

Sunday, September 30, 2012

The 60th Anniversary of the Foundation of Japan Oil Chemists' Society

Opening Ceremony: The Celebration for the 60th Anniversary of the Foundation of JOCS

13:00 - 13:40

Grand Hall (2F)

Lectures on the 60th Anniversary: in Japanese

14:00 - 16:40

Grand Hall (2F)

**L-1 NEVER GIVE UP - MY ENCOUNTER AND LASTING CONNECTION WITH THE JELLYFISH
*AEQUOREA***

[[[99999]]] O. Shimomura

Marine Biological Laboratory (MBL), Woods Hole, Nobel Prize Laureate in Chemistry, 2008

**L-2 THE CROSS COUPLING REACTIONS THAT INNOVATED SYNTHETIC METHODOLOGY OF
ORGANIC MATERIALS**

[[[99999]]] N. Miyaura

Graduate School of Engineering, Hokkaido University, Japan

L-3 ECO-INNOVATION ENRICHING LIVES

[[[99999]]] M. Ozaki

Kao Corporation, Japan

Monday, October 1, 2012

Plenary Lecture 1

13:30 - 14:30

Concert Hall (4F)

Chairperson: Koretaro Takahashi (*Hokkaido University, Japan*)

PL-1 BIOCATALYSIS, OLEOCHEMICALS AND FUNCTIONAL FOODS

[[[10022]]]

Ching Tsang Hou

Renewable Product Technology Research Unit, National Center for Agricultural Utilization Research, ARS, USDA, USA

Plenary Lecture 2

14:30 - 15:30

Concert Hall (4F)

Chairperson: Kazuo Tajima (*Kanagawa University, Japan*)

PL-2 TiO₂ PHOTOCATALYSIS AND RELATED SURFACE PHENOMENA

[[[10351]]]

Akira Fujishima

Tokyo University of Science, Japan

JOCS/KOCS Joint Symposium

Opening Remarks

10:00 - 10:05

Reception Hall (1F)

Chairperson: Osamu Shibata (*Nagasaki International University, Japan*)

The Ceremony for Dr. Jang Sook Noh

10:05 - 10:10

Reception Hall (1F)

Chairperson: Masahiko Abe (*Tokyo University of Science, Japan*)

JOCS/KOCS Joint Symposium 1

10:10 - 11:25

Reception Hall (1F)

Chairpersons: Jin-Hui Lee (*Seoul National University of Science and Technology, Korea*)
Keisuke Matsuoka (*Showa Pharmaceutical University, Japan*)

JK1-1 A STUDY ON THE GENERAL CHARACTERISTICS AND COMPONENTS ANALYSIS OF NATURAL OMIJA EXTRACT

[[[10303]]]

K.-C. Sung

Chemical Engineering Department, Deajin University, Korea

JK1-2 INTERFACIAL PHENOMENA OF PULMONARY SURFACTANT MODEL SYSTEMS INCORPORATED WITH FLUORINATED AMPHIPHILES

[[[10003]]] H. Nakahara¹, S. Lee¹, M. P. Krafft², O. Shibata¹

¹Department of Biophysical Chemistry, Faculty of Pharmaceutical Science, Nagasaki International University, Japan,

²Universite de Strasbourg, Systemes Organises Fluores a Finalites Therapeutiques (SOFFT), Institut Charles Sadron (CNRS, UPR 22), France

JK1-3 DEVELOPMENTS OF BIO-BASED SURFACTANTS

[[[10165]]] T. Imura

Research Institute for Innovation in Sustainable Chemistry (ISC), National Institute of Advanced Industrial Science and Technology (AIST), Japan

JOCS/KOCS Joint Symposium 2

11:40 - 12:30

Reception Hall (1F)

Chairpersons: Ki-Chun Sung (*Deajin University, Korea*)

Rie Kakehashi (*Osaka Municipal Technical Research Institute, Japan*)

JK2-1 SYNTHESIS OF INORGANIC MATERIALS WITH VARIOUS SHAPES USING IONIC LIQUID AND THEIR APPLICATION

[[[10101]]] K. S. Yoo

Department of Chemical Engineering, Seoul National University of Science & Technology, Korea

JK2-2 AGGREGATION BEHAVIOR OF NONIONIC SURFACTANTS IN ROOM TEMPERATURE IONIC LIQUIDS

[[[10072]]] T. Inoue

Department of Chemistry, Fukuoka University, Japan

JOCS/KOCS Joint Symposium 3

15:40 - 16:30

Reception Hall (1F)

Chairpersons: Ki-Chun Sung (*Deajin University, Korea*)

Rie Kakehashi (*Osaka Municipal Technical Research Institute, Japan*)

JK3-1 SCREENING AND CHARACTERIZATION OF BIOSURFACTANTS PRODUCED BY BLACK YEAST *AUREOBASIDIUM PULLULANS* ORIGINATING FROM WILD FLOWERS

[[[10048]]] J.-S. Kim

Gyeongbuk Institute for Marine Bioindustry, Korea

JK3-2 ACTIVE INTERFACIAL MODIFIER (AIM): STABILIZATION OF W/O EMULSIONS BY HYBRID AMPHIPHILIC POLYMERS

[[[10023]]] K. Sakai¹, H. Sakai², K. Sakamoto³, M. Abe²

¹Research Institute for Science and Technology, Tokyo University of Science, Japan, ²Faculty of Science and Technology, Tokyo University of Science, Japan, ³Faculty of Pharmacy, Chiba Institute of Science, Japan

JOCS/KOCS Joint Symposium 4

16:40 - 17:55

Reception Hall (1F)

Chairpersons: Kye Sang Yoo (*Seoul National University of Science & Technology, Korea*)

Tomohiro Imura (*National Institute of Advanced Industrial Science and Technology (AIST), Japan*)

JK4-1 ROLE OF THE HYDROGEN BOND IN CONTROLLING THE SELF-ASSEMBLED STRUCTURES AND THE SOLUTION PROPERTIES OF AMIDOAMINE OXIDE SURFACTANTS

[[[10029]]] R. Kakehashi, N. Tokai, S. Yamamura

Organic Materials Research Division, Osaka Municipal Technical Research Institute, Japan

JK4-2 OVERVIEW OF THE BIOETHANOL AND GASOHOL AS A FUEL FOR VEHICLE

[[[10320]]] J.-H. Lee

Department of Chemical and Biomolecular Engineering, Seoul National University of Science and Technology, Korea

JK4-3 MICELLIZATION AND SOLUBILIZATION OF FLUORINATED SURFACTANTS

[[[10011]]] K. Matsuoka

Department of Physical Chemistry, Showa Pharmaceutical University, Japan

Closing Remarks

17:55 - 18:00

Reception Hall (1F)

Chairperson: Jin-Hui Lee (*Seoul National University of Science and Technology, Korea*)

Award Lectures (Foundation, Oil & Fat Industry Kaikan)

9:00 - 12:00

Conference Room (L)-B/C (3F)

Surfactants & Interface Science 1 (Oral 1)

10:00 - 11:10

Conference Room (L)-A (3F)

Chairperson: Kenji Aramaki (*Yokohama National University, Japan*)

O-1 Invited paper: EXCEPTIONALLY STABLE MICROBUBBLES STABILIZED BY FLUORINATED AMPHIPHILES. DECORATION OF THE BUBBLES' SURFACE WITH MAGNETIC NANOPARTICLES: NEW BIMODAL CONTRAST AGENTS FOR ECHOSONOGRAPHY AND MRI

[[[10035]]] M. P. Krafft¹, P. N. Nguyen¹, A. Kovalenko¹, P. Polavarapu¹, J. Jouhannaud², G. Pourroy², G. Waton¹

¹*Institut Charles Sadron, CNRS - University of Strasbourg, France*, ²*DCMI, Institut de Physique et de Chimie des Matériaux de Strasbourg (IPCMS, UMR 7504), University of Strasbourg, Strasbourg, France*

O-2 A STUDY ON THE MOLECULAR PACKING CHARACTERISTICS OF MIXED ION PAIR AMPHIPHILE/DIALKYL-CHAINED CATIONIC SURFACTANT LANGMUIR MONOLAYERS BY INFRARED REFLECTION-ABSORPTION SPECTROSCOPY

[[[10134]]] A.-T. Kuo, C.-H. Chang

Department of Chemical Engineering, National Cheng Kung University, Taiwan

O-3 STATIC AND DYNAMIC BEHAVIORS OF DRUG DELIVERY TO LIPID BILAYER MEMBRANE BY NMR AND MOLECULAR DYNAMICS SIMULATION

[[[10282]]] E. Okamura, N. Yoshii

Faculty of Pharmaceutical Sciences, Himeji Dokkyo University, Japan

Surfactants & Interface Science 1 (Oral 2)

11:10 - 12:10

Conference Room (L)-A (3F)

