

Hsi-Mei Lai, Ph.D.

Current appointments

Professor of Department of Agricultural Chemistry, National Taiwan University

Associate Dean of Office of Student Affairs (OSA), National Taiwan University

Research interests

Carbohydrate Chemistry

Starch Chemistry

Cereal Chemistry and Processing

Baking Science and Technology

Food Chemistry & Processing

Agricultural Products Analysis



Honors & Awards

2010 Outstanding Teaching Award, National Taiwan University

2009 Teaching Award, National Taiwan University

2008 Teaching Award, National Taiwan University

2008 Excellent Advisor Award, National Taiwan University

2007 Outstanding Contribution in the Field of Agricultural Chemical Science in Taiwan

2007 Teacher Award, National Taiwan University

2006 Teacher Award, College of Bioresources and Agriculture, National Taiwan University

Education

1987.01-1990.02 Ph.D. Division of Foods and Nutrition, University of Illinois, Champaign-Urbana, USA

1985.01-1987.01 M.S. Division of Foods and Nutrition, University of Illinois, Champaign-Urbana. USA

1979.09-1983.06 B.S. Department of Agricultural Chemistry, National Taiwan University

Training

Association of Operative Miller's Short Course in "Practical Milling." Kansas State University, Manhattan, KS, USA. May 17~May 28, 1993.

American Institute of Baking Class #146: "Baking Science and Technology." Manhattan, KS, USA. Feb. 6~May 25, 1995.

Professional Experience

2006 - Present	Professor, Dept. Agricultural Chemistry, National Taiwan University, Taiwan
2012 - Present	Associate Dean of NTU Office of Student Affairs
2002 - Present	Supervisor, Student Club--Cake-making, Extracurricular Activity Section, NTU, Taiwan
2011-2013	Present of Taiwan Neutron Science Society (TANSS)
2011-2012	Director of Student Assistance Office, NTU Office of Student Affairs
2009-2011	Vice Present of Taiwan Neutron Science Society (TANSS)
2005-2009	Editor-in-Chief, Taiwanese Journal of Agricultural Chemistry and Food Science, Taiwan
2002-2006	Associate Professor, Dept. Agricultural Chemistry, National Taiwan University, Taiwan
2002-2005	Director of Academic Affair, Agricultural Chemistry Society of Taiwan, Taiwan
2001-2002	Editor Manager, Taiwanese Journal of Agricultural Chemistry and Food Science, Taiwan
2000-2001	Editor Manager, Food Science and Agricultural Chemistry, Taiwan
1998-2002	Assistant Professor, Dept. Agricultural Chemistry, National Taiwan University, Taiwan
1992-1998	Research Fellow, China Grain Products R&D Institute, Taipei, Taiwan
1990-1992	Research Associate, University of Illinois, USA
1985-1990	Research and Teaching Assistant, University of Illinois, USA
1983-1985	Teaching Assistant, Department of Agricultural Chemistry, National Taiwan University, Taiwan

Professional Memberships

American Association of Cereal Chemists International (1995-current)

Institute of Food Technologists (1985-current)

Agricultural Chemical Society of Taiwan (1992-current)

Taiwan Association for Food Science and Technology (1992-current)

Courses offered

Chemical Analysis of Biomaterials (Lecture & Lab.)

Food Chemistry

Food Processing

Bioresource Chemistry

Cereal Materials and Processing (Lecture & Lab.)

Carbohydrate Chemistry and Applications

Special Topic on Starch

Research fields

1. Studies on the properties of biopolymers (carbohydrates & proteins) and their applications as the environmental friendly materials for food and agricultural applications.
2. Isolation and characterization of bioactive compounds from natural resources (grains and legumes) for functional foods.
3. Developments on value-added grain (rice, wheat) processed products.
4. Studies on the quality and stability of foods (including starchy-based & cereal products) by MRI, NMR, MDSC, CLSM, WAXD, SAXS, SANS, rheology -----etc. .

