

2018 AOCS Annual Meeting & Expo

May 6–9 | Minneapolis Convention Center | Minneapolis, Minnesota, USA



Phospholipid (PHO) Interest Area Tentative Technical Program

As of April 1, 2018

This presentation list is not final and is subject to change.

The presenter is the first author, or the author indicated with an asterisk ().*

Monday Afternoon

H&N 1 / PHO 1: Emerging Bioactives and Health Impacts

Chairs: Eileen Bailey Hall, DSM Nutritional Products, USA; and Xiaosan Wang, Jiangnan University, China

Health Impact of the Newly Discovered Elovonoids: Stroke, Retinal Degenerations, Neurotrauma and Alzheimer's Disease. Nicolas G. Bazan, *LSU Health New Orleans Neuroscience Center, USA*

Evidence for the Use of Docosahexaenoic Acid in the Treatment of Breast Cancer. Catherine J. Field, Newell Marnie, and Lynne M. Postovit, *University of Alberta, Canada*

A Brief Overview of Palmitoleic Acid, the Forgotten MUFA. Gretchen Vannice, *Organic Technologies, USA*

Arachidonic Acid has Anti-diabetic Actions. Gundala K. Naveen Kumar, and Undurti Das*, *BioScience Research Centre, India*

Effects of Sesamol on Lipid Metabolism and Neurodegeneration. Xuebo Liu and Zhigang Liu, *Northwest A&F University, China*

A Novel Method for Evaluating Anti-inflammatory Activity of Camellia Seed Oil. Ruijie Liu¹, Niannian Lan², Ming Chang¹, Qingzhe Jin¹, and Xingguo Wang¹, ¹*Jiangnan University, China*; ²*School of Food Science and Technology, Jiangnan University, China*

Dietary Krill Oil Enhances Neurocognitive Functions and Modulates Proteomic Changes in Brain Tissues of Aging Mice. Ling Zhi Cheong, Tingting Sun, and Xiurong Su, *Ningbo University, China*

Role of Oxidized Phospholipids in Myocardial Reperfusion Injury. Amir Ravandi, *University of Manitoba, Canada*

Tuesday Morning

PHO 2: Chemical and Biochemical Advancement in the Phospholipid Field

Chairs: Moghis Ahmad, Jina Pharmaceuticals Inc., USA; and Swapnil Jadhav, Archer Daniels Midland Co., USA

Phospholipids Modification with Enzymes: A Re-visit. Xuebing Xu, *Wilmar Global Research and Development Center, China*

Phenolipids for Delivery Systems: Synthesis and Characterization. Sampson Anankanbil¹, Bianca Perez¹, Chiranjib Banerjee², Katarzyna Widzisz², and Zheng Guo², ¹*Dept. of Engineering, Aarhus University, Denmark;* ²*Aarhus University, Denmark*

New Approaches in Non-aqueous Enzymology for Modification of Lipids and Phospholipids. Douglas G. Hayes, *University of Tennessee, USA*

Ability of Soy Lecithin Oleogel Emulsions to Protect Probiotics and Prevent Oxidation. Nicole I. Gaudino, Stephanie Clark, and Nuria C. Acevedo, *Iowa State University, USA*

Lipids as Mediators of Cardiomyocyte Cell Death During Ischemia/Reperfusion Injury. Aleksandra Stamenkovic¹, Kimberley A. O'Hara², David C. Nelson², Andrea L. Edel², Grant N. Pierce², and Amir Ravandi¹, ¹*University of Manitoba, Canada;* ²*Institute of Cardiovascular Sciences, Canada*

Sunflower and Soy Bean Lecithin: Interfacial Rheology and Kinetics at the Oil / Water Interface plus the Influence of Counter Ions. Arnulf Schoeppe and Prashandh Sankarappan, *Cargill Texturizing Solutions Deutschland GmbH & Co.KG, Germany*

Development of Phospholipid-Enriched Oleogels and Oleogel Emulsions Edible Semisolid Applications. Nicole I. Gaudino¹, Saeed Mirzaee Ghazani², Alejandro G. Marangoni², Stephanie Clark¹, and Nuria C. Acevedo¹, ¹*Iowa State University, USA;* ²*University of Guelph, Canada*