Chairperson: Marie Pierre Krafft (*Institut Charles Sadron (ICS, CNRS), France*)

O-4 INTERACTION OF GLYCYRRHIZIN WITH LIPID RAFTS MODEL AT THE AIR/WATER INTERFACE

[[[10016]]] S. Sakamoto, H. Nakahara, O. Shibata

Department of Biophysical Chemistry, Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan

O-5 INFLUENCE OF VISCOUS FINGERING GENERATED DURING SUNSCREEN APPLICATION ON *IN VITRO* SPF DETERMINATION

[[[10177]]] K. Fujikake¹, R. Plasson¹, R. Nakazawa¹, K. Okano¹, T. Mukawa², D. Maezawa², A. Kuroda³, K. Asakura¹

¹*Department of Applied Chemistry, Keio University, Japan*, ²*R&D, Para Hermosa Co., Ltd., Japan*, ³*Yokohama Office, Cosmetech Co., Ltd., Japan*

O-6 QUARTZ CRYSTAL MICROBALANCE (QCM) STUDIES OF SURFACTANT ADSORPTION AND THE EFFECT OF COADSORBENTS, ROUGHNESS AND TEMPERATURE

[[[10039]]] B. Grady

Chemical Engineering, University of Oklahoma, USA

Surfactants & Interface Science 1 (Oral 3)

15:40 - 17:10

Conference Room (L)-A (3F)

Chairperson: Lok Kumar Shrestha (*International Center for Materials Nanoarchitectonics (WPI-MANA) /*

National Institute for Materials Science (NIMS), Japan)

O-7 Invited paper: SPHINGOLIPID GRAFTED POLY(AMINO ACID)S DERIVATIVES FOR DRUG DELIVERY

[[[10283]]] J.-D. Kim, C. W. Park, B. Jung

Department of Chemical and Biomolecular Engineering, Korea Advanced Institute of Science and Engineering, Korea

O-8 FORMULATION OF LECITHIN MICROEMULSION-BASED GELS

[[[10273]]] E. Acosta, X.-Y. Xuan, Y.-L. Cheng

Chemical Engineering and Applied Chemistry, University of Toronto, Canada

O-9 CORE-SHELL-CORONA POLYMERIC MICELLES AS A VERSATILE TEMPLATE FOR THE SYNTHESIS OF INORGANIC HOLLOW NANOPARTICLES: APPLICATION TO MESOPOROUS HOLLOW SILICA NANOSPHERES

[[[10274]]] K. Nakashima¹, S. Manickam¹, H. Zenibana¹, M. Nandi², A. Bhaumik²

¹*Department of Chemistry, Saga University, Japan*, ²*Department of Materials Science, Indian Association for the Cultivation of Science, Jadavpur, Kolkata, India*

O-10 ADSORPTION AND DECOMPOSITION OF ORGANIC MOLECULES ON SURFACE MODIFIED TITANIA NANOSKELETON

[[[10224]]] T. Endo¹, A. Kawabata¹, N. Koshikawa², M. Katsuta², K. Sakai³, H. Sakai¹, M. Abe¹

¹*Department of Pure and Applied Chemistry, Tokyo University of Science, Japan*, ²*Space Environment Utilization Center, Japan Aerospace Exploration Agency, Japan*, ³*Research Institute of Science and Technology, Japan*

Surfactants & Interface Science 1 (Oral 4)

17:10 - 18:30

Conference Room (L)-A (3F)

Chairperson: Jong-Duk Kim (*KAIST, Korea*)

O-11 ROLE OF SURFACTANT ON THE SHAPE-CONTROLLED SYNTHESIS OF CRYSTALLINE FULLERENE VIA LIQUID-LIQUID INTERFACIAL PRECIPITATION (LLIP) METHOD

[[[10132]]] L. K. Shrestha¹, J. P. Hill², K. Miyazawa³, K. Ariga²

¹International Center for Young Scientists (ICYS), International Center for Materials Nanoarchitect, National Institute for Materials Science (NIMS), Japan, ²International Center for Materials Nanoarchitectonics (WPI-MANA), National Institute for Materials Science (NIMS), Japan, ³Fullerene Engineering Group, NIMS, Japan

O-12 FABRICATION AND PHOTOCATALYTIC ACTIVITY UNDER VISIBLE LIGHT IRRADIATION OF MESOSTRUCTURED TITANIA PARTICLES MODIFIED WITH PHTHALOCYANINE IN THE PORES

[[[10314]]] H. Shibata¹, S. Ohshika², T. Ogura³, K. Nishio², H. Sakai³, M. Abe³, K. Hashimoto¹, M. Matsumoto²

¹Department of Life and Environmental Sciences, Chiba Institute of Technology, Japan, ²Department of Materials Science and Technology, Tokyo University of Science, Japan, ³Department of Pure and Applied Chemistry, Tokyo University of Science, Japan

O-13 EFFECT OF THE GEGEN IONS OF SPICULISPORATES AS THE SURFACE-ACTIVE REDUCTANTS ON THE PREPARATION OF GOLD COLLOIDS

[[[10064]]] Y. Ishigami¹, T. Koike², Y. Mitsutsuka², Y. Zhang¹, H. Hidaka²

¹School of Chemical Engineering, Nanjing University of Science and Technology, China, ²Department of Science and Technology, Meisei University, Japan

O-14 MICROMETER-SIZED MESOPOROUS DIAMOND SPHERICAL PARTICLES FOR FUNCTIONAL MATERIALS

[[[10240]]] T. Kondo¹, M. Kobayashi¹, T. Morimura¹, Y. Kadota², M. Yuasa¹

¹Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Japan, ²Shiseido Irica Technology Inc., Japan

Surfactants & Interface Science 2 (Oral 5)

10:00 - 11:10

Special Conference Room (3F)

Chairperson: Masaru Oya (*Yokohama National University, Japan*)

O-15 Invited paper: MEMBRANE CURVATURE AND LIPID MOBILITY ARE THE KEY FACTORS FOR THE CATIONIC OLIGO-PEPTIDE PENETRATION

[[[10319]]] K. Sakamoto

Faculty of Pharmacy, Chiba Institute of Science, Japan

O-16 AGGREGATION BEHAVIOR OF A SKIN-MILD ANIONIC SURFACTANT IN AQUEOUS SOLUTION

[[[10131]]] T. Sakai¹, R. Ikoshi², N. Toshida¹, M. Kagaya¹

¹Eco-Innovation Research Laboratories, Kao Corporation, Japan, ²Skin Beauty Research Laboratories, Kao Corporation, Japan

O-17 PHORBOL ESTERS EXTRACTION FROM *JATHOPHA CURCAS* PRESSED CAKE USING SURFACTANT AQUEOUS-BASE SOLUTION

[[[10034]]] N. Phasukarratchai¹, C. Tongcumpou²

¹National Center of Excellence for Environmental and Hazardous Waste Management, Chulalongkorn University, Thailand, ²Environmental Research Institute, Chulalongkorn University, Thailand

Surfactants & Interface Science 2 (Oral 6)

11:10 - 12:10

Special Conference Room (3F)

Chairperson: Takaya Sakai (*KAO Corporation, Japan*)

O-18 PALM-BASED METHYL ESTER SULPHONATES (MES) SYNERGY IN LINEAR ALKYL SULPHONATES (LAS) APPLICATIONS

[[[10071]]] Z. B. Ismail¹, M. S. A. B. Yusoff², M. N. B. Ali Thambi²

¹*Sime Darby Research Sdn Bhd, Sime Darby Plantation, Malaysia*, ²*Sime Darby Research Sdn Bhd, Sime Darby Plantation Berhad, Malaysia*

O-19 DYNAMICS OF SPONTANEOUSLY-GENERATED SOLUBILIZATION OF OLEIC ACID BY THE PLANT-BASED INGREDIENT MEE (METHYL ESTER ETHOXYLATE)

[[[10210]]] T. Ogura¹, Y. Kaneko¹, T. Suekuni¹, N. Tobori¹, O. Glatter²

¹*Functional Materials Research Lab., R & D, LION Corporation, Japan*, ²*Department of Chemistry, University of Graz, Austria*

O-20 AQUATIC TOXICITY AND WASHING PERFORMANCE OF SODIUM DODECYL SULFATE AND FATTY ALCOHOL MIXTURES

[[[10138]]] G. Shimanuki, M. Oya

Graduate School of Environment and Information Sciences, YOKOHAMA National University, Japan

Surfactants & Interface Science 2 (Oral 7)

15:40 - 16:50

Special Conference Room (3F)

Chairperson: Kazutami Sakamoto (*Chiba Institute of Science, Japan*)

O-21 Invited paper: THE ROLE OF CO-ADSORPTION OF Cd IONS AND SDS ON THE AIR-WATER INTERFACE OF FOAM IN RELATION TO THE REMOVAL EFFICIENCY OF TRACE Cd IONS FROM WATER IN CONTINUOUS MULTISTAGE ION FOAM FRACTIONATION