Current research projects

1. Electrostatic cross-linked starch based pH sensitive materials, the preparation and applications.
2. Modifying self-assembling structures of Pluronic F108 with beta-cyclodextrin studied by SAXS and SANS.
3. Gelation mechanism, gel physicochemical properties and applications of self-assembled supramolecular system--Polypseudorotaxane gel formed by beta-cyclodextrin and grafted starch.
4. Improving the functionalities of starch-based materials coated with layer by

layer (LbL) self-assembly multilayers by using nanocoating technique.

5. Ultra-fine milling on the domestic grown colored rice for the applications of functional foods.
6. Property and processing functionality of high amylose rice during storage.

Publications (~2012)

1. There are 31 peer reviewed journal articles published, including 28 SCI papers.
2. There are 6 book chapters and one book published.
3. More than 89 posters or oral presentations have been presented in the scientific conferences.

Webpage

http://lab.ac.ntu.edu.tw/cereal/default_Eng.htm

Publications

Peer Reviewed Journal Articles

1. Wan-Yuan Kuo and **Hsi-Mei Lai**. Morphological, structural and rheological properties of beta-cyclodextrin based polypseudorotaxane gels. ***Polymer*** 52:3389-3395, **2011**.
2. Pei-Yin Lin and **Hsi-Mei Lai**. Bioactive compounds in rice during grain development. ***Food Chemistry*** 127:86-93, **2011**.
3. Zong-Yan Zhuo, Chien-Sheng Liao, Chen-Han Huang, Jiun-Yann Yu, Yu-Yi Tzeng, Wen Lo, Chen-Yuan Dong, Hsiang-Chen Chui, Yu-Chan Huang, **Hsi-Mei Lai**, Shi-Wei Chu. Second harmonic generation imaging-a new method for unraveling molecular information of starch. ***Journal of Structural Biology*** 171:88-94, **2010**.
4. Yi-Lin Chung and **Hsi-Mei Lai**. Preparation and properties of biodegradable starch-layered double hydroxide nanocomposites. ***Carbohydrate Polymers***, 80:526-533, **2010**.
5. Yu-Chan Huang and **Hsi-Mei Lai**. Noodle quality affected by different cereal starches. ***Journal of Food Engineering*** 97:135-143, **2010**.
6. Yi-Lin Chung, Seema Ansari, Luis Estevez, Suren Hayrapetyan, Emmanuel P. Giannelis, and **Hsi-Mei Lai**. Preparation and properties of biodegradable starch-clay nanocomposites. ***Carbohydrate Polymers*** 79:391-396, **2010**.
7. Wan-Yuan Kuo and **Hsi-Mei Lai**. Effects of reaction conditions on the physicochemical properties of cationic starch studied by RSM. ***Carbohydrate Polymers*** 75: 627-635, **2009**.
8. Yi-Ling Chung and **Hsi-Mei Lai**. Properties of cast films made of HCl-methanol modified corn starch. ***Starch/Starke*** 59:583-592, **2007**.
9. Wan-Yuan Kuo and **Hsi-Mei Lai**. Changes of property and morphology of cationic corn starches. ***Carbohydrate Polymers*** 69:544-553, **2007**.
10. Pei-Yin Lin and **Hsi-Mei Lai**. 2006. Bioactive compounds in legumes and their germinated products. ***Journal of Agricultural and Food Chemistry*** 54:3807-3814, **2006**.
11. Yi-Ling Chung and **Hsi-Mei Lai**. Molecular and granular characteristics of corn starch modified by HCl-methanol at different temperatures. ***Carbohydrate Polymers*** 63:527-534, **2006**.
12. **Hsi-Mei Lai** and I-Chen Chiang. Properties of MTGase treated gluten film. ***European of Food Research and Technology*** 222: 291-297, **2006**.
13. Yi-Ching Liu, Shin-Huang Lin, **Hsi-Mei Lai**, and Shih-Tong Jeng Detection of genetically modified soybean and its product tou-kan by polymerase chain reaction with dual pairs of DNA primers. ***European of Food Research and Technology*** 221:725-730, **2005**.

