, C. J. and Chang, K. C. 1995. Effect of soymilk solid content and press weights on tofu characteristics. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Sohn, M., Chang, K. C. and Dhurandhar, N. V. 1995. Effect of storage on pectin from sunflower head residues harvested at various dates. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Xie, X. and Chang, K. C. 1995. Processing effects on genistein, daidzein, and their glycosides in soymilk and tofu products. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Zhang, G. H. and Chang, K. C. 1995. Optimization of mixing and pressing for small-scale tofu-making. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Li, G. J. and Chang, K. C. 1995. Effect of pH, buffer solution, buffer concentration, pectin concentration and heating on viscosity of sunflower pectin. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Hou, H. J., Shih, M. C., and Chang, K. C. 1995. The effect of stirring speed and time of adding coagulant on yield and quality of soft-tofu. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Cai, T. D., Chang, K. C., Lunde, H., and Wu, D. 1995. Effects of enzymes and sunflower meals on the yield and characteristics of sunflower protein hydrolyzate. Presented



- in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Cai, T. D. and Chang, K. C. 1995. Yield and textural characteristics of semi-dry tofu. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Xu, M. D., Wiesenborn, D. P., Chang, K. C. and Schwarz, J. 1995. Pigment removal and pectin loss during the continuous countercurrent washing of sunflower heads. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Shi, X. Q., Schwarz, J. G., and Chang, K. C. 1995. Kinetics of acid diffusion in pectin gel during ethanol-washing process. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Shi, X. Q., Schwarz, J. G., and Chang, K. C. 1995. Transfer behavior of pectin and pigments in water washing treatment of sunflower heads. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- Shih, M. C., Hou, H. J. and Chang, K. C. 1995. Study on the process optimization of soft-tofu. Presented in the 56th Annual Meeting of the Institute of Food Technologists. June 3-7, 1995. Anaheim, California.
- \*Shi, X. Q., Chang, K. C., Schwarz, J. G., and Wiesenborn, D. P. 1994. Characteristics of low-methoxyl pectin from sunflower heads after ethanol washing. International ASAE/CSAE Meeting, Winnipeg, Canada, Sept. 29-Oct. 1, 1994. Paper No. MBSK 94-301.
- \*Xu, M. D., Wiesenborn, D. P., Shi, X. Q., Chang, K. C., and Schwarz, J. G. 1994. Countercurrent washing of sunflower heads prior to pectin extraction. International ASAE/CSAE Meeting, Winnipeg, Canada, Sept. 29-Oct. 1, 1994. Paper No. MBSK 94-30.
- Lu, W., Chang, K. C., and Grafton, K. F. 1993. Correlation between protein, seed size, seed coat crackness, hydration, pin cook time, and canning quality of navy bean. *Cereal Foods World* 38(8):625.
- Lu, W., Chang, K. C., and Grafton, K. F. 1994. Correlations between canning quality attributes and physicochemical properties of navy bean. Presented in the 55th Annual Meeting of the Institute of Food Technologists. June 25-29, 1994, Atlanta, GA.
- Su, H. L. and Chang, K. C. 1994. Physicochemical properties of dehydrated bean paste products from six varieties of dry bean. Presented in the 55th Annual Meeting of the Institute of Food Technologists. June 25-29, 1994, Atlanta, GA.
- Su, H. L. and Chang, K. C. 1994. Effect of processing conditions on the wholeness of dehydrated pre-cooked pinto beans. Presented in the 55th Annual Meeting of the Institute of Food Technologists. June 25-29, 1994, Atlanta, GA.