[[[10331]]] S. Chavadej^{1,2}, V. Rujirawanid², R. Rujiravanit^{1,2}, J. H. O'Haver³

¹*The Petroleum and Petrochemical College, Chulalongkorn University, Thailand*, ²*Center for Petroleum, Petrochemicals and Advanced Materials, Chulalongkorn University, Thailand*, ³*Department of Chemical Engineering, The University of Mississippi, USA*

O-22 NEW SURFACTANT SYSTEM TO REALIZE CLEANLINESS AND ECO-FRIENDLINESS

[[[10149]]] Y. Yanagisawa¹, T. Miyake², A. Kita¹, H. Ishizuka¹, T. Kotera¹, N. Yamaguchi¹

¹*Global R&D - Household Products, Kao Corporation, Japan*, ²*Global Fabric & Home Care Business Unit, Kao Corporation, Japan*

O-23 SURFACE MODIFICATION WITH CLEANERS CONTAINING SPECIALTY POLYMERS TO EASE "NEXT-TIME" CLEANING

[[[10108]]] J. J. Effing¹, G. Nunez², M. Loeffler², D. Rocque³, S. Mahosky³

¹*BU Industrial & Consumer Specialties, Clariant, China*, ²*BU Industrial & Consumer Specialties, Clariant, Germany*, ³*BU Industrial & Consumer Specialties, Clariant, USA*

Surfactants & Interface Science 2 (Oral 8)

16:50 - 17:40

Special Conference Room (3F)

Chairperson: Sumaeth Chavadej (*Chulalongkorn University, Thailand*)

O-24 Invited paper: LECITHIN ORGANOGELS: FORMATION, STRUCTURE, PROPERTIES AND PHASE STATES

[[[10335]]] Y. Shchipunov^{1,2}, C. Schmidt³

¹*Institute of Chemistry, Far East Department, Russian Academy of Sciences, Russia,* ²*The WCU Center for Synthetic Polymer Bioconjugate Hybrid Materials, Department of Polymer Science and Engineering, Pusan National University, Korea,* ³*Fakultaet fuer Naturwissenschaften, Department Chemie, Universitaet Paderborn, Germany*

O-25 IMPROVEMENT OF REMOVAL EFFICIENCY INDICATOR USING PROBABILITY DENSITY FUNCTION

~FROM RESULT OF WASHING TEST USING SOME KINDS OF SOILED CLOTHS~

[[[10137]]] E. Shigyo, M. Oya

Graduate School of Environment & Information Sciences, Yokohama National University, Japan

Surfactants & Interface Science 2 (Oral 9)

17:40 - 18:40

Special Conference Room (3F)

Chairperson: Takeshi Endo (*Tokyo University of Science, Japan*)

O-26 METHYL ESTER ETHOXYLATE: ECO-FRIENDLY SURFACTANT

[[[10176]]] N. Tamura, E. Hashimoto, H. Shindo, T. Okamoto, T. Iihara, H. Takaoka

Lion Corporation, Japan

O-27 EFFECT OF SURFACTANT ADDITION ON MICRO BUBBLE CLEANING

[[[10280]]] N. Nishio¹, M. Oya²

¹*Graduate School of Environment and Information Sciences, Yokohama National University, Japan,* ²*Institute of Environment and Information Sciences, Yokohama National University, Japan*

O-28 AGGREGATION BEHAVIOR OF GEMINI SURFACTANTS WITH A ROOM TEMPERATURE IONIC LIQUID AND MICROENVIRONMENT OF MIXED MICELLES IN WATER AND WATER-ORGANIC SOLVENT MIXED MEDIA

[[[10350]]] S. K. Saha, A. K. Tiwari, Sonu

Department of Chemistry, Birla Institute of Technology and Science, India

Processing Developments in Oil & Fat Technology (Oral 10)

10:00 - 11:20

Conference Room (M)-A/B (3F)

Chairperson: Takashi Yamaguchi (*J-OIL MILLS, INC, Japan*)

O-29 Plenary: DEVELOPMENT OF BIOLUBRICANTS FROM NON-EDIBLE OILS

[[[10348]]] R. B. N. Prasad

CSIR-Indian Institute of Chemical Technology, India

O-30 Invited paper: PRODUCTION OF ENZYMES AND INDUSTRIAL USAGE - SPECIAL FOCUS ON INTERESTERIFICATION OF FAT

[[[70028]]] H. C. Holm

Novozymes A/S, Denmark

O-31 ADSORBENT PURIFICATION OF BIODIESEL FEEDSTOCK USING SYNTHETIC MAGNESIUM SILICATE

[[[10285]]] B. Cooke, G. Hicks

Research and Development, Dallas Group, USA

Processing Developments in Oil & Fat Technology/ Biodiesel & Biofuel (Oral 11)

11:20 - 12:20

Conference Room (M)-A/B (3F)

Chairperson: Hans Christian Holm (*Novozymes A/S, Denmark*)

O-32 Invited paper: FATTY ACID MONOGLYCERIDE FROM PALM OIL BY GLYCEROLYSIS WITH PROTECTED GLYCEROL (SOLKETAL)

[[[10279]]] B. Kitiyanan, K. Makkam, N. Suriyapradilok

The Petroleum and Petrochemical College, Chulalongkorn University, Thailand

O-33 SIMPLE PRODUCTION PROCESS OF HIGH QUALITY BIODIESEL AND GLYCERIN FROM JATROPHA OIL USING CATION- AND ANION-EXCHANGE RESINS

[[[10317]]] N. Shibasaki-Kitakawa, K. Kanagawa, K. Nakashima, T. Yonemoto

Department of Chemical Engineering, Tohoku University, Japan

O-34 CHARACTERISTICS OF BIODIESEL FUEL DISSOLVED WASTE POLYSTYRENE

[[[10009]]] K. Yamane, K. Kawasaki, C. Kondo

Department of Mechanical Systems Engineering, The University of Shiga Prefecture, Japan

Biodiesel & Biofuel (Oral 12)

15:40 - 16:40

Conference Room (M)-A/B (3F)

Chairperson: Naomi Shibasaki-Kitakawa (*Tohoku University, Japan*)

O-35 PRODUCTION OF BIODIESEL FROM PALM, PEANUT, CANOLA, SOY AND SUNFLOWER OIL WITH METHANOL, ETHANOL, ISOPROPANOL, BUTANOL AND TERT-BUTANOL: CHEMICAL KINETICS, EQUILIBRIUM AND MASS TRANSFER

[[[10047]]] B. Likozar, J. Levec

Laboratory of Catalysis and Chemical Reaction Engineering, National Institute of Chemistry, Slovenia

O-36 BIODIESOHOL PRODUCTION FROM JATROPHA OIL USING MICROEMULSION TECHNIQUE

[[[10078]]] C. Tongcumpou¹, W. Prapatigul², S. Topaiboul³

¹*Environmental Research Institute, Chulalongkorn University, Thailand,* ²*National Center of Excellence for Environmental and Hazardous Waste Management, Chulalongkorn University, Bangkok, Thailand,* ³*National Metal and Materials Technology Center (MTEC), Thailand*

O-37 TRANSESTERIFICATION OF SOYBEAN OIL TO BIODIESEL BY SOLID BASE CATALYST DERIVED FROM MIXING POTASSIUM FLUORIDE AND CALCIUM NITRATE ASSISTED BY VERMICELLI AS A TEMPLATE

[[[10106]]] E. Somsook, T. Meechai, S. Kongchamdee

Department of Chemistry, Mahidol University, Thailand

Analytical Techniques & Application (Oral 13)

10:00 - 11:10

Rehearsal Room 1 (B1F)

Chairperson: Yutaka Itabashi (*Hokkaido University, Japan*)

O-38 Invited paper: RATIOS OF REGIOISOMERS OF MINOR ACYLGLYCEROLS LESS POLAR THAN TRIRICINOLEIN IN CASTOR OIL ESTIMATED BY MASS SPECTROMETRY

[[[10006]]] J.-T. Lin

Western Regional Research Center, United States Department of Agriculture, USA

O-39 REGIO-SPECIFIC STRUCTURAL ANALYSIS OF TRIACYLGLYCEROLS USING MALDI-TOF-TOF TANDEM MS WITH HIGH PRECURSOR-ION SELECTIVITY AND HIGH-ENERGY COLLISION INDUCED DISSOCIATION

[[[10015]]] J. Tamura, A. Kubo, Y. Itoh, M. Hashimoto, Y. Ueda

Mass Spectrometry Business Unit, JEOL Ltd., Japan

O-40 REVERSED-PHASE HPLC SEPARATION OF ISOMERIC FATTY ACIDS (FAs), FATTY ACID METHYL ESTERS (FAMES), AND TRIACYLGLYCEROLS (TAGs). EFFECT OF PRESSURE AND TEMPERATURE