14. Yi-Ling Chung and Hsi-Mei Lai. Water barrier property of starch film investigated by magnetic resonance imaging. **Cereal Chemistry** 82:131-137, **2005**.
15. Yu-Chi Chen, Hung-Shu Chang, Hsi-Mei Lai and Shih-Tong Jeng. Characterization of the wound-inducible protein ipomoelin from sweet potato. **Plant Cell and Environment** 28:251-259, **2005**.
16. Yi-Ling Chung and Hsi-Mei Lai. Water status of two gelatin gels during storage investigated by magnetic resonance imaging. **J of Food and Drug Analysis** 12(3):221-227, **2004**.
17. Hsi-Mei Lai and San-Chao Hwang. Water status of cooked white salted noodles evaluated by MRI. **Food Research International** 37:957-966, **2004**.
18. Hsi-Mei Lai and Cheng, Hsiao-Hsien. Properties of pregelatinized rice flour made by hot air popping or gun puffing. **International Journal of Food Science and Technology** 39:201-212, **2004**.
19. Hsi-Mei Lai. Effects of rice properties and emulsifiers on the quality of rice pasta. **Journal of the Science of Food and Agriculture** 82:203-216, **2002**.
20. Chien-Sheng Tseng and Hsi-Mei Lai. Physicochemical properties of wheat flour dough modified by microbial transglutaminase. **Journal of Food Science** 67: 750-755, **2002**.
21. Hsi-Mei Lai. Effects of hydrothermal treatment on the physicochemical properties of pregelatinized rice flour. **Food Chemistry** 72:455-463, **2001**.
22. Hsi-Mei Lai. A simple procedure for the measurement of wheat germ in the milling products by fluorescence spectroscopy. **Food Science and Agricultural Chemistry** 1:47-54, **1999**.
23. Hsi-Mei Lai, Shih-Tong Jeng, and Cheng-Yi Lii. ¹⁷O NMR and DSC for studying quality of taro paste as affected by processing and storage. **Food Science and Technology-LEB** 31:57-63, **1998**.
24. Shih-Tong Jeng, Sheue-Hwey Lay, and Hsi-Mei Lai. Transcription termination by bacteriophage T3 and SP6 RNA polymerases at Rho-independent termination. **Canadian Journal of Microbiology** 43:1147-1156, **1997**.
25. Hsi-Mei Lai and Cheng-Yi Lii. The effects of α-amylase and ascorbic acid in bromate-free breadmaking. **Journal of the Chinese Agricultural Chemistry Society** 34:518-534, **1996**.
26. Hsi-Mei Lai, Shelly J. Schmidt, Roger G Chiou, L.A. Slowinski and G.A. Day. Mobility of water in a starch-based fat replacer as studied by ¹⁷O NMR spectroscopy. **Journal of Food Science** 58:1103-1106, **1993**.
27. Hsi-Mei Lai and Shelly J. Schmidt. Mobility of water in various sugar-water systems as studied by oxygen-17 NMR. **Food Chemistry** 46:55-60, **1993**.

28. **Hsi-Mei Lai** and Shelly J. Schmidt. Proton, deuterium and oxygen-17 NMR relaxation studies of lactose- and sucrose-water systems. ***Journal of Agricultural and Food Chemistry*** 39:1921-1926, **1991**.
29. **Hsi-Mei Lai** and Shelly J. Schmidt. Water mobility and crystallization action of lactose-water systems by oxygen-17 and carbon-13 NMR. ***J. Food Science*** 55:1435-1440, **1990**.
30. **Hsi-Mei Lai** and Shelly J. Schmidt. Lactose crystallization in skim milk powder observed by hydrodynamic equilibria, scanning electron microscopy and ²H Nuclear Magnetic Resonance. ***J. Food Science*** 55:995-999, **1990**.
31. Chen-The Yang, Wei-Pin Yu and **Hsi-Mei. Lai**. Studies on manufacture of pyrodextrins from rice. I. Optimal conditions for the methods of pyrodextrinization. ***J. Chinese Agricul. Chem. Soc.*** 26:63-68, **1988**.