- Wang, C. R. and Chang, K. C. 1994. Effect of the size of soybean on physicochemical properties and tofu quality. Presented in the 55th Annual Meeting of the Institute of Food Technologists. June 25-29, 1994, Atlanta, GA.
- Dhurandhar, N. V., Chang, K. C., and Sohn, M. 1994. Effect of harvest dates on the pectin from sunflower head residues. Presented in the 55th Annual Meeting of the Institute of Food Technologists. June 25-29, 1994, Atlanta, GA.
- Dhurandhar, N. V. and Chang, K. C. 1994. Intermolecular methyl ester distribution of the low-methoxyl pectin from sunflower head residues. Presented in the 55th Annual Meeting of the Institute of Food Technologists. June 25-29, 1994, Atlanta, GA.
- Mitek, M. K., Chang, K. C. and Wiesenborn, D. 1994. Effect of particle size and extraction conditions on the yield and physicochemical characteristics of the sunflower pectin. Presented in the 55th Annual Meeting of the Institute of Food Technologists. June 25-29, 1994, Atlanta, GA.
- Li, H. and Chang, K. C. 1994. Development of a small-scale laboratory procedure for tofu quality evaluation of soybean. Presented in the 55th Annual Meeting of the Institute of Food Technologists. June 25-29, 1994, Atlanta, GA.
- Lu, W., Chang, K. C., Grafton, K. F., and Schwarz, P. 1993. Correlations between canning quality attributes and physicochemical properties of navy bean. Presented in the Annual meeting of the American Association of Cereal Chemists. October 1 to 4, 1993. Miami, FL.
- Li, H. and Chang, K. C. 1993. The relationship between tofu firmness and the ratio of 11S/7S protein of food soybean. Presented in the 54th Annual Meeting of the Institute of Food Technologists. July 10 to 14, 1993. Chicago, IL.
- Honggowati, I. M. and Chang, K. C. 1993. Effect of partial replacement of food soybeans with navy bean on tofu properties. Presented in the 54th Annual Meeting of the Institute of Food Technologists. July 10 to 14, 1993. Chicago, IL.
- Wu, C. J. and Chang, K. C. 1993. Comparisons of laboratory methods with a commercial method for evaluating canning quality of navy bean. Presented in the 54th Annual Meeting of the Institute of Food Technologists. July 10 to 14, 1993. Chicago, IL.
- Chang, K. C., You, X., Miyamoto, A., Dhurandhar, N. V. and Zhou, Z. 1993. Effect of pH, temperature and time on extraction of pectin from sunflower head residues. Presented in the 54th Annual Meeting of the Institute of Food Technologists. July 10 to 14, 1993. Chicago, IL.
- Bao, B., Chang, K. C. and Zhao, Y. P. 1992. Effect of blanching and retorting on carotenoids, non-starchy polysaccharides and color of carrot juice and pulp products. Presented in the 53rd Annual Meeting of the Institute of Food Technologists. June 20-25, 1992. New Orleans, LA.
- Zhao, Y. P., Chang, K. C., Saiko, W. and Bao, B. 1992. Effect of sulfite and starch

- treatments on quality of dehydrated carrots. Presented in the 53rd Annual Meeting of the Institute of Food Technologists, June 20-25, 1992. New Orleans, LA.
- Chen, M. C. and Chang, K. C. 1992. Effect of high temperature/high moisture storage on cell wall components in navy and pinto beans. Presented in the 53rd Annual Meeting of the Institute of Food Technologists. June 20-25, 1992. New Orleans, LA.
- Chen, M. C. and Chang, K. C. 1991. Effect of selected storage on food quality and chemical composition of dry beans. Presented in the 52nd Annual Meeting of the Institute of Food Technologists. June, 1991. Dallas, TX.
- Miyamoto, A. and Chang, K. C. 1991. Isolation and characterization of pectin from sunflower head residues. Presented in the 52nd Annual Meeting of the Institute of Food Technologists. June, 1991. Dallas, TX.
- Wu, C. J. and Chang, K. C. 1990. Quality evaluation of navy beans canned in tomato sauce. Presented at the 51st Annual Meeting of the Institute of Food Technologists. June, 1990. Anaheim, CA.
- Wang, C. H. and Chang, K. C. 1990. Effect of freezing beets on beet pulp and pectin composition, and selected chemical components in beet pulp products. Presented at the 51st Annual Meeting of the Institute of Food Technologists. June, 1990. Anaheim, CA.
- Dhurandhar, N. V. and Chang, K. C. 1989. Effect of cooking on firmness, trypsin inhibitors, lectins, and cysteine content of navy and red kidney beans. Presented in the 50th Annual Meeting of the Institute of Food Technologists. June 25-29, 1989. Chicago, IL.
- Chang, K. C., Skauge, L. and Satterlee, L. D. 1988. Analysis of amino acids in legume hydrolysates using pre-column PITC derivatization. Presented in the 49th Annual Meeting of the Institute of Food Technologists. June 19-22, 1988. New Orleans, LA.
- Ethen, S. V., Chang, K. C., and Skauge, L. H. 1987. Development of a low-oligosaccharide bean flour. Presented in the Annual Meeting of the 48th Institute of Food Technologists. June 16-19, 1987. Las Vegas, NV.
- Wen, L. F., Chang, K. C., Gallaher, D., and Brown, G. 1987. Isolation and characterization of hemicellulose and cellulose from beet pulp. Presented in the 48th Annual Meeting of the Institute of Food Technologists. June 16-19, 1987. Las Vegas, NV.
- Phatak, L., Chang, K., and Brown, G. 1987. Isolation and characterization of pectin from sugar beet pulp. Presented in the 48th Annual Meeting of the Institute of Food Technologists. June 16-19, 1987. Las Vegas, NV.
- Wang, C. C. and Chang, K. C. 1987. Canning quality evaluation of pinto and navy beans. Presented in the 48th Annual Meeting of the Institute of Food