[[[10052]]] N. Tanaka¹, K. Okusa¹, Y. Iwasaki¹, I. Kuroda², M. Takahashi², S. Miwa³, M. Tahara³, M. Ohira¹, T. Nagai⁴, H. Mizobe⁴, K. Yoshinaga⁴, K. Kojima⁴, N. Gotoh⁵, T. Ikegami⁶

¹Research and Development, GL Sciences, Japan, ²Customer Support Center, GL Sciences, Japan, ³GL Sciences Inc., Fukushima Factory, Japan, ⁴Functional and Health Food Lab., Tsukishima Foods Industry Co., Japan, ⁵Department of Food Science and Technology, Tokyo University of Marine Science and Technology, Japan, ⁶Department of Biomolecular Engineering, Kyoto Institute of Technology, Japan

Analytical Techniques & Application (Oral 14)

11:10 - 12:10

Rehearsal Room 1 (B1F)

Chairperson: Jiann-Tsyh (Ken) Lin (*United States Department of Agriculture, USA*)

O-41 CHARACTERIZATION OF ASYMMETRIC TRIACYLGLYCEROLS FOR ENANTIOMERIC RESOLUTION BY CHIRAL HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY

[[[10088]]] T. Nagai¹, N. Gotoh², H. Mizobe¹, K. Yoshinaga¹, K. Kojima¹, Y. Matsumoto², I. Kuroda³, S. Wada²

¹Research and Development Division, Tsukishima Foods Industry Co., Ltd., Japan, ²Department of Food Science and Technology, Tokyo University of Marine Science and Technology, Japan, ³GL Sciences Inc., Japan

O-42 QUANTIFICATION OF 1,2-DIPALMITOYL-3-BUTYROYL-RAC-GLYCEROL AS A MARKER OF MILK FAT CONTENT IN BLENDS OF BUTTER AND MARGARINE BY HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY

[[[10090]]] K. Yoshinaga¹, T. Nagai¹, H. Mizobe¹, K. Kojima¹, N. Gotoh², S. Wada²

¹Research and Development Division, Tsukishima Foods Industry Co., Ltd., Japan, ²Department of Food Science and Technology, Tokyo University of Marine Science and Technology, Japan

O-43 DETERMINATION OF FA COMPOSITION AT *sn*-2 OF SOLID FAT BY NOVEL ENZYMATIC METHOD

[[[10045]]] Y. Watanabe¹, S. Sato², S. Sera³, C. Satou³, T. Nagai⁴

¹Biomaterials and Commodity Chemicals Research Division, Osaka Municipal Technical Research Institute, Japan, ²Nagoya Branch, Japan Food Research Laboratories, Japan, ³Central Research Laboratory, The Nisshin OilliO Group, Japan, ⁴R&D, Tsukishima Foods Industry Co., Ltd., Japan

Analytical Techniques & Application (Oral 15)

15:40 - 16:40

Rehearsal Room 1 (B1F)

Chairperson: Jiann-Tsyh (Ken) Lin (*United States Department of Agriculture, USA*)

O-44 DETERMINATION OF SPHINGOID BASES FROM HYDROLYZED GLUCOSYLCERAMIDE IN RICE AND WHEAT BY ONLINE POST-COLUMN HIGH PERFORMANCE LIQUID CHROMATOGRAPHY WITH O- PHTHALALDEHYDE DERIVATIZATION

[[[10128]]] H. Goto¹, K. Nishikawa¹, N. Shionoya¹, M. Taniguchi², T. Igarashi¹

¹Japan Food Research Laboratories, Japan, ²Mimasaka University, Japan

O-45 PHOSPHOLIPIDS OF NEW ZEALAND EXTREMOPHILES

[[[10229]]] A. D. MacKenzie¹, M. Vyssotski¹, K. Lagutin¹, J. Ryan¹, K. Lee², X. Morgan², M. Stott²

¹Industrial Research Limited, New Zealand, ²Geomicrobiology Team, Institute of Geological and Nuclear Sciences Ltd, New Zealand

O-46 SKIN LIPID STRUCTURE INVESTIGATED BY EPR SPIN-PROBE METHOD AND A POSSIBLE EPR-IMAGING APPLICATION

[[[10037]]] K. Nakagawa¹, Y. Ohba²

¹Department of Radiological Life Sciences, Graduate School of Health Sciences, Hirosaki University, Japan, ²Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Japan

Analytical Techniques & Application (Oral 16)

16:40 - 17:40

Rehearsal Room 1 (B1F)

Chairperson: Andrew D. MacKenzie (*Industrial Research Limited, New Zealand*)

O-47 EVALUATION OF SURFACTANT POTENCY FOR NON-IONIC AND IONIC SURFACTANTS BY TLC: ALTERNATIVE INDEXATION TO HLB

[[[10120]]] Y. Yamashita, K. Sakamoto

Pharmacy, Chiba Institute of Science, Japan

O-48 SURFACTANT-INDUCED MEMBRANE DYNAMICS IN A CELL-SIZED LIPOSOME AS TOOLS FOR THE PREDICTIVE IDENTIFICATION OF SENSORY IRRITATION

[[[10296]]] Y. Tsujino¹, H. Hagihara², M. C. Vestergaard², T. Hamada², M. Takagi²

¹Faculty of Pharmaceutical Sciences, Chiba Institute of Sciences, Japan, ²School of Materials Science, Japan Advanced Institute of Science and Technology, Japan

O-49 DIRECT DETERMINATION OF 3-MCPD FATTY ACID ESTERS IN EDIBLE OILS

[[[10332]]] H. Shiro¹, K. Oosawa¹, S. Kawai², N. Suzuki³, Y. Masukawa²

¹Tochigi Research Labs, Kao Corporation, Japan, ²Tokyo Research Labs, Kao Corporation, Japan, ³Wakayama Research Labs, Kao Corporation, Japan

Analytical Techniques & Application (Oral 17)

17:40 - 18:40

Rehearsal Room 1 (B1F)

Chairperson: Yoshinori Masukawa (*Kao Corporation, Japan*)

O-50 A RAPID INDIRECT METHOD FOR SIMULTANEOUS DETERMINATIONS OF 3-CHLORO-1, 2-PROPANEDIOL FATTY ACID ESTERS AND GLYCIDYL FATTY ACID ESTERS IN VEGETABLE OILS AND FATS

[[[10136]]] K. Miyazaki, T. Hirao, K. Koyama

House Foods Corporation, Japan

O-51 INTERLABORATORY VALIDATION OF A QUANTITATIVE METHOD FOR GLYCIDYL FATTY ACID ESTERS IN MARGARINE AND FAT SPREAD

[[[10170]]] T. Fukazawa¹, M. Aoyama¹, S. Wada^{1,2}, T. Maruyama¹

¹Japan Institute for Oils & Fats & Foods Inspection, Japan, ²Department of Food Science and Technology, Tokyo University of Marine Science and Technology, Japan

O-52 ACTUAL RATIO OF TRIACYLGLYCEROL POSITIONAL ISOMERS IN MILK AND CHEESE

[[[10092]]] N. Gotoh¹, H. Ishida¹, Y. Matsumoto¹, T. Nagai², H. Mizobe², K. Yoshinaga², K. Kojima², I. Kuroda³, Y. Kitamura⁴, T. Shimizu⁴, S. Wada¹

¹Department of Marine Science and Technology, Tokyo University of Marine Science and Technology, Japan, ²Research and Development Division, Tsukishima Foods Industry Co. Ltd., Japan, ³Customer Support Center, GL Sciences Inc., Japan, ⁴Nutritional Science Institute, Morinaga Milk Industry Co., Ltd., Japan

Tuesday, October 2, 2012

Plenary Lecture 3

15:30 - 16:30**Concert Hall (4F)**Chairperson: Masahiko Abe (*Tokyo University of Science, Japan*)**PL-3 CONTRIBUTION TO SUSTAINABLE CONSUMERS' LIFE BY OLEO SCIENCE**

[[[10346]]]

Itsuo Hama*President and Chief Operating Officer of Lion Corporation, Japan*

Plenary Lecture 4

16:30 - 17:30**Concert Hall (4F)**Chairperson: Osamu Shibata (*Nagasaki International University, Japan*)**PL-4 ROLE OF SCIENTISTS/ENGINEERS IN JAPAN AFTER MARCH 11, 2011**

[[[10352]]]

Toyoko Imae*Graduate Institute of Advanced Science and Technology and Department of Chemical Engineering, National Taiwan University of Science and Technology, Taiwan*

Interdisciplinary Lecture

9:00 - 15:00**Concert Hall (4F)**Chairperson: Masahiko Abe (*Tokyo University of Science, Japan*)**IL-1 ELASTIC NANOVESICLES FOR PHARMACEUTICAL AND COSMETIC APPLICATIONS**

[[[10336]]]