Book Chapters

1. Yi-Ling Chung and **Hsi-Mei Lai**. **2013**. Recent Progress in the Development of Starch-Layered Silicate. In "Technological advancement in polymer nano-composites of layered silicates: processing, performance and applications," Jitendra Kumar Pandey, Raghunatha Reddy, Amar Kumar Mohanty, Manjusri Misra (Eds.) Springer. (In Press)
2. **Hsi-Mei Lai** and Pei-Yin Lin. **2010**. Thermal effects on the conversion of isoflavones in soybean. In "Chemistry, Texture, and Flavor of Soy," Keith R. Cadwallader and Sam K.C. Chang (Eds.) American Chemical Society, Washington, DC, USA.
3. **Hsi-Mei Lai** and Tze-Ching Lin. **2006**. Bakery Products: Science and Technology. In "Bakery Products—Science and Technology," Chapter 1. Hui, Y. H. (Ed). Blackwell Publishing, Ames, Iowa, USA. Pp3-65.
4. **Hsi-Mei Lai** and Tze-Ching Lin. **2005**. Bakery Products. In "Handbook of Food Science, Technology and Engineering," Vol. 4. Chapter 148. Hui, Y. H. (Ed) CRC Taylor & Francis, Boca Raton, Florida, USA. pp148-1~148-51.
5. **Hsi-Mei Lai**. **2002**. Development of wheat flour processing industry in Taiwan and China. In "Proceedings of Symposium of Grain Quality," Hsi-Mei Lai (Ed.). Taipei, Taiwan.
6. Shelly Schmidt and **Hsi-Mei Lai**. **1991**. Use of NMR and MRI to study water relations in foods. In "Water relationships in Foods-Advances in the 1980's and Trends for the 190's," (Eds) H. Levine and L. Slade. Plenum Publishing Co., NY.
7. I-Ni Ting and **Hsi-Mei Lai**. **1985**. Problems for experimental biochemistry. Hwa-Shan-Yen Publishing Co., Taiwan, ROC.

Thesis

1. **Hsi-Mei Lai. 1990.** Water relations of simple sugars solutions and skim milk powder as studied by Nuclear Magnetic Resonance spectroscopy. Ph. D. Thesis. University of Illinois at Urbana-Champaign.
2. **Hsi-Mei Lai. 1987.** Characterization of tomato lipoxygenase from two cultivars at different maturity stages. Master Thesis. University of Illinois at Urbana-Champaign.

Conference Papers

1. 賴喜美、吳秀蘭、黃玉萍、林佩吟。國產有色米之機能性與加工應用。臺灣食品科技學會第四十屆年會，臺北，臺灣。Nov. 30, 2012.
2. 賴喜美、吳秀蘭、黃玉萍。有色米活性成分的開發及應用。稻米活性成分的開發與應用研討會。台北，臺灣。Sept. 26, 2012.
3. Shing-Yun Chang and Hsi-Mei Lai. Structural Characteristics of pH-responsive Starch Thin Film Studied by SAXS. 國家同步輻射研究中心第18屆用戶年會暨研討會，新竹，台灣。Aug. 27-29, 2012.
4. 賴喜美。有色米之機能性與加工應用。第四屆海峽兩岸雜糧健康產業研討會。山西太原，中國。Aug. 10-16, 2012.
5. Yu-Chan Huang and Hsi-Mei Lai. Effect of elevated storage temperature on the pasting properties of high-amylose rice related to the changes of rice protein. Institute of Food Technologist Annual Meeting and Food Expo. Las Vegas, NA, USA. June 25-28, 2012.
6. Ying-Chung Lin, Tsung-Chi Chen, Hsi-Mei Lai, and Shih-Tong Jeng Effects of starch branching enzymes on the properties of starch in *Arabidopsis*. Institute of Food Technologist Annual Meeting and Food Expo. Las Vegas, NA, USA. June 25-28, 2012.
7. 吳秀蘭、賴喜美。國產有色發芽米超微細化研磨技術之產品。第二屆米食加工與營養國際研討會。台北，臺灣。June 8, 2012.
8. Wei-Feng Hung and Hsi-Mei Lai Developing antioxidant-containing starch matrix by LbL self-assembly of cationic starch and microemulsion multilayers. 11th International Hydrocolloids Conference, Whistler Center for Carbohydrate Research, Purdue University, USA. May 14-18, 2012.
9. Ko-Lan Tsung and Hsi-Mei Lai. Nanocasting Polypseudorotaxane with Pre-treated TMOS for Mesostuctured Silica Materials Preparation. 11th International Hydrocolloids Conference, Whistler Center for Carbohydrate Research, Purdue University, USA. May 14-18, 2012.
10. K.C. Shih, W.Y. Kuo and H.M. Lai. Structural and rheological modification of Pluronic® by β -Cyclodextrin. 1st Asia-Oceania Conference on Neutron Scattering, Tsukuba, Japan. Nov. 20-24, 2011.
11. K.C. Shih, W.Y. Kuo and H.M. Lai. Self-assembling structure of Pluronic® and β -cyclodextrin investigated by small-angle X-ray scattering. 1st Asia-Oceania Conference on Neutron Scattering, Tsukuba, Japan. Nov. 20-24, 2011

