

Fan (Cendy) Wang

Postdoctoral Research Fellow
Ph. D., Department of Food Science, University of Guelph
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Languages: English, Chinese

Education

University of Guelph (2012 – 2015)

Doctor of Philosophy in Food Science,

Research focus: the stabilization of monoglyceride α -gel phase and its potential application in food and personal care products

Dalhousie University (2009 – 2012)

Bachelor of Applied Science in Food Science

Grade: 3.77/4.3, University medal in food science, Graduate with distinction

Publications

Wang, F.C., Gravelle, A.J., Blake, A.I., and Marangoni, A.G. 2016. “Novel Trans Fat Replacement Strategies.” *Current Opinion in Food Science*. 7:27–34.

Wang, F.C., Peyronel, F. and Marangoni, A.G. 2016. “Phase Diagram of Glycerol Monostearate and Sodium Stearoyl Lactylate”. *Crystal Growth & Design*. 16: 297–306.

Wang, F.C., and Marangoni, A.G. 2016. “Microstructural basis for water release from glycerol monostearate structured emulsions upon transformation from the α -gel to the coagel phase”. *Food structure*. 7:1–5

Wang, F.C., Challacombe, C. and Marangoni, A.G. 2016. “Effect of the addition of palm stearin and storage temperatures on the thermal properties of glycerol monostearate-structured emulsions”. *Food Research International*. 79:29–32

Wang, F.C., and Marangoni, A.G. 2015. “pH and Stability of the α -gel phase in glycerol monostearate-water systems using sodium stearyl lactylate and sodium stearate as the co-emulsifier” *RSC Advances*. *RSC Advances*. 5:96746–96749.

Wang, F.C., and Marangoni, A.G. 2015. “Intrinsic and Extrinsic Factors affecting the Stability of Glycerol Monostearate Structured Emulsions”. *RSC Advances*. 5:93108–93116.

Wang, F.C., and Marangoni, A.G. 2015. “Effect of Intrinsic and Extrinsic Factors on the Stability of the A-Gel Phase of a Glyceryl Monostearate-Water System.” *RSC Advances*. 5:43121–29.

Wang, F.C., and Marangoni, A.G. 2014. “Nature and Dynamics of Monostearin Phase Transitions in Water: Stability and the Sub-A-Gel Phase.” *RSC Advances*. 4:50417–25.

Conferences and Presentations

Oral presentations

Wang, F., Fernanda Peyronel and Alejandro G. Marangoni. *Co-crystallization Behaviour of Glycerol Monostearate and Sodium Stearoyl Lactylate*. 25th Canadian Conference on Fats and Oils, Quebec City, QC, Canada, October 4-6, 2015

- Wang, F.C.** and Marangoni, A.G. *Effect of Intrinsic and Extrinsic Factors on the Stability of the α -gel Phase of a GMS-water System*. 106th Annual Meeting of the American Oil Chemists' Society, San Antonio, TX, USA, May 4-7, 2014.
- Wang, F.C.** and Marangoni, A.G. *Monoglyceride and water system: the sub-alpha phase and the Krafft transition*. 105th Annual Meeting of the American Oil Chemists' Society, San Antonio, TX, USA, May 4-7, 2014.
- Wang, F.C.** and Marangoni, A.G. *Nature and Dynamics of the Phase Transition of Monoglyceride-water System for Cosmetic Applications*. Ontario Chapter Meeting of the Society of Cosmetic Chemists, Vaughan, ON, Canada, May 30, 2013.
- Wang, F.C.** and Marangoni, A.G. *Nature and Dynamics of the Phase Transition of Monoglyceride-water System: Re-investigate*. 104th Annual Meeting of the American Oil Chemists' Society, Montreal, QC, Canada, April 28-May 1, 2013.
- Wang, F.C.** and Mazzanti, G. *Viscous Heating in a Mini-Couette Cell Used in Rheo-XRD and Rheo-NMR Research*, 103th Annual Meeting of the American Oil Chemists' Society, Long Beach, USA, April 29–May 02, 2012.
- Wang, F.C.** and Mazzanti, G. 2012, *Mathematical model for viscous heating in a mini-Couette cell used in Rheo-XRD and Rheo-NMR research with a Non-newtonian fluid*, Zurich, Switzerland, April 10 -13, 2012