A. Manosroi*Natural Products Research and Development Center (NPRDC), Science and Technology Research Institute (STRI), Faculty of Pharmacy, Chiang Mai University, Thailand***IL-2 INNOVATIVE COLLOID AND SURFACE SCIENCE STRATEGIES TO MEET THE NEEDS OF AN ECOLOGICALLY AWARE GLOBAL COMMUNITY: FROM FOODS TO THE MITIGATION OF OIL SPILLS IN THE MARINE ENVIRONMENT**

[[[70012]]]

R. Y. Lochhead*The School of Polymers & High Performance Materials, The University of Southern Mississippi, USA***IL-3 VERSATILE SOFT MATERIAL — MICRO-HYDROGELS**

[[[10338]]]

H. Kawaguchi*Graduate School of Engineering, Kanagawa University, Japan***IL-4 EQUILIBRIUM SELF-ASSEMBLY AND STRUCTURAL TRAPPING OF BLOCK CO-OLIGOMER AMPHIPHILES**

[[[10341]]]

G. G. Warr¹, J. M. O'Donnell^{1,2}, A. C.M. Blom¹, B. S. Hawkett¹*¹School of Chemistry F11, The University of Sydney, Australia, ²Department of Chemical and Biological Engineering, Iowa State University, USA***IL-5 DESIGN OF AMPHIPHILE-NUCLEIC ACID COMPLEXES**

[[[10122]]]

N. L. Abbott*Department of Chemical and Biological Engineering, University of Wisconsin-Madison, USA*

- IL-6 HYDROPHOBICITY TO HYDROPHILICITY TRANSFORMATION IN NANOPOROUS SOLIDS**
 [[10339]] K. Kaneko
Research Center for Exotic Nanocarbons, Shinshu University, Japan
- IL-7 HIERARCHICALLY ORGANIZED NANOSTRUCTURED LIPID MATERIALS**
 [[10337]] O. Glatter, Ch. Kulkarni, M. Tomšič, S. Salentinig, A. Chemelli, A. Yagmur, L. de Campo
Department of Chemistry, University of Graz, Austria
- IL-8 INTEGRATION OF AGRO-, BIO-, CHEMICAL-, ENERGY- ENVIRONMENTAL-PROCESS INTENSIFICATIONS IN THE DEVELOPMENT OF SUSTAINABLE BIOREFINERY TECHNOLOGY**
 [[10340]] G. Akay
Process Intensification and Miniaturization Centre, School of Chemical Engineering and Advanced Materials / The Institute of Stem Cell Biology and Regenerative Medicine / Institute for Nanoscale Science and Technology, Newcastle University, UK
- IL-9 MICROWAVE-DRIVEN CHEMISTRY ORGANIC SYNTHESIS - ENVIRONMENTAL PROTECTION**
 [[10344]] S. Horikoshi
Department of Materials and Life Sciences, Sophia University, Japan
- IL-10 MOLECULAR ASSEMBLY OF MICROCAPSULES WITH MOTOR PROTEINS**
 [[10342]] J. Li
Beijing National Laboratory for Molecular Sciences (BNLMS), Key Lab of Colloid and Interface Science, Institute of Chemistry, Chinese Academy of Sciences / National Center for Nanoscience and Technology, China

JOCS/AOCS Joint Symposium

Session 1: Emulsions, Suspensions, Dispersions

8:30 - 11:15

Special Conference Room (3F)

Chairpersons: Dai Kitamoto (*National Institute of Advanced Industrial Science and Technology (AIST), Japan*)
 Steven Adamy (*Church & Dwight Co., Inc., USA*)
 Masaki Tsumadori (*Kao Corporation, Japan*)

- JA1-1 PREDICTING EMULSION FORMATION AND STABILITY USING THE HLD-NAC EQUATION OF STATE**
 [[10272]] E. Acosta, S. Kiran
Chemical Engineering and Applied Chemistry, University of Toronto, Canada
- JA1-2 PREPARATION FOR AN ULTRAFINE EMULSION WITHOUT USING EXCESS ENERGY**
 [[10059]] R. Miyahara
Research Center, Shiseido Co., Ltd., Japan
- JA1-3 EMPLOYMENT OF BRANCHED ALCOHOLS FOR FOAM MITIGATION**
 [[10070]] S. Adamy
Research and Development, Church & Dwight Co., Inc., USA
- JA1-4 CHARACTERISTIC WATER-SOLUBILITY OF AN ECO-FRIENDLY CATIONIC SURFACTANT WHICH HAS A C22 ALKYL CHAIN**
 [[10095]] T. Sakai
Global R&D -Eco-Innovation, Kao Corporation, Japan
- JA1-5 EMULSIFICATION PROPERTIES OF VEGETABLE OIL ETHOXYLATES**
 [[10286]] G. A. Smith, C. Cleary
Home and Personal Care, Huntsman Corporation, USA

JA1-6 NANOTUBE FORMATION THROUGH THE ONE-DIMENSIONAL FUSION OF NANOCAPSULES COMPOSED OF POLYMER THIN FILMS

[[[10044]]] T. Kida, K. Kondo, M. Akashi

Department of Applied Chemistry, Osaka University, Japan

Session 2: General Surfactants: Recent Advances

12:30 - 15:10

Special Conference Room (3F)

Chairpersons: Dai Kitamoto (*National Institute of Advanced Industrial Science and Technology (AIST), Japan*)

Steven Adamy (*Church & Dwight Co., Inc., USA*)

Masaki Tsumadori (*Kao Corporation, Japan*)

JA2-1 MIXTURES OF NONIONIC/ANIONIC RENEWABLE RESOURCE SURFACTANTS

[[[10040]]] B. Grady

Chemical Engineering, University of Oklahoma, USA

JA2-2 MOLECULAR STRUCTURE AND FUNCTION OF METHYL ESTER SULFONATE

[[[10243]]] Y. Abe

Chemicals Research Laboratories, R&D Headquarters, Lion Corporation, Japan

JA2-3 PHASE BEHAVIOR OF PEARLIZED DETERGENT SYSTEMS

[[[10069]]] S. A. Bolkan, S. Adamy

Global Research and Development, Church & Dwight Co., Inc., USA

JA2-4 REACTIVE EMULSIFIER FOR EMULSION POLYMERIZATION [ADEKA REASOAP SERIES]

[[[10041]]] N. Tsukahara

Surface Specialties Department, ADEKA CORPORATION, Japan

JA2-5 NOVEL SURFACTANTS FROM NATURAL OIL METATHESIS

[[[10220]]] G. P. Dado, R. Bernhardt, A. Brown, S. Wolfe

Stepan Company, USA

JA2-6 DESIGN AND PROPERTIES OF NOVEL PHOTO-SWITCHABLE SURFACTANTS

[[[10237]]] H. Sakai, K. Sakai, M. Abe

Faculty of Science and Technology, Tokyo University of Science, Japan

Altech Luncheon Seminar

12:00 - 13:00

Rehearsal Room 2 (B1F)

MEASUREMENT OF OIL/WATER INTERFACES WITH ATTENSION AND KSV NIMA INSTRUMENTS

[[[99999]]] S. Aura

Biolin Scientific, Sweden

Surfactants & Interface Science (Oral 18)

9:00 - 10:00

Conference Room (L)-A (3F)

Chairperson: Tomohiro Imura (*National Institute of Advanced Industrial Science and Technology (AIST), Japan*)

O-53 PARTICLE IMAGE VELOCIMETRY INVESTIGATION ON SPONTANEOUS GROUPED MOTION OF SELF-PROPELLED OIL DROPLETS IN SURFACTANT SOLUTION

[[[10206]]] R. Kuroha, Y. Natsume, T. Banno, T. Toyota

Department of Basic Science, Graduate School of Arts and Sciences, The University of Tokyo, Japan

O-54 LIQUID MARBLE PREPARED BY MODIFIED HALLOYSITE NANOTUBE

[[[10291]]] H. Wu¹, H. Watanabe¹, W. Ma², A. Fujimoto¹, A. Takahara¹

¹ERATO, Takahara Soft Interfaces Project, Japan Science and Technology Agency, Japan, ²Institute for Materials Chemistry and Engineering, Kyushu University, Japan

O-55 FROM SUPERHYDROPHOBICITY TO OLEOPHOBICTY; CONTROL OF LIQUID SPREADING ON SURFACES

[[[10211]]] S. Aura

Biolin Scientific, Finland

Surfactants & Interface Science (Oral 19)

10:00 - 11:00

Conference Room (L)-A (3F)

Chairperson: Yukishige Kondo (*Tokyo University of Science, Japan*)

O-56 Invited paper: EFFECTS OF CHOLESTEROL ON THE PHYSICAL STABILITY OF CATANIONIC VESICLES COMPOSED OF ION PAIR AMPHIPHILE WITH DIALKYL-CHAINED CATIONIC SURFACTANT