12. W.P. Huang and H.M. Lai. Structural and functional studies of starch-based LbL multilayers by GISAXS and wettability determinations. 1st Asia-Oceania Conference on Neutron Scattering, Tsukuba, Japan. Nov. 20-24, 2011.
13. S.L. Ngoo and H.M. Lai. Bioactive compounds in germinated and ultrafine-milled colored rice. 2011 International Conference on Food Factors. Taipei, Taiwan. Nov. 20-23, 2011.
14. Y.P. Huang and H.M. Lai. Improving the stability and functionality of black rice bran by microwave heating and ball-milling treatments. 2011 International Conference on Food Factors. Taipei, Taiwan. Nov. 20-23, 2011.
15. 賴喜美。發芽及加工處理對大豆機能成分之影響。第三屆海峽兩岸穀類與雜糧健康產業研討會。台北，台灣。Oct. 25-26, 2011.
16. K.C. Shih, W.Y. Kuo and H.M. Lai. Modifying the Self-assembled Structure and Rheological Properties of Pluronic F108 by Beta-cyclodextrin. 國家同步輻射研究中心第17屆用戶年會暨研討會，新竹，台灣。Oct. 19-21, 2011.
17. Tsung, K.L. and Lai, H.M. Synthesis of Mesostructure Silica Material by Nanocasting of Polypseudorotaxanes as Templates. 國家同步輻射研究中心第17屆用戶年會暨研討會，新竹，台灣。Oct. 19-21, 2011.
18. Kuo-Chih Shih, Wan-Yuan Kuo and Hsi-Mei Lai. Visual, Structural and Rheological Properties of Polypseudorotaxane Composed by β -cyclodextrin and Pluronic®. Colloids and Materials 2011, The 1st International Symposium on Colloids and Materials. Amsterdam, The Netherlands. May 8-11, 2011.
19. Tsung, K.L. and Lai, H.M. Mesostructure silica materials prepared by using polypseudorotaxane made of cyclodextrin and triblock copolymer as templates. 臺灣農業化學會第49屆年會，台北，台灣。2011.06.29.
20. P.Y. Lin and H.M. Lai. Bioactive compounds in rice kernels during developing. 臺灣食品科技學會第三十八屆年會，臺中，台灣。2010.12.03.
21. W.Y. Huang and H.M. Lai. Morphology and physicochemical properties of ball-milled corn starches with different amylose contents. 臺灣食品科技學會第三十八屆年會，臺中，台灣。2010.12.03.
22. T.M. Wang and H.M. Lai. Anthocyanins analysis and quantification of two taiwanese purple sweet potatoes. 臺灣食品科技學會第三十八屆年會，臺中，台灣。2010.12.03.
23. 李昱寬、賴喜美。添加硬脂酸及1-胺基-2-丙醇對玉米澱粉膜性質之影響。臺灣食品科技學會第三十八屆年會，臺中，台灣。2010.12.03.
24. K.C. Shih, W.Y. Kuo, W.P. Hung, and H.M. Lai. Observing the thermal behaviour of self-assembled gels based on the molecular interactions at different temperatures. Neutrons and Food Workshop. Sydney, Australia. October 31-November 3, 2010
25. Y.P. Huang and H.M. Lai. Bioactive compounds of bran in colored rice. 92th Annual Meeting of The American Association of Cereal Chemists International. Savannah, Georgia, USA. October 24-27, 2010.
26. W.Y. Huang and H.M. Lai. Morphology and x-ray scattering property of ball-milled corn starches with different amylose contents. 92th Annual Meeting of The American Association of Cereal Chemists International. Savannah, Georgia, USA. October 24-27, 2010.