- Technologists. June 16-19, 1987. Las Vegas, NV.
- Chang, K. C. 1987. Effects of germination on proteins in navy and pinto beans. Presented in the 48th Annual Meeting of the Institute of Food Technologists. June 16-19, 1987. Las Vegas, NV.
- Krishnan, P., Dreher, M. L. and Chang, K. C. 1985. Protein and fiber supplementation of wheat bread using oat bran. Presented at the 70th Annual Meeting of the American Association of Cereal Chemists. September, 1985. Orlando, FL.
- Cook, L., Burt, E., and Chang, K. C. 1985. Observations on PTC-amino acid analysis using the Waters PICO-Tag system. Presented at the Minnesota Chromatography Forum. October, 1985. Fargo, ND.
- Shelke, K., Nymon, M. C., Dreher, M. L., and Chang, K. C. 1985. Nutritional evaluation of raw and processed navy beans. Presented at the Annual Meeting of the American Association of Cereal Chemists. September, 1985. Orlando, FL.
- \*Chen, Y. C., Chen, H. H., and Chang, K. C. 1985. Chemical phosphorylation of single cell proteins. Presented at the Annual Meeting of the Chinese Chemistry Society. June, 1985. Taipei, Taiwan.
- Chang, K. C. and Goll, D. E. 1985. Comparative studies on actin isolated from Z-disks and from thin filament of rabbit skeletal muscle. Presented at the 46<sup>th</sup> Annual Meeting of the Institute of Food Technologists. June, 1985. Atlanta, GA.
- Goll, D. E., Shannon, J. D., Edmunds, T., Sathe, Chang, K. C., and Kleese, W. C. 1984. Enzymes and enzyme inhibitors in muscle tissue. Presented in Agric. and Food Chem. Meeting. American Chemical Society, Fall, 1984. San Francisco, CA.
- \*Lee, C.C. and Chang, K. C. 1983. High protein rice flour production and nutritional quality determination. Presented in the Chinese Institute of Food Science and Technology. December 13, 1983. Taipei, Taiwan.
- Chang, K. C., Marshall, H. F., Kendrick, J. G., and Satterlee, L. D. 1983. Effect of partial methionine oxidation on nutritional quality of soy isolate and casein. Presented in the 43rd Annual Institute of Food Technologists. June 19-22, 1983. New Orleans, LA.
- \*Chang, K. C. and Lee, C.C. 1982. Microbiological examination of foods in food stands in Taipei. Annual Meeting of the Chinese Nutrition Society. June 10, 1982. Taipei, Taiwan.
- Marshall, H., Chang, K. C., and Satterlee, L. D. 1981. Effects of processing on stability of sulfur amino acids in legume based proteins. Presented in the 41st Annual Meeting of the Institute of Food Technologists. June 7-10, 1981. Atlanta, GA.
- Chang, K. C. and Satterlee, L. D. 1981. Chemistry of dry bean proteins. Presented in the 41st Annual Meeting of the Institute of Food Technologists. June 7-10, 1981. Atlanta, GA.