Poster Presentations

- Wang, F.C.** and Marangoni, A.G. Novel Monoglyceride Structured Emulsion for Production of Petroleum- free Moisturizers. 28th IFSCC Congress, Paris, France, October 27-30, 2014
- Wang, F.**, Stortz, T., and Marangoni, A.G. Novel structuring techniques for production of petroleum-free moisturizers and barriers for cosmetic applications. SCC semi-annual scientific seminar, St. Louis, Missouri, USA, June 6-7, 2013.
- Wang, F.** and Marangoni, A.G. Petroleum-Free Structured Emulsion for Cosmetic Applications. Annual Meeting of the American Oil Chemists' Society, Montreal, QC, Canada, April 28-May 1, 2013.
- Wang, F.** and Mazzanti, G. Viscous Heating in a Mini-Couette Cell Used in Rheo-XRD and Rheo-NMR Research with a Non-Newtonian Standard Fluid, 104th Annual Meeting of the American Oil Chemists' Society, April 29–May 02, 2012.
- Wang, F.** and Mazzanti, G. *Mathematical model for viscous heating in a mini-Couette cell used in Rheo-XRD and Rheo-NMR research with a newtonian fluid*, ETH-Internal Symposium of Food Rheology and Structure , Zurich, Switzerland, April 10 -13, 2012.
- Wang, F.** and Mazzanti, G. *Rheology of Crystallization of Diluted Binary Mixtures of Triglycerides*, 102th Annual Meeting of the American Oil Chemists' Society, Cincinnati, USA, May 1-4.
- Wang, F.** and Mazzanti, G. *A Model for Viscous Heating in a Couette Cell Used in Theo-XRD and Theo-NMR Research of Crystallization of Triglycerides*, 102th Annual Meeting of the American Oil Chemists' Society, Cincinnati, USA, May 1-4, 2011.

Awards and Scholarships

- Mitacs Elevate postdoctoral fellowship, March 2016
- Nominee of Vanier Canada Scholarship at University of Guelph, Fall 2013.
- Society of Cosmetic Chemists student scholarship, Sep. 2013

- Research spotted at the homepage of University of Guelph's website, Feb. 13, 2013.
- University of Guelph International student scholarship, University of Guelph, Winter 2013, Fall 2013, and Winter 2014.
- Society of Cosmetic Chemists student scholarship, Sep. 2012
- University medal in Food Science, Dalhousie University, May 2012
- Scotsburn Dairy Group Scholarship, Dalhousie University, 2011-2012,
- Scotsburn Dairy Group Scholarship, Dalhousie University, 2010-2011
- Sexton Scholarship, 2008-2009, Dalhousie University

Skills and Expertise

- Physicochemical characterization of fats and oils
- Sensory evaluation
- Teaching
- Effective communication
- Academic and professional presentation
- Food service
- Time management

Research experiences

Teaching Assistant

Food Chemistry, Principles of Food Science, Food Analysis, Introduction to Food Engineering

Research Assistant

Mathematical model of viscous heating generated in a mini-Couette cell used in Rheo-XRD / NMR system with Newtonian standard fluid and non-Newtonian standard fluid (November 2010 – April 2012)

Internship

Food analysis lab (state key lab), Technique Center of Beijing Entry-Exit Inspection and Quarantine Bureau, Beijing, China (July 2010)

Non-Academic Activities and Leadership

- Previous president and current executive board member of Guelph Chinese Christian Fellowship, University of Guelph, Guelph, Ontario, Canada, August 2012 – present
- Volunteer of Beijing 2008 Paralympics Games at the Press Tribune in Road Cycling Course Event, Beijing, China, Sep. 2008
- Volunteer of Beijing 2008 Olympic Games at the Press Tribune in Road Cycling Course Event, honor of Outstanding Volunteer, Beijing, China, July – Aug, 2008
- Volunteer of Good Luck Beijing 2008 Handball Tournament and Wheelchair Basketball International Tournament at National Indoor Stadium, Beijing, China, Jan. 2008
- Vice president of Video department at Youth RUC at Renmin University of China, 2008
- Hostess of CCTV youth news TV program, Dec. 2005 – Feb. 2006
- Editor in chief / vice editor of the campus magazine of High School Affiliated of Renmen University of China, Beijing, China, Oct. 2004 – Oct. 2006