27. W.Y. Kuo, K.C. Shih and H.M. Lai. Modifying self-assembling structures of Pluronic F108 with beta-cyclodextrin. 國家同步輻射研究中心第十六屆用戶年會暨研討會，新竹，台灣。Oct. 20-22, 2010.
28. W.Y. Huang and H.M. Lai. Fine structure of ball-milled corn starches with different amylose contents investigated by WAXD and SAXS. 國家同步輻射研究中心第十六屆用戶年會暨研討會，新竹，台灣。Oct. 20-22, 2010.
29. 吳秀蘭、賴喜美。國產及進口有色米之性質分析。臺灣農業化學會第48屆年會，台北，台灣。2010.06.30.
30. K.C. Shih and H.M. Lai. Improving the hydrophobicity of OSA-starch film by nanocoated with layer by layer self-assembly multilayer. 臺灣農業化學會第48屆年會，台北，台灣。2010.06.30.
31. Kou, W.Y. and Lai, H.M. Structural and rheological properties of β -CD based polypseudorotaxane gels. The 10th International Hydrocolloids Conference. Shanghai, China. June 20-24, 2010.
32. 洪偉峰、賴喜美。奈米塗覆技術對澱粉基質生物材料水分阻隔性之改善。臺灣食品科技學會第三十七屆年會，彰化，台灣。2009.11.27.
33. Y.C. Huang and H.M. Lai. Characteristics of starch fine structure and pasting properties of waxy rice during storage. 91th Annual Meeting of The American Association of Cereal Chemists International. Baltimore, Maryland, USA. September 13-17, 2009.
34. W.Y. Kou and H.M. Lai. Preparation of polypseudorotaxane gels through supramolecular self-assembling between beta-cyclodextrin and polyalkylene glycols. 91th Annual Meeting of The American Association of Cereal Chemists International. Baltimore, Maryland, USA. September 13-17, 2009.
35. Y.C. Huang and H.M. Lai. Puffing quality of waxy rice cracker affected by the rice cultivar, cooking condition and frying methods. Institute of Food Technologist Annual Meeting and Food Expo. Anaheim, CA, USA. June 9-10, 2009.
36. 鍾依林、Seema Ansari、Luis Estevez、Suren Hayrapetyan、Emmanuel P. Giannelis、賴喜美。澱粉-黏土奈米複合材料之合成及性質研究。臺灣農業化學會第47屆年會，台北，台灣。2009.06.
37. 謝元容、賴喜美。負電荷多醣對澱粉-層狀雙氫氧化物奈米複合材料之影響。臺灣農業化學會第47屆年會，台北，台灣。2009.06.
38. Y.L. Chung and H.M. Lai. Preparation and properties of biodegradable starch-LDHs nanocomposites. 90th Annual Meeting of The American Association of Cereal Chemists International. Honolulu, Hawaii, USA. September 25-29, 2008.
39. Wang, Y.F. and Lai, H.M. Bioactive compounds of soybean affected by the thermal treatments and ultra-fine milling. 90th Annual Meeting of The American Association of Cereal Chemists International. Honolulu, Hawaii, USA. September 25-29, 2008.
40. H.M. Lai and P.Y. Lin. Processing effects on the bioactive compounds of soybean. In "Chemistry, Texture and Flavor of Soy" Symposium, American Chemical Society 236th National Meeting & Exposition, Philadelphia, PA, USA. August 17-21, 2008.
41. W.Y. Huang, H.M. Lai and W.H. Li. X-ray scattering study on ball-milled corn starches with different amylose content. ANSTO – AINSE Neutron School on Materials. Lucas Heights (Sydney), Australia. July 20-25, 2008.