Chang, K. C. and Satterlee, L. D. 1980. Isolation and characterization of the major proteins from Great Northern beans (*Phaseolus vulgaris*). Presented in the 40th Annual Meeting of the Institute of Food Technologists. June 8-11, 1980. New Orleans, LA.

***Invited Presentations (not listed elsewhere): \*Marked are international presentations.***

Sam K. C. Chang, 2015. Introduction of the activities at the Mississippi Center for Food Safety and Post-Harvest Technology. A seminar at the Division of the Food Safety and Quality Assessment Unit at the USDA-Russell Research Center in Athens, Georgia. September 28, 2015.

\*Sam K. C. Chang. 2015. Soybean chemistry for food making. College of Food Science, Jiangnan University, Wuxi, Jiangsu Province, China. March 9, 2015.

\*Sam K. C. Chang. 2015. The chemistry of soymilk and tofu making. Department of Chemistry, Guilin University of Science and Technology. Guilin, Guangxi Province, China. March 12, 2015.

Sam K. C. Chang, 2014. Introduction of the activities at the Mississippi Center for Food Safety and Post-Harvest Technology. Presented at the USDA-ARS Southern Regional Research Center. New Orleans, LA. January 27, 2015.

\*Sam K. C. Chang. 2014. Introduction of the mission and programs offered in the Department of Food Science, Nutrition and Health Promotion. Inner Mongolia Academy of Agriculture and Animal Husbandries. Hohhot City, Inner Mongolia, China. Aug 1, 2014. MOU for collaboration with MSU established.

\*Sam K. C. Chang. 2014. Quality of Soybeans for Soy Food Manufacturing and Legume Foods for Health Promotion. Inner Mongolia Academy of Agriculture and Animal Husbandries. Hohhot City, Inner Mongolia, China. Aug 1, 2014.

\*Biochemical characteristics of soybeans as related to soymilk and tofu making, and potential health benefits. Northeast Agricultural University. Harbin, China, Dec 18, 2012.

\*Biochemical characteristics of soybeans as related to soymilk and tofu making, and potential health benefits. Jilin Agricultural University. Changchun, Jilin, China. December 19, 2012.

\*Quality of soybean for food making and potential health benefits of legume foods. China Agricultural University. Beijing, China. December 20, 2012. MOU with NDSU established.

\*Soybean quality for making tofu as affected by storage. Soybean Processing Short Course. IntSoy Center, National Soybean Research Laboratory, University of Illinois-Urbana Champaign. June 3-8, 2012. Champaign, IL.

Dairy Food Research Program at the Mississippi State University. Annual meeting of the

