ANA 1/LOQ 1.1: Marine Oils - Analytical and Stability

04/29/13  1:55 pm- 5:00 pm
512AE

Analytical

Sponsor(s):

Chair(s):  V. Barthet, J. Reuther

2  268800  Quantitation of Fatty Acids in Marine Oils by Comprehensive gc-online Hydrogenation x Gc.
Pierluigi Delmonte, US Food and Drug Administration (Primary); Ali Reza Fardin Kia, US Food and Drug Administration; Jeanne I. Rader, US Food and Drug Administration

3  269053  Determination of Trans Polyunsaturated Fatty Acid Content in Fish oil Supplements Available in the U.S. Market
Cynthia Tyburczy, U.S. Food and Drug Administration (Primary); Jeanne I. Rader, U.S. Food and Drug Administration
ANA 2: Review of Old Analytical Methods - Challenges, Solutions

Sponsor(s): T. Mason West, R. Della Porta

Chair(s): T. Mason West, R. Della Porta

2 268801 Preparation of Fatty Acid Methyl Esters for gas Chromatographic Analysis by Lipase Catalyzed Transesterification.
Ali Reza Fardin-Kia, U.S. FDA (Primary); Pierluigi Delmonte, U.S. FDA; Jeanne Rader, U.S. FDA

Jonathan M Curtis, University of Alberta (Primary); Sabiqah Tuan Anuar, University of Alberta; Samuel M Mugo, Grant MacEwan University

4 269069 Investigation of the Measurement of Palm Oils
Peter Clarke, Lovibond Tintometer (Primary)

5 269132 Separation of Fatty Acids in Marine Oils With Highly Polar Ionic Liquid gas Chromatographic Columns.
Ali Reza Fardin-Kia, U.S. FDA (Primary); Pierluigi Delmonte, U.S. FDA; Jeanne Rader, U.S. FDA

6 269926 Determination of Slip Melting Point, Iodine Value and Moisture% in Refined Palm Oil Using FT-NIR
Paul Chabot, ABB Analytical Measurements (Primary)
ANA 3: Analysis of Trace Contaminants in Vegetable Oil and By-Products

Analytical

Sponsor(s):

Chair(s): M. Collison, S. MacMahon

2  268489 Interconversion Between Monochloropropanediols and Glycidol in the Course of Deep Fat Frying (Standard Method C-vi 18 (10))
Hirofumi Sato, Osaka Municipal Technical Research Institute, Japan (Primary); Naoki Kaze, UEDA OILS and FATS MFG CO., LTD. Japan; Hiroshi Yamamoto, UEDA OILS and FATS MFG CO., LTD. Japan; Daisuke Ono, Osaka Municipal Technical Research Institute; Motohiro Shizuma, Osaka Municipal Technical Research Institute; Yomi Watanabe, Osaka Municipal Technical Research Institute

2:00 pm - 2:20 pm

3  268752 Progress in the Analysis of 2-/3-mcpd Esters and Glycidyl Esters: From Refined Oils to Oil-based Foodstuffs
Alessia Ermacora, Technical University of Berlin (Primary); Karel Hrnčířík, Unilever R&D Vlaardingen

2:20 pm - 2:40 pm

4  269089 Formation of the Toxicologically Relevant 2-alkenals Acrolein and Crotonaldehyde in Comparison to Aroma-active Compounds During Deep-frying of Food
Michael Granvogl, German Research Center for Food Chemistry (Primary); Peter Shieberle, German Research Center for Food Chemistry

2:40 pm - 3:00 pm

5  269021 Development and Validation of Hexaconzole Residue in Crude Palm Oil by gas Chromatograph With Electron Capture Detector and Confirmed With Mass Spectrometer
halimah binti muhamad, Malaysian Palm Oil Board (Primary)

3:00 pm - 3:20 pm

6  268591 Simple and Fast Analyses Using Ge-fid for Detection of Potential Genotoxins (isopropyl Para-toluene-sulphonate) in Palm oil Based Esters a Common Ingredient Used in Cosmetic and Personal Care Products
Bonnie Tay Yen Ping, Malaysian Palm Oil Board (Primary)

3:20 pm - 3:40 pm

7  272453 Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) Detection of Glycidyl Esters and MCPD Esters in Edible Oils
Shaun MacMahon, U.S. Food and Drug Administration (Primary); Tim H. Begley, U.S. Food and Drug Administration; Gregory W. Diachenko, U.S. Food and Drug Administration

3:40 pm - 4:00 pm
ANA 4: Rapid and Real Time Analysis

Analytical

Sponsor(s):

Chair(s):  H. Zhao, M. Mossoba

2  269068  *In-vivo and Rapid Monitoring of Obesity Using Ft-nir Spectroscopy*
Hormoz Azizian, NIR Technologies Inc. (Primary); John Kramer, Retired; Suzanna Winsborough, NIR Technologies Inc.