[[[10213]]] C.-H. Chang, C.-L. Tu, A.-T. Kuo

Department of Chemical Engineering, National Cheng Kung University, Taiwan

O-57 FORMULATION AND PHYSICO-CHEMICAL CHARACTERIZATION OF ANTIMICROBIAL MICROEMULSIONS CONTAINING PLANT ESSENTIAL OILS

[[[10062]]] S. Kim, W. K. Ng, R. B. H. Tan

Formulation Science/CPS, Institute of Chemical and Engineering Sciences (ICES), Singapore

O-58 HEAT INDUCED GEL AND THERMO-COLORING PHENOMENA IN EMULSIONS OF AN AMIDOAMINE DERIVATIVE

[[[10115]]] T. Kawai, Y. Imura, C. Morita, H. Endo

Department of Industrial Chemistry, Tokyo University of Science, Japan

Surfactants & Interface Science (Oral 20)

11:00 - 12:00

Conference Room (L)-A (3F)

Chairperson: Kenichi Sakai (*Tokyo University of Science, Japan*)

O-59 PREPARATION OF UNIFORM SUBMICRON DROPLETS BY NANOCANNEL EMULSIFICATION

[[[10145]]] I. Kobayashi¹, Y. Hori¹, M. A. Neves^{1,2}, K. Uemura¹, M. Nakajima^{1,2}

¹Food Engineering Division, National Food Research Institute, NARO, Japan, ²Faculty of Life and Environmental Sciences, University of Tsukuba, Japan

O-60 PICKERING EMULSIONS PREPARED BY LAYERED NIOBATE INTERCALATED WITH ORGANIC CATIONS AND PHOTOCATALYTIC DYE DECOMPOSITION IN THE EMULSIONS

[[[10298]]] E. Mouri¹, H. Ueda², S. Hashimoto², R. Terao², T. Nakato¹

¹Department of Applied Chemistry, Kyushu Institute of Technology, Japan, ²Graduate School of Bio-Applications and Systems Engineering, Tokyo University of Agriculture and Technology, Japan

O-61 A NEW EMULSION TECHNIQUE BY THE SOFT NANO-PARTICLES: FUNDAMENTAL ASPECTS OF THE THREE-PHASE EMULSIFICATION AND INTERESTING EMULSION PROPERTIES FOR INDUSTRIAL APPLICATIONS

[[[10083]]] K. Tajima, Y. Imai, K. Toyoda, M. Koshinuma

Three-Phase Emulsion Project, Kanagawa University, Japan

Surfactants & Interface Science (Oral 21)

13:00 - 14:00

Conference Room (L)-A (3F)

Chairperson: Daisuke Ono (*Osaka Municipal Technical Research Institute, Japan*)

O-62 PHOTO DISPERSION POLYMERIZATION OF METHYL METHACRYLATE BY CONTROLLED/LIVING RADICAL POLYMERIZATION USING A NITROXIDE MEDIATOR

[[[10007]]] E. Yoshida

Department of Environmental and Life Sciences, Toyohashi University of Technology, Japan

O-63 HYBRID CO₂-PHILIC SURFACTANTS WITH LOW FLUORINE CONTENT

[[[10013]]] A. Mohamed¹, J. Eastoe², M. Sagisaka³, M. Hollamby⁴

¹Department of Chemistry, Universiti Pendidikan Sultan Idris (UPSI), Malaysia, ²School of Chemistry University of Bristol, UK, ³Department of Frontier Materials Chemistry, Graduate School of Science and Technology, Hirosaki University, Japan, ⁴National Institute of Materials Science (NIMS), Tsukuba, Japan

O-64 POLYMER MOLECULAR WEIGHT EFFECT ON COMPLEX FORMATION BETWEEN POLYELECTROLYTE AND IONIC SURFACTANT

[[[10287]]] L.-J. Chen, P.-C. Chen, C.-H. Wang, H.-Y. Yen

Department of Chemical Engineering, National Taiwan University, Taiwan

Surfactants & Interface Science (Oral 22)

14:00 - 15:00

Conference Room (L)-A (3F)

Chairperson: Keisuke Matsuoka (*Showa Pharmaceutical University, Japan*)

O-65 SYNTHESIS AND PROPERTIES OF CHEMOCLEAVABLE NONIONIC SURFACTANTS DERIVED FROM DIETHYL TARTRATE

[[[10197]]] D. Ono¹, T. Nakagawa², H. Sato¹, M. Shizuma¹, A. Masuyama²

¹Biomaterial and Commodity Chemicals Research Division, Osaka Municipal Technical Research Institute, Japan, ²Department of Applied Chemistry, Osaka Institute of Technology, Japan

O-66 PHOTOINDUCED INCREASE IN SURFACTANT SOLUTION VISCOSITY USING PHOTOCLEAVABLE SURFACTANT

[[[10179]]] S. Aikawa¹, W. Matsuda¹, K. Arimitsu¹, T. Ohmori², Y. Fukukita², Y. Tezuka³, A. Matsumura¹, T. Endo¹, K. Torigoe¹, K. Sakai⁴, K. Sakamoto⁵, M. Abe⁴, H. Sakai⁴

¹Faculty of Science and Technology, Tokyo University of Science, Japan, ²Shiseido Co., Ltd. Japan, ³NOF Co., Japan, ⁴Research Institute for Science and Technology, Tokyo University of Science, Japan, ⁵Faculty of Pharmacy, Chiba Institute of Science, Japan

O-67 PHOTOINDUCED CHANGE IN THE VISCOSITY OF WORMLIKE MICELLE SOLUTIONS

[[[10160]]] Y. Takahashi, Y. Yamamoto, Y. Kondo

Department of Industrial Chemistry, Tokyo University of Science, Japan

Lipid Oxidation & Antioxidants (Oral 23)

9:00 - 10:10

Conference Room (L)-B/C (3F)

Chairperson: Naohiro Gotoh (*Tokyo University of Marine Science and Technology, Japan*)

O-68 Invited paper: THE ROLE OF LIPID-WATER INTERFACES IN LIPID OXIDATION IN FOOD DISPERSIONS

[[[10304]]] E. A. Decker, D. J. McClements

Department of Food Science, University of Massachusetts, Amherst, USA

O-69 THE STABILITY OF EDIBLE OILS CONTAINING NON-METHYLENE-INTERRUPTED POLYUNSATURATED FATTY ACIDS

[[[10046]]] Y. Endo

School of Bioscience and Biotechnology, Tokyo University of Technology, Japan

O-70 THE OXIDATIVE STABILITY OF ALGAE OIL AND WATER-IN-ALGAE OIL EMULSIONS: THE IMPACT OF NATURAL ANTIOXIDANTS AND EMULSIFIERS

[[[10054]]] B. Chen, D. J. McClements, E. A. Decker

Department of Food Science, University of Massachusetts, MA, USA

Lipid Oxidation & Antioxidants (Oral 24)

10:30 - 11:30

Conference Room (L)-B/C (3F)

Chairperson: Eric A. Decker (*University of Massachusetts, USA*)

O-71 OXIDIZED POLYUNSATURATED FATTY ACIDS, INCLUDING EICOSAPENTAENOIC ACID AND DOCOSAHEXAENOIC ACID, MORE POTENTLY SUPPRESS SREBP-1c EXPRESSION THAN THEIR INTACT FORMS

[[[10173]]] T. Nanthirudjanar, H. Furumoto, T. Sugawara, T. Hirata

Division of Applied Biosciences, Graduate School of Agriculture, Kyoto University, Japan

O-72 SIMULTANEOUS OXIDATION OF TRIACYLGLYCEROL POSITIONAL ISOMERS IN BULK SYSTEM

[[[10077]]] T. Wakatabe¹, N. Gotoh¹, K. Yamaguchi¹, D. Mashimo¹, H. Mizobe², T. Nagai², K. Yoshinaga², K. Kojima², S. Wada¹

¹*Department of Marine Science and Technology, Tokyo University of Marine Science and Technology, Japan,* ²*Research and Development Division, Tsukishima Foods Industry Co. Ltd., Japan*

O-73 HIGHLY UNSATURATED FATTY ACID MIGHT ACT AS AN ANTIOXIDANT IN EMULSION SYSTEM OXIDIZED BY AZO COMPOUND

[[[10076]]] N. Gotoh¹, Y. Noguchi¹, K. Yamaguchi¹, H. Mizobe², T. Nagai², K. Yoshinaga², K. Kojima², S. Wada¹

¹*Department of Marine Science and Technology, Tokyo University of Marine Science and Technology, Japan,* ²*Research and Development Division, Tsukishima Foods Industry Co. Ltd., Japan*

Lipid Chemistry & Organic Synthesis (Oral 25)

11:30 - 12:00

Conference Room (L)-B/C (3F)

Chairperson: Toshihiro Akihisa (*Nihon University, Japan*)