- Southeast Dairy Food Research Consortium. North Carolina State University. Raleigh, NC. Aug 17, 2012.
- My vision for a Global Institute of Food Science. The first interview seminar for the position of the Associate Vice-President and Director of the NDSU's new Global Food Science Institute on March 29, 2012, Fargo, ND.*
- The business of food product development. The second interview seminar for the position of the Associate Vice-President and Director of the NDSU's new Global Food Institute, March 29, 2012, Fargo, ND.*
- Physical and biochemical characteristics of soybean as related to soymilk and tofu making. VI International Soybean Processing and Utilization Conference. November 1-2, 2011. St. Louis, MO.
- Dry bean protein as emulsifier. Bush Brother Canning Company. September 22, 2011. Knoxville, TN.
- Soybean in foods and feeds, what is in the pipeline? United States Soybean Export Council's stakeholders meeting. Seattle, WA. August 21, 2011.
- \*Effect of storage on biochemistry and quality of soybeans for making soy foods. Widya Mandala Catholic University in Subaraya, Indonesia. August 11, 2011.
- \*Quality of food-grade soybeans for soy food manufacturing. R&D Center, Pulmuone Food Company. Seoul, Korea. August 2, 2011.
- \*Quality of food-grade soybeans for soymilk making. Dr. Jung's Food. Cheong-Joo city. Seoul, Korea, August 3, 2011.
- \*Biochemistry of soybean as related to food making and health promotion. Department of Food Science and Biotechnology. Seoul National University. Seoul, Korea. August 5, 2011.
- \*Effective preparation of scientific manuscripts and my legume research. Presented during the period of May 20-June 18 in Guanzhou, Guandong Province, at three universities: National Jinan University, South China University of Technology, and South China Agricultural University, and in Wuhan, Hubei Province at one university: Wuhan Polytech University.
- \*Biochemistry of soybean as related to the quality of soybean for making soymilk, tofu, and natto foods. Three seminars presented to the Japanese Tofu Manufacturers Association, Japanese Natto Association, and Japanese Soymilk Association. Feb 20-25, 2011. Tokyo, Japan.
- Research on natural colorants in canned black bean products. Bush Brother Canning Company. December 15, 2010. Knoxville, TN.
- \*Selecting best soybeans for food uses. Soy Innovations-Africa Conference. Soyatech Inc. Cape Town, South Africa. August 26-27, 2010. Speech given to about 100 representatives from the agricultural and soy food industries in Sub-Sahara countries in conjunction with IUFoST Conference.
- \*Biochemistry of Soybeans for food making. June 18, 2010. US Soybean Export

- Council, Taipei Office in collaboration with Taiwan Tofu Association. Taichung, Taiwan.
- \*Rapid method for coagulation of soymilk. June 18, 2010. US Soybean Export Council, Taipei Office in collaboration with Taiwan Tofu Association. Taichung, Taiwan.
  - \*Effect of storage on biochemical composition and food quality of soybeans. Intsoy Soybean Utilization Short Course. June 6-8, 2010. University of Illinois-Urbana Champaign. Intsoy is the international soybean utilization center, which holds short courses to international participants.
  - \*Quality of soybeans for foods. Invited by North Dakota Trade Office, North Dakota Soybean Council, and China Tofu Association. Presented in two cities: Shengzhen and Shanghai to tofu and soymilk industries.
- Dry bean protein as functional ingredient. Bush Brothers. May. 23-24. 2010. Knoxville, TN.
- Dry bean protein as affected by food processing and storage. Protein summit at Bush Brothers. Dec. 15-16. 2009. Knoxville, TN.
- My recent trips to promote ND soybeans in China and Taiwan. Presented to the Agassiz Club: a local association of agricultural growers. Nov. 17, 2009. Fargo, ND.
- \*My recent trips to China and Taiwan: Soy research, industry and food science education. Presented in the School of Food Systems Seminar in the Fall semester of 2009. NDSU.
- Characterization of phytochemicals in pea and lentil. Research Update presented to the staff members of the US Dry Pea and Lentil Association and North Dakota Northern Pulse Association. Oct. 27, 2009. Fargo, ND.
- \*Quality Advantages of Food-Grade Soybeans from Upper Midwest. The sixth Annual Conference and Trade Show of the Midwest Shippers Association. September 1-3, 2009. Sioux Falls, SD. Audience is oversea's buyers of US crops.
  - \*Effect of Storage on Color, Biochemical and Quality of Food Grade Soybeans for Soymilk and Tofu Making. Invited by the Graduate Institute of Food Science Technology, National Taiwan University, Taiwan Association of Food Science and Technology, and the Health Food Society of Taiwan. August 28, 2009. Taipei, Taiwan.
  - \*Effect of storage on color, biochemical and quality of food grade soybeans for soymilk and tofu making. College of Grain, Oil and Food Science. Henan University of Technology. August 16, 2009. Zhengzhou, Henan Province, China. MOU with NDSU established following the trip.
- Colorimetric method for protein determination. US Pharmacopeia. July 16-17, 2009. Rockville, Maryland.
- \*Effect of soybean quality on soymilk characteristics. Uni-President Soymilk Company. August 25, 2009. Tainan, Taiwan.
- AES is Central to the Mission of the Land-Grant University. An interview speech for the