3  268498  *Choice of Calibration Standard for the Quantitation of Trans fat in Edible Oils by Attenuated Total Reflection-fourier Transform Infrared Spectroscopy*
Cynthia Tyburczy, U.S. Food and Drug Administration (Primary); Magdi M. Mossoba, U.S. Food and Drug Administration; Ali Reza Fardin-Kia, U.S. Food and Drug Administration; Jeanne I. Rader, U.S. Food and Drug Administration

4  268860  *Rapid (<5 Min) Ft-nir Screening of Edible Oils for the Determination of the Total Sfa, Trans fa, Mufa and Pufa Contents and Comparison to gc and Declared Values on Nutrition Facts Panels*
Magdi M Mossoba, FDA (Primary); Hormoz Azizian, NIR Technologies, Inc; Cynthia Tyburczy, FDA; John K.G. Kramer, Guelph Food Research Center, Agri-food Canada; Pierluigi Delmonte, FDA; Ali Reza Fardin Kia, FDA; Jeanne Rader, FDA

5  270169  *Quality assessment of olive paste, pomace and oil by NIR*
Hui Li, Bruker Optics, Inc. (Primary); Christopher Larkin, Bruker Optics, Inc.

6  270350  *Application of portable FT-IR spectrometers to authenticate raw materials*
Luis E. Rodriguez-Saona, The Ohio State University (Primary)

7  269124  *Strategies for Rapid Characterization of Supplements Using Simple Extraction Protocol Followed by Dari ms of Intact Triglycerides and Fatty Acids*
Brian Musselman, IonSense (Primary); Joseph LaPointe, IonSense, Inc.

8  269765  *A Simple Analytical Method for Detailing the Composition and Oxidation Levels of Marine Omega-3 Supplements*
Robert Freeman, Frontier Laboratories (Primary); I. Iwai, Frontier Laboratory; D. Randle, Frontier Laboratory; Chu Watanabe, Frontier Laboratories

9  269151  *Adulteration Testing of Edible Oils by Ft-nir*
Christopher Heil, Thermo Fisher Scientific (Primary); David Drapcho, Thermo Fisher Scientific
ANA 4.1/H&N 4: Advances in Analytical Aspects of Lipid Nutrition

Analytical

Sponsor(s): S. Bhandari, B. Ward

   - Adam H Metherel, University of Waterloo (Primary); Ken D Stark, University of Waterloo
   - 8:00 am - 8:20 am

2. **269097 Improved Lipid Profile in Hyperbilirubinemic Subjects Contributes to Cardiovascular Protection**
   - Karl-Heinz Wagner, University of Vienna (Primary)
   - 8:20 am - 8:40 am

3. **268782 Plasma, Erythrocytes and Whole Blood Fatty Acids: Translating Compositional Data**
   - Ken D Stark, University of Waterloo (Primary); Juan J Aristizabal Henao, University of Waterloo; Adam H Metherel, University of Waterloo; Louise Pilote, McGill University Health Centre; for the GENESIS PRAXY investigators, McGill University Health Centre
   - 8:40 am - 9:00 am

4. **269077 Relative Role of Dietary fat Amount and Structure in the Meal on the Secretion of Chylomicrons and Associated Endotoxin Transport in Lean and Obese Humans**
   - Cécile Vors, INRA USC1362, CarMeN laboratory (Primary); Fabienne Laugerette, INRA USC1362, CarMeN laboratory; Gaëlle Pineau, INRA USC1362, CarMeN laboratory; Hubert Vidal, INSERM U1060, CarMeN laboratory; Martine Laville, CENS; Marie-Caroline Michalski, INRA USC1362, CarMeN laboratory
   - 9:00 am - 9:20 am
ANA 5: General Analytical

Analytical
Sponsor(s):
Chair(s):  V. Jain, A. Tang

Under Development
ANA 5.1/S&D 5: Emerging Test Methods for Surfactants and Detergents

05/01/13  1:55 pm- 5:00 pm
513AB

Analytical
Sponsor(s):

Chair(s):  M. Tsumadori, H. Li

2  268924 Characterization of Surfactant Iron Oxide Nanoparticle Interactions Using Isothermal Titration Calorimetry (itc)
Ziheng Wang, University of Toronto (Primary); Sheng Xu, University of Toronto; Edgar Acosta, University of Toronto

3  270521 Using Inflection Points in Surfactant Blend Properties as a Guide to System Synergies
Rick Theiner, Air Products and Chemicals, Inc. (Primary); Renae Bennett, Air Products and Chemicals, Inc.
ANA-P: Analytical Poster Session