42. Chang, S.Y. and Lai, H.M. Sodium hexametaphosphate as dispersant of starch nanocrystals. The 9th International Hydrocolloids Conference, Singapore. June 16-20, 2008.
43. 李昱寬、賴喜美。以天然多醣奈米結晶粒子為模板製備矽酸鹽介孔材料。臺灣農業化學會第46屆年會，台北，台灣。2008.05.
44. 王姿閔、高雅玲、陳彥竹、賴喜美。市售油條之鋁含量分析。臺灣食品科技學會第三十七屆年會，彰化，台灣。2007.12.
45. Wan-Yuan Kuo and Hsi-Mei Lai. A response surface methodology study on the effects of reaction conditions on the physicochemical properties of cationic starches. 89th Annual Meeting of The American Association of Cereal Chemists International. San Antonio, TX, USA. October 7-10, 2007.
46. Yu-Chan Huang and Hsi-Mei Lai. Effects of drying conditions on the puffing quality of waxy rice. 89th Annual Meeting of The American Association of Cereal Chemists International. San Antonio, TX, USA. October 7-10, 2007.
47. Shing-Yun Chang and Hsi-Mei Lai. Nanocrystals prepared from waxy corn starch by the treatments of acid hydrolysis. Institute of Food Technologist Annual Meeting and Food Expo. Chicago, IL, USA. July 28-August 1, 2007.
48. 王玉芬、賴喜美。市售果汁及含果汁飲料之抗氧化能力及類黃酮含量測定。臺灣農業化學會第45屆年會，台北，台灣。2007.05.
49. Yi-Lin Chung and Hsi-Mei Lai. Effects of HCl-methanol modification on the properties of corn starch film. 88th Annual Meeting of The American Association of Cereal Chemists International and World Grains Summit: Foods and Beverages. San Francisco, CA, USA. September 17-20, 2006.
50. Yu-Chan Huang and Hsi-Mei Lai. Noodle quality affected by different cereal starches. 88th Annual Meeting of The American Association of Cereal Chemists International and World Grains Summit: Foods and Beverages. San Francisco, CA, USA. September 17-20, 2006.
51. Wan-Yuan Kuo and Hsi-Mei Lai. Granular morphology, molecular structure and related physicochemical properties of cationic starches. 88th Annual Meeting of The American Association of Cereal Chemists International and World Grains Summit: Foods and Beverages. San Francisco, CA, USA. September 17-20, 2006.
52. 邱于珍、黃玉嬋、賴喜美。2006。國產糯米加工特性及休閒食品之開發與應用。95年度農業科技「研究開發農產品之加工技術」研究成果發表會。屏東，台灣。2006.10.
53. Chong-Yao Tsou and Hsi-Mei Lai. Coating technique applied for the calcium fortified rice and its properties. 44th Annual Meeting of Agricultural Chemical Society of Taiwan, Taipei, Taiwan. June 24, 2006.
54. Chiew-Peng Ng and Hsi-Mei Lai. ACE inhibitor activity of egg white hydrolystates. Annual Meeting of Taiwan Association for Food Science and Technology, Taipei, Taiwan. November 25, 2005.
55. Pei-Yin Lin and Hsi-Mei Lai. Bioactive components of legumes and their changes after germination. 87th Annual Meeting of The American Association of Cereal Chemists International, Orlando, Florida, USA. September 11 -14, 2005.
56. Yi-Ling Chung and Hsi-Mei Lai. Molecular and granular characteristics of corn starch modified by HCl-methanol at different temperatures. 87th Annual Meeting of The American Association of Cereal Chemists International, Orlando, Florida, USA. September 11 -14, 2005.

57. Chiew-Peng Ng and Hsi-Mei Lai. Study on the hydrolysates and sialic acid in liquid egg white. 43th Annual Meeting of Agricultural Chemical Society of Taiwan, Taipei, Taiwan. June 21, 2005.
58. Hsi-Mei Lai and Yi-Ju Chen. Effect of clays on the biodegradable starch-clay composite film. 86th Annual Meeting of The American Association of Cereal Chemists, San Diego, California, USA. September 19 - 22, 2004.
59. Chung-Hua Liu and Hsi-Mei Lai. Effects of waxy rice flour on the dough property and storage quality of steam bread. 86th Annual Meeting of The American Association of Cereal Chemists, San Diego, California, USA. September 19 - 22, 2004.
60. Pei-Yin Lin and Hsi-Mei Lai. Antioxidative activities of bamboo leaf and bamboo shoot. International Symposium on Functional Foods for Health in Taiwan. Taipei, Taiwan. May 25, 2004.
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