- Position of Associate Dean/AES Associate Director, University of Maryland-College Park, May 19, 2008. College Park, Maryland.
- My Dry Bean Research for Canning Purpose. R&D Center at the Bush Brothers Canning Company. January 12, 2008. Knoxville, TN.
- \*Soy foods and health benefits. Department of Food and Nutrition. Chung Hua College of Medical Technology. May 30, 2006. Tainan, Taiwan.
  - \*Soybean varietal characteristics, damage, and storage affect yield, processing quality and textural properties of soymilk and tofu. TetraPak. Singapore. Sponsored by the North Dakota Trade Mission/American Soybean Association. March 13, 2006. Singapore.
  - \*Science and technology of soymilk and tofu making: Some selected studies in our laboratory. Sponsored by the North Dakota Trade Mission/American Soybean Association. March 16, 2006. Bangkok, Thailand.
  - \*Value-added agriculture in the Second Annual International Business Conference at the Minot State University. October 10-11, 2004. Minot, North Dakota.
  - \*Effect of storage on the quality of food soybean in the First Specialty Grain Conference, sponsored by the Midwest Shippers Association. September 8-10, 2004. Minneapolis, MN.
  - \*Quality of food soybean produced in this region. Northern Crops Institute. June 3, 2004. Fargo, ND. Lecture given to soybean buyers from Asia.
  - \*Current hot topics in food, nutrition and health promotion in the USA. Chinese Culture University. May 25, 2004. Taipei, Taiwan.
- Value-added Processing Center: Mission and Objectives. In "US Senator Byron L. Dorgan's Summit on Value-Added Agricultural Processing." April 18-19, 2004. Minot State University, Minot, ND.
- Buckwheat as a health food: Physical, chemical and nutritional characteristics. Kellogg's R & D Center. October 6, 2003. Battle Creek, Michigan.
- My vision for the future of the disciplines of nutrition and food science. Department of Nutrition and Food Science, Utah State University. August 22, 2002. Logan, UT.
- Chemistry, processing and health benefits of soy foods. University of Maryland-Eastern Shore. May 1, 2002. Eastern Shore, Maryland.
- \*The Science and Technology of Tofu Making. International Conference on Soybean Utilization and Technology. Sponsored by United Nation's Food and Agricultural Development Project. September 4-7, 2001. Harbin, China.
  - \*Physical, chemical, and nutritional properties of soybeans as related to food and feed uses. Northern Crops Institute, North Dakota State University. August 2, 2001. Fargo, ND. Lecture given to audience from oversea's grain buyers.
- Chemistry, processing and health benefits of soy foods. USDA Human Nutrition Center. Feb. 28, 2001. Grand Forks, North Dakota.
- \*Processing effect and characterization of soybean for tofu making. Presented at the