Achieving a Docosahexaenoic Acid Content of 7% Improved the Efficacy of Chemotherapy in Mice Bearing a Triple Negative Breast Cancer Human Xenograft. Marnie Newell, Vera Mazurak, Lynne M. Postovit, and Catherine J. Field, *University of Alberta, Canada*

Wednesday Morning

PHO 3: Developments and Applications of Novel and Modified Phospholipids

Chairs: Ernesto Hernandez, Advanced Lipid Consultants, USA; and Xuebing Xu, Wilmar Global Research and Development Center, China

Preparation and Functional Evaluation of Antarctic Krill Lipid. Yuanfa Liu¹, Dewei Sun², Peirang Cao¹, and Zong Meng³, ¹*Jiangnan University, China;* ²*School of Food Science and Technology, Jiangnan University, China;* ³*School of Food Science and Technology, Jiangnan University, China*

Review of Uses of Phospholipids in Delivery Systems and Bioactive Carriers Applications. Ernesto Hernandez, *Advanced Lipid Consultants, USA*

Composition and Structure of Phospholipid in Breast Milk: Towards Specific Interest in Infant Formula. Wei Wei¹, Mingdong Dong², and Xingguo Wang¹, ¹*Jiangnan University, China;* ²*Interdisciplinary Nanoscience Center, Aarhus University, Denmark*

Design of Two-layered Microcapsules of Chia Oil by Using Sunflower PC-enriched Lecithin and the LBL Technique. Luciana M. Julio¹, Claudia N. Copado¹, Vanesa Y. Ixtaina¹, Bernd W.K Diehl², and Mabel Tomás*¹, ¹CIDCA (CONICET-UNLP), Argentina; ²Spectral Service AG, Germany

Low Molecular Weight Food Grade Emulsifiers including Soy Lecithins / Phosphatidylcholine Span a Wide Range of Interfacial Tensions and Interfacial Rheological Properties. Arnulf Schoeppe and Padmavathi Sridharan, *Cargill Texturizing Solutions Deutschland GmbH & Co.KG, Germany*

Extraction, Purification and Enzymatic Modification of Phospholipids from Antarctic Krill. Shulai Liu, Jie Hu, Kaixi Xu, Bokai Yu, and Yuting Ding, *Zhejiang University of Technology, China*

Novel Structured Phospholipids and Applications from Avocado Oil. Sara KoohiKamali and Ernesto Hernandez, *Advanced Lipids Consultants, USA*

Characterization of Novel Vegetable Lecithin and its Application in Emulsions. Xuebing Xu, Fang Cong*, and Binbin Chen, *Wilmar Global Research and Development Center, China*

PHO-P: Phospholipid Poster Session

Posters will be available for viewing from noon on Monday, May 7 through 2:00 p.m. Wednesday, May 9, 2018.

Physical, Oxidative Stability and Microstructure Characteristics of Structured Lipid/Skim Milk Emulsions Prepared by using Different Emulsifiers. Abdelmoneim H. Ali*¹, Wei Wei², Sherif M. Abed², Sameh Korma¹, Qingzhe Jin³, and Xingguo Wang³, ¹School of Food Science and Technology, Jiangnan University, PR China, China; ²State Key Laboratory of Food Science and Technology, Synergetic Innovation Center of Food Safety and Nutrition, School of Food Science and Technology, China; ³Jiangnan University, China

Effect of Modified Sunflower Lecithins on Bread Quality. Estefania N. Guiotto¹, Mabel Tomás², and Claudia M. Haros³, ¹Centro de Investigación y Desarrollo en Criotecnología de Alimentos (CIDCA), Argentina; ²CIDCA (CONICET-UNLP), Argentina; ³Grupo de cereales, Instituto de Agroquímica y Tecnología de Alimentos (IATA-CSIC), Spain

Preparation of Phosphatidylcholine by Transphosphatidylation of Phosphatidylethanolamine and Phospholipase D. Wei-Ju Lee, *Taipei Medical University, Taiwan*

Release of ω -3 and ω -6 Epoxides from Acidic Phospholipids of Lipoproteins by IIA, V and X Secretory Phospholipases A2. Arnis Kuksis and Waldemar Pruzanski, *University of Toronto, Canada*