O-74 Invited paper: MODERN DRUG DEVELOPMENT FROM THAI FOLKLORE WISDOM MANOSROI II DATABASE

[[[10310]]] J. Manosroi

Pharm Sci, Faculty of Pharmacy, Thailand

Lipid Nutrition & Human Health (Oral 26)

13:00 - 14:10

Conference Room (L)-B/C (3F)

Chairperson: Hiramitsu Suzuki (*Kagawa Nutrition University, Japan*)

O-75 Invited paper: EFFECT OF DOCOSAHEXAENOIC ACID DEFICIENCY ON BRAIN FUNCTION

[[[10306]]]

S.-Y. Lim

Division of Marine Environment & Bioscience, Korea Maritime University, Korea

O-76 LC-PUFA PHOSPHOLIPIDS NANOCARRIERS: APPLICATION IN NEURONAL DISEASE

[[[10167]]]

E. Arab Tehrani¹, S. Latifi², F. Cesca², F. Benfenati², M. Linder¹

¹*Universite de Lorraine-ENSAIA, ENSAIA-LiBio, France*, ²*Istituto Italiano di Tecnologia (IIT), Italy*

O-77 EFFECTS OF PARTIAL HYDROGENATION OF PLANT STEROL-ENRICHED SOY BEAN OIL ON SERUM CHOLESTEROL CONCENTRATIONS OF HAMSTERS

[[[10292]]]

M. Sugano¹, I. Ikeda², K. Iwama², S. Tokairin³

¹*Kyushu University (Emeritus Professor), Japan*, ²*Laboratory of Food and Biomolecular Sciences, Graduate School of Agricultural Science, Tohoku University, Japan*, ³*Tsukisima Food Industry, Co. Ltd., Japan*

Lipid Nutrition & Human Health (Oral 27)

14:10 - 15:10

Conference Room (L)-B/C (3F)

Chairperson: SunYoung Lim (*Korea Maritime University, Korea*)

O-78 FATTY ACIDS IN THE DEEP-SEA CRUSTACEAN SHINKAIA CROSNIERI WITH ITS PREY

[[[10031]]]

H. Saito

National Research Institute of Fisheries Science, Japan

O-79 PREVENTIVE EFFECTS OF MARINE CAROTENOIDS ON INFLAMMATORY BOWEL DISEASE AND COLON CARCINOGENESIS

[[[10111]]]

M. Hosokawa¹, Y. Yasui², N. Mikami¹, K. Miyashita¹, T. Tanaka³

¹*Faculty of Fisheries Sciences, Hokkaido University, Japan*, ²*Rakuno Gakuen University, Japan*, ³*The Tokai Cytopathology Institute, Japan*

O-80 REGIONAL AND SEASONAL DIFFERENCES IN THE FATTY ACID COMPOSITIONS AND CONTENT OF SKIN SURFACE LIPIDS IN YOUNG JAPANESE WOMEN

[[[10253]]]

M. Yamada¹, J. Baoyindugurong², M. Saito³, H. Suzuki¹

¹*Department of Food Function, Kagawa Nutrition University, Japan*, ²*Institute of Nutrition Sciences, Kagawa Nutrition University, Japan*, ³*Department of Food Science and Technology, Kagawa Nutrition University, Japan*

Oil, Fat & Lipid in Human Nutrition (Oral 28)

9:00 - 10:20

Conference Room (M)-A/B (3F)

Chairperson: Francesco Visioli (*Madrid Institute for Advanced Studies (IMDEA)-Food, Spain*)

O-81 Invited paper: BIOACTIVE EFFECTS OF OLIVE OIL PHENOLIC COMPOUNDS IN HUMANS

[[[10260]]]

F. Visioli

Madrid Institute for Advanced Studies (IMDEA) Food, Spain

O-82 Invited paper: PALM OIL: A PREFERRED HEALTHY CHOICE IN THE TRANS FREE ERA?

[[[10268]]]

K. Sundram

Science & Environment, Malaysian Palm Oil Council (MPOC), Malaysia

O-83 FUNCTIONAL LIPIDS FOR THE PREVENTION OF FATTY LIVER AND INFLAMMATION

[[[10118]]]

T. Yanagita¹, K. Nagao²¹Department of Health and Nutrition Sciences, NishiKyushu University, Japan, ²Department of Applied Biochemistry and Food Science, Saga University, Japan**Oil, Fat & Lipid in Human Nutrition (Oral 29)****10:40 - 11:50****Conference Room (M)-A/B (3F)**Chairperson: Kazuo Miyashita (*Hokkaido University, Japan*)**O-84 OXIDATIVE STABILITY OF OMEGA-3 PUFA IN POLAR LIPIDS**

[[[10259]]]

K. Miyashita, T. Yamaguchi, J. Shimajiri, M. Abe, M. Hosokawa

*Faculty of Fisheries Sciences, Hokkaido University, Japan***O-85 OXIDATION OF SOYBEAN OIL IS EMPHATIC IN INTERMITTENT DEEP-FRYING**

[[[10036]]]

N. Totani¹, S. Tateishi¹, T. Mori¹, E. G. Hammond²¹Faculty of Nutrition, Kobe-Gakuin University, Japan, ²Department of Food Science and Human Nutrition, Iowa State University, USA**O-86 Invited paper: FRYING PERFORMANCE OF PALM OLEIN WITH ADDED NATURAL ANTIOXIDANT MIXTURES AND ACCEPTABILITY OF FRIED**

[[[10264]]]

I. Jaswir¹, Y. B. Che Man²¹Department of Biotechnology Engineering, International Islamic University Malaysia, Malaysia, ²Department of Food Technology, Universiti Putra Malaysia, Selangor, Malaysia**Oil, Fat & Lipid in Human Nutrition (Oral 30)****13:00 - 14:20****Conference Room (M)-A/B (3F)**Chairperson: Francesco Visioli (*Madrid Institute for Advanced Studies (IMDEA) - Food, Spain*)**O-87 CHLOROPHYLL AND CAROTENOIDS CONTENT, AND QUALITY CRITERIA OF LEBANESE OLIVE OIL**

[[[10010]]]

R. E. Dib, F. Torosyan

*Sciences, Notre Dame University, Lebanon***O-88 DYNAMICS OF 3-MCPD AND GLYCIDOL IN THE PROCESS OF DGF STANDARD METHODS**

[[[10021]]]

H. Sato¹, N. Kaze², H. Yamamoto², T. Nagao¹, M. Shizuma¹, D. Ono¹, Y. Watanabe¹¹Biomaterial and Commodity Chemicals Research Division, Osaka Municipal Technical Research Institute, Japan, ²UEDA OILS and FATS MFG CO., LTD., Japan**O-89 TRANS FATTY ACID CONTENTS IN MARGARINES AND FAT SPREADS MARKETED IN JAPAN**

[[[10169]]]

Y. Iida¹, M. Aoyama¹, S. Wada^{1,2}, T. Maruyama¹, M. Sugano³¹Japan Institute for Oils & Fats & Foods Inspection, Japan, ²Department of Food Science and Technology, Tokyo University of Marine Science and Technology, Japan, ³Professor Emeritus, Kyushu University, Japan**O-90 DIFFERENTIAL EFFECT OF LONG CHAIN SATURATED AND UNSATURATED FATTY ACIDS AT sn-1, 3 POSITIONS OF TRIACYLGLYCEROLS ON FAT ACCRETION IN C57/BL6 MICE**

[[[10347]]]

S. W. Gouk¹, S. F. Cheng¹, J. S. L. Mok², A. S. H. Ong¹, C. H. Chuah¹¹Unit of Research on Lipids, Department of Chemistry, Faculty of Science, University of Malaya, Malaysia, ²Department of Pharmacology, Faculty of Medicine, University of Malaya, Malaysia

Food Structure & Functionality/ FSFF (Opening Remarks)

9:00 - 9:05

Reception Hall (1F)

OPENING REMARKS

[[[70074]]]

D. Rousseau

Department of Chemistry and Biology, Ryerson University, Canada

Food Structure & Functionality/ FSFF (Oral 31)

9:05 - 10:05

Reception Hall (1F)

Chairperson: Haruyasu Kida (*FUJI OIL Co., Ltd., Japan*)

O-91 GRANULAR CRYSTALS FORMATION IN PLASTIC FATS-MECHANISMS AND INHIBITIONS

[[[10119]]]

Z. Meng, L. Yuanfa, J. Qingzhe, W. Xingguo

State Key Laboratory of Food Science and Technology, School of Food Science and Technology, Jiangnan University, China

O-92 A NOVEL APPROACH TO THE SOLUBILITY MEASUREMENT OF TRIACYLGLYCEROL CRYSTALS

[[[10102]]]

H. Hondoh¹, H. Uehara², M. Takaba², S. Negishi², S. Ueno¹

¹Graduate School of Biosphere Sciences, Hiroshima University, Japan, ²The Nisshin OilliO Group, Ltd., Japan