- AlfaBio Tofu Company. November 10, 1999. Banska Bystrica, Slovakia.
- \*Processing effect and characterization of soybean for tofu making. Presented at the Chinese Academy of Agricultural Sciences. October 14, 1999. Beijing, China.
  - \*Food soybean and soy food product development in America. Presented at the China National Research Institute of Food and Fermentation Industries. October 14, 1999. Beijing, China.
  - \*Oriental culture and trade in the China and Japan. Presented seven invited lectures in the course of International Business. Instructor: Mort Sarabaksh. University of Mary. 1998-2005. Fargo, ND.
  - \*Global soyfoods utilization. Presented in the Food Soybean Conference, Northern Crops Institute. November 4, 1998. Fargo, ND. Lecture given to Asian soybean buyers.
  - \*Soybean protein and tofu quality. Presented in the Third Annual Tofu Convention, Huinan City. September 15-20, 1993. Anhui Province, China.
  - \*Sunflower pectin extraction and functional properties. Presented in the Scientific Research Institute of the Food and Fermentation. Department of Light Industry. September 21, 1993. Beijing, China.
  - \*Screening of soybean cultivars for tofu making. Presented in the Scientific Research Institute of the Food and Fermentation. Department of Light Industry. September 21, 1993. Beijing, China.
- Pectin extraction from sunflower heads. IVN TV Videotaping for Extension Home Economists Update. NDSU Extension Service. March 27, 1993. Fargo, ND.
- Pectin extraction from sunflower heads. Presented to the NDSU-USDA Sunflower Research Group. March 18, 1993. Fargo, ND.
- Utilization of pectin from sunflower heads. Presented in 1993 Marketplace Exhibitions sponsored by US Senator Ken Conrad and Agriculture Commissioner Sara Vogel. Jan. 7, 1993. Bismarck, ND.
- A trip to Taiwan to establish linkages with Taiwanese soybean industries and researchers. A seminar presented to the Department of Food and Nutrition, NDSU. February 26, 1993. Fargo, ND.
- A trip to Taiwan to establish linkages with Taiwanese soybean industries and researchers. A seminar presented to the Department of Cereal Science and Food Technology, NDSU. September 17, 1993. Fargo, ND.
- \*Legume and pectin research at NDSU. Presented in the Food Industry Research and Development Institute. June 9, 1992. Hsin Chu, Taiwan, Republic of China.
- Structure and functional properties of non-starchy polysaccharides isolated from sugar beet pulp. A seminar presented to the Department of Food Science and Human Nutrition, Michigan State University. November, 1991. East Lansing, Michigan.
- Food and nutritional quality of canned navy and pinto beans. A seminar presented at the Department of Food Science and Technology, University of Nebraska.

September, 1990. Lincoln, NE.

Effect of cooking on firmness, trypsin inhibitors, lectins and cysteine/cystine content in navy and red kidney beans. A seminar presented at the Department of Human Nutrition, Food and Institutional Food Service Management, University of Maryland. February, 1989. College Park, Maryland.

Effect of selected canning methods on trypsin inhibitor activity, sterilization value, and firmness of canned navy bean. A seminar presented at the FDA Center for Food Processing and Safety. September, 1988. Cincinnati, OH.

Effect of processing methodology, cultivar and production location on food quality attributes of canned navy and pinto beans. Presented in the 81st National Food Processors Association Annual Meeting. February, 1988. Orlando, FL.

\*Canning quality of dry beans. Presented in the Fargo Dry Bean Quality Conference, Fargo, ND. September 1986, 1987, 1988, and 1989. Sponsored by the Northarvest Bean Growers Association. Lectures presented to European edible bean buyers.

Process and product evaluation of dry beans. Progress reports presented at the Northarvest Bean Growers Association Annual Meeting in Detroit Lakes, MN. July 1986, 1987, 1988, 1989, 1990, 1991, and 1992.

**Postdoctoral Associates and Visiting Scholars/Professors Directed:** About 50 scientists from many countries: USA, Taiwan, Poland, Spain, China, Korea, Libya, Syria, Argentina, Brazil, Japan and India. Currently three visiting scholars from China and Brazil.

**Fulbright Scholar Hosted:** Dr. Ghassan El-Khayat, Professor and Head of the Department of Food Science, University of Damascus, Syria.

**Associate Dean Hosted:** Dr. Shiyi Ou, College of Engineering, Jinan University. China.

## SERVICE ACTIVITIES

### Service to the Agricultural and Food Processing Industries

I have provided services to many private sectors.

### Regional, National and International Organizations

Professional member of the Institute of Food Technologists, 1976-present.

Member of the American Chemical Society, 2002-

Member of the International Nutraceutical Society. 2008-present.

Member of the American Society of Nutrition, 2013-present.

Member of the American Association of Cereal Chemists (AACC), 1985-1992. 2015-

Member of the Protein Technical Committee of AACC.

Member of the Regional NCR-159 Committee, Industrial Uses of Oil Seeds, 1993-2001.  
Member of NC-1023 Committee on Engineering for Food Safety and Quality. 2010-2012. 2015-

Life-member of the University of Nebraska Alumni Association.