Analytical
Sponsor(s):
Chair(s): K. Ma

1. **Comparison of Supercritical Fluid Extraction of Canola With Traditional Solvent Extraction Techniques**
   Gwynyth Almendarez, Dow AgroSciences (Primary); Josh Flook, Dow AgroSciences; Tom Patterson, Dow AgroSciences; Jeff Wright, Waters; Rui Chen, Waters; Brita McNew, Dow AgroSciences; Derrick Gish, Dow AgroSciences; Charlene Hight, Dow AgroSciences

2. **Secretary Phospholipases A2(spla2s)release Free F2-isoprostanes From Lipoprotein Phospholipids**
   Arnis Kuksis, University of Toronto (Primary); Waldemar Pruzanski, University of Toronto

3. **Edible oil Adulteration Testing by Ft-nir**
   Chris Heil, Thermo Fisher Scientific (Primary); David Drapcho, Thermo Fisher Scientific; Herman He, Thermo Fisher Scientific

4. **Acid Number Determination of Vegetable Oils by Different Titration Methods**
   Fernanda Ribeiro Bürgel, PUC-Rio (Primary); Andrea dos Santos Vicente, PUC-Rio; Cristiane Maria de Mello Alves Portella, PUC-Rio; Mônica Maria Jorge Vinhoza, PUC-Rio; Sônia Cabral de Menezes, Petrobras

5. **Quantitative Comparison of Direct in Situ Transesterification of Plasma, Red Blood Cells and Brain Tissues With and Without Prior Lipid Isolations**
   Kelsey Ramirez, DSM Nutritional Products (Primary); Kelly M Wynalda Camozzi, DSM

6. **Authentication and Quality Control and of Vegetable oil by the Heracles E-nose System**
   LaToya Britton, Alpha MOS America (Primary)

7. **Determination of Cooking oil Adulteration by Principal Component Analysis With HPLC - Charged Aerosol Detector Data**
   Marc Plante, Thermo Fisher Scientific (Primary); David Thomas, Thermo Fisher Scientific; Bruce Bailey, Thermo Fisher Scientific; Ian Acworth, Thermo Fisher Scientific

8. **Characterization of Used Cooking Oils by Hple-ms and Corona Charged Aerosol Detection**
   Marc Plante, Thermo Fisher Scientific (Primary); David Thomas, Thermo Fisher Scientific; Bruce Bailey, Thermo Fisher Scientific; Ian Acworth, Thermo Fisher Scientific

9. **Release of Fatty Acid Hydroperoxides and Hydroxides From Lipoprotein Phospholipids by Group Iia, v and x of Human Secretory Phospholipases (spla2s)**
   Arnis Kuksis, University of Toronto (Primary); Waldemar Pruzanski, University of Toronto

10. **Mathematical Relationship Between IV & RI for vegetable Oil.**
    Sanjoy Mukhopadhyay, Emami Biotech Limited. (Primary)

11. **PTAD (4-phenyl-1,2,4-triazoline-3,5-dione) as a Novel Reagent in the GC-MS Identification of Conjugated Fatty Acid Positional Isomerism**
268697 Rapid Lipid Extraction From egg Yolks
Utkarsh Shah, University of Arkansas (Primary); Andy Proctor, University of Arkansas; Jackson O Lay, University of Arkansas

272918 Fatty acid profile and minor lipid components in the oil of some selected germplasms of Lepidium campestre
Samanthi R.P. Madawala, Swedish University of Agricultural Sciences (SLU) (Primary); Mulatu D. Geleta, Swedish University of Agricultural Sciences; Li-Hua Zhu, Swedish University of Agricultural Sciences; Paresh C. Dutta, Swedish University of Agricultural Sciences

273092 Effect of temperature and usage of frying process on the fatty acids profile of partially hydrogenated vegetable oil (Vanaspati)
Khalid Anwar, Indian Institute of Delhi (IIT), New Delhi, India (Primary); Vikas Kardam, Indian Institute of Technology (IIT), New Delhi, India; K K Pant, Indian Institute of Technology (IIT), New Delhi, India

273838 Quantification of triacylglycerols in vegetable oils by easy ambient sonic-spray ionization mass spectrometry technique.
Gabriel D Fernandes, UNICAMP (Primary); Anna M. Ap. Fernandes, UNICAMP; Rosineide C. Simas, UNICAMP; Marcos N. Eberlin, UNICAMP; Rosana M. Alberici, UNICAMP; Daniel Barrera-Arellano, UNICAMP

274831 The Effect of Different Cold Storage Conditions on Extra Virgin Olive Oil
XUEQI LI, University of California, Davis (Primary); Selina Wang, University of California, Davis; Charles F. Shoemaker, University of California, Davis; Hanjiang Zhu, University of California, Davis