\*Life Member of the International Academy of Food Science and Technology, 2014-

\*Editorial Advisory Board for Refereed Journals:

Soybean (China), 2012-present

J. Food and Nutrition, 2014-

LWT-Food Science and Technology (Europe). 2011-present

J. Agric. and Food Chem. 2002-present.

J. Food Processing and Preservation. 2003-present.

J. Chinese Nutritional Society (Taiwan). 1982-1984.

\*Scientific Editorship:

J. Food Science. 2007-present. Associate Scientific Editor for 2 sections. Food Chemistry, and Food Quality, Nutrition and Health.

LWT-Food Science and Technology. Editor, 2015-2017.

## **INTERNATIONAL ACTIVITIES**

International program development is one of my best strengths that has benefited my own pursuit to fulfill institutional missions in teaching, research and service/outreach. Since my research has a strong focus on legume science and technology, I developed international programs very much along with soybean marketing and processing in regions where soybeans are produced and utilized, particularly in East and Southeast Asian countries, where most of the food-grade soybeans are utilized. I also developed excellent relationships with many universities in East Asia, Southeast Asia, Brazil and Argentina.

## **HONOR AND AWARDS**

Life-time achievement award, Chinese American Food Society, 2015.

Fellow of the International Academy of Food Science and Technology, 2014.

Fellow of American Chemical Society-Division of Agriculture and Food Chem. 2013.

Fellow of the Institute of Food Technologists. 2008.

Who is Who in America. 2010. Marqui's publication.

Certificate of recognition for the most cited paper of 2007 in the J. Food Science. "A Comparative Study on Phenolic Profiles and Antioxidant Activities of Legumes as Affected by Extraction Solvents." Recognized on July 19, 2010 at the IFT meeting in Anaheim, CA.

Certificate of recognition for the most cited paper of 2008 in the J. Food Science.  
“Changes of Soybean Quality during Storage as Related to Soymilk and Tofu Making.” Recognized on June 13, 2011 at the IFT meeting in New Orleans, LA.

Member of the Advisory Board of the American Council on Science and Health. 2008-Present.

Reader’s Digest reported our research on ability of legume extract to lower human LDL Oxidation. March 08 issue.

One research project on dry bean was featured by many major media, including AP, CNN, USA-Today, CBS News Network, Chicago Tribune and many other radio stations in the United States. May-June, 2002.

Who's Who among American Teachers. 2002. 7<sup>th</sup> Edition. Educational Communications, Inc. Nominated by students.

Honorary Visiting Professor, National Research Center of Soybean Engineering and Technology. Harbin, China. 2001.

Graduate Certificate, Class 10 ESCOP/ACOP Leadership Development Program. 2001.

Eugene R. Dahl Excellence in Research Award (Annual Senior Professor-Outstanding Research Award), College of Agriculture. NDSU. 2001.

Apple Polisher Award, Outstanding Contribution to Teaching and Service to the Students at NDSU. 2001.

Annual Professional Achievement Award for contribution to food science and technology, Chinese American Food Society. 1999. Chicago.

ServSafe Manager Certificate. National Restaurant Association. 1999.

Certificate of Appreciation, Job Shadow Sponsor for a high school student. Plummer High School, MN. 1999.

NDSU Tapestry of Outstanding Diverse Talents Award (selected by NDSU students, staff and faculty in the recognition of cultural diversity). 1997.

Who's Who among Asian Americans, 1st Edition, Gale Research Inc. Detroit, MI. 1994.

First Exceptional Contributions to Research/Scholarship Annual Award, College of Human Development and Education, NDSU. 1994.

Special Appreciation Award for service as the President, Chinese American Food Society. 1993.

President, Chinese American Food Society. 1992-1993.

Certificate for Excellence in Research, College of Agriculture/Agricultural Experiment Station, NDSU. 1991, 1992 and 1993.

NDSU International Agricultural Linkage Development Travel Award. 1992.

Visiting Professor, University of Alberta, Edmonton. 1986.

Fellowship, American Heart Association, Arizona Affiliate. 1984.

Research Awards, National Science and Development Council, ROC. 1982 and 1983.