O-93 THE STUDY OF INTERFACIAL HETEROGENEOUS CRYSTALLIZATION OF FAT CRYSTALS IN OIL-IN-WATER EMULSION DROPLETS

[[[10192]]]

S. Arima¹, A. Ogawa¹, S. Ueno², K. Sato²

¹Research and Development Center, Mitsubishi-Kagaku Foods Co., Japan, ²Laboratory of Food Biophysics, Graduate School of Bioscience, Hiroshima University, Japan

Food Structure & Functionality/ FSFF (Oral 32)

10:10 - 10:50

Reception Hall (1F)

Chairperson: D errick Rousseau (*Ryerson University, Canada*)

O-94 SYNCHROTRON RADIATION MACROBEAM AND MICROBEAM X-RAY DIFFRACTION STUDIES OF INTERFACIAL CRYSTALLIZATION OF FATS IN WATER-IN-OIL EMULSIONS

[[[10079]]]

A. Okamura¹, P. Wassell², Y. W.G. Niall², G. Bonwick³, C. Smith⁴, H. Hondoh¹, K. Sato¹, S. Ueno¹

¹Graduate School of Biosphere Sciences, Hiroshima University, Japan, ²Danisco-Dupont, Multiple Food Applications, Brabrand, Denmark, ³Department of Biological Sciences, University of Chester, UK, ⁴Department of Food and Tourism Management, Manchester Metropolitan University, UK

O-95 RELATIONS BETWEEN MORPHOLOGY AND PHYSICAL PROPERTIES OF MILK FAT CRYSTALS

[[[10117]]]

S. Itatani, S. Ueno, H. Hondoh

Graduate School of Biosphere Sciences, Hiroshima University, Japan

Food Structure & Functionality/ FSFF (Oral 33)

10:55 - 11:45

Reception Hall (1F)

Chairperson: Kiyotaka Sato (*Hiroshima University, Japan*)

O-96 Invited paper: CONFINED GAP SHEAR-COOLING TO CREATE NOVEL FAT MICROSTRUCTURES

[[[10312]]] D. Rousseau¹, S. Ghosh²

¹Department of Chemistry and Biology, Ryerson University, Canada, ²Department of Food & Bioproduct Sciences, University of Saskatchewan, Canada

O-97 A NOVEL METHOD FOR MEASURING THE MOISTURE DISTRIBUTION WITHIN COOKED SPAGHETTI

[[[10033]]] S. Adachi, T. Ogawa

Division of Food Science and Biotechnology, Kyoto University, Japan

FSFF Special Lecture (Oral 34)

12:50 - 13:20

Reception Hall (1F)

Chairperson: Yasuki Matsumura (*Kyoto University, Japan*)

O-98 Invited paper: THE IMPACT OF SPATIAL AND TEMPORAL INHOMOGENEITY OF TASTANTS AND FAT ON SENSORY PERCEPTION: ILLUSTRATION OF SUCCESSFUL PUBLIC-PRIVATE COLLABORATIONS IN THE NETHERLANDS

[[[10349]]] M. Paques, W. Noordman, H. Dijkstra, G. Willems

Royal FrieslandCampina, Deventer, The Netherlands

Food Structure & Functionality/ FSFF (Oral 35)

13:25 - 13:45

Reception Hall (1F)

Chairperson: Satoru Ueno (*Hiroshima University, Japan*)

O-99 THERMODYNAMICALLY-BASED EVALUATION METHOD OF WHIPPED CREAM TEXTURE

[[[10241]]] T. Nishizu¹, Y. Nishimura², C. Suzuki¹, K. Kato¹, K. Goto¹

¹Department of Applied Life Science, Gifu University, Japan, ²Division of Environmental Science and Technology, Kyoto University, Japan

Food Structure & Functionality/ FSFF (Oral 36)

13:45 - 14:25

Reception Hall (1F)

Chairperson: Satoru Ueno (*Hiroshima University, Japan*)

O-100 EFFECT OF GLOBULAR FAT ON CRYSTALLIZATION AND RHEOLOGICAL PROPERTIES OF MILK FAT BASED PRODUCTS

[[[10205]]] S. Ronholt¹, P. Buldo², K. Mortensen³, U. Andersen⁴, L. Wiking², J. C. Knudsen¹

¹Department of Food Science, University of Copenhagen, Denmark, ²Department of Food Science, Aarhus University, Denmark, ³Niels Bohr Institute, University of Copenhagen, Denmark, ⁴Arla Strategic Innovation Centre, Arla Foods, Denmark

O-101 STABILIZATION OF 6-(METHYLSULFINYL)HEXYL ISOTHIOCYANATE IN WASABI FIBROUS ROOT OF MICROENCAPSULATION WITH MEDIUM-CHAIN TRIGLYCERIDE AND DEXTRIN

[[[10316]]] S. Ube, M. Miura, Y. Ito
Iwate University, Japan

Food Structure & Functionality/ FSFF (Oral 37)

14:30 - 15:10

Reception Hall (1F)

Chairperson: Kentaro Matsumiya (*Kyoto University, Japan*)

O-102 PROTEIN STABILIZING PROPERTIES OF SOYBEAN HIGH-MOLECULAR-MASS POLYSACCHARIDE COMPLEX EVALUATED BY THE ACIDIFIED MILK SYSTEM

[[[10261]]] A. Nakamura¹, N. Fujii², J. Tobe¹, N. Adachi², H. Kida¹
¹Food Science Research Institute, FUJI OIL Co., Ltd., Japan, ²Soy Protein, Processed Foods R&D Center, FUJI OIL Co., Ltd., Japan

O-103 THE STRUCTURE OF SOY SOLUBLE POLYSACCHARIDE IN AQUEOUS SOLUTION

[[[10271]]] P. Chivero¹, S. Gohtani¹, S. Ikeda¹, A. Nakamura²
¹Department of Applied Bioresources Science, Kagawa University, Japan, ²Food Science Research Institute, Fuji Oil Co., Ltd., Japan

Biochemistry & Biotechnology (Oral 38)

9:00 - 10:30

Rehearsal Room 1 (B1F)

Chairperson: Michel Linder (*Laboratoire d'Ingénierie des Biomolécules (LIBio), France*)

O-104 Invited paper: BIOCATALYSIS FOR BIO-BASED PRODUCTS: USING LIPASES AND NOVEL OLEOCHEMICALS FOR THE PREPARATION OF COMBINATION PRODUCTS FROM RENEWABLES

[[[10038]]] M. P. Schneider
FB C - Organic Chemistry, Bergische Universitaet Wuppertal, Germany

O-105 THE EFFECTS OF BOVINE LACTOFERRIN ON AN *IN VITRO* NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) MODEL

[[[10105]]] S. Morishita¹, K. Tomita², T. Ono¹, M. Murakoshi¹, K. Sugiyama¹, H. Kato², H. Nishino³
¹Life Science Research Laboratories, Lion Corp, Japan, ²The University of Tokyo, Japan, ³Ritsumeikan University, Japan

O-106 ANTI-HYPERGLYCEMIC EFFECTS OF *PANAX NOTOGINSENG* EXTRACT CONTAINING DAMMARANE-TYPE TRITERPENES

[[[10158]]] M. Nomura¹, K. Kitamura¹, Y. Takamura¹, H. Kambayashi¹, H. Iwasaki¹, T. Ono¹, M. Murakoshi¹, K. Sugiyama¹, H. Nishino², Y. Manabe³, N. L. Fujii³, T. Fushiki⁴
¹Research and Development Headquarters, Lion Corporation, Japan, ²Ritsumeikan University, Japan, ³Department of Health Promotion Science, Tokyo Metropolitan University, Japan, ⁴Laboratory of Nutrition Chemistry, Kyoto University, Japan

O-107 POTENT *IN VIVO* ANTI-TUMOR ACTIVITY ON HeLa CELL LINE OF THE THAI MEDICINAL PLANT RECIPE SELECTED FROM "MANOSROI II" DATABASE

[[[10086]]] W. Kitdamrongtham¹, A. Manosroi¹, A. Gidado², P. Satiernrut³, T. Akihisa⁴, W. Manosroi⁵, J. Manosroi¹
¹Faculty of Pharmacy, Chiang Mai University, Thailand, ²Biochemistry Department, Faculty of Science, University of Maiduguri, Maiduguri, Nigeria, ³The Institute of Thai Traditional Medicine, Ministry of Public Health, Nonthaburi, Thailand, ⁴College of Science and Technology, Nihon University, Tokyo, Japan, ⁵Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

Biochemistry & Biotechnology (Oral 39)

10:50 - 11:50

Rehearsal Room 1 (B1F)

Chairperson: Koretaro Takahashi (*Hokkaido University, Japan*)

O-108 ANTIBACTERIAL ACTIVITY OF RARE UNSATURATED FATTY ACIDS PRODUCED BY MICROBIAL CONVERSION

[[[10014]]] T. Nagao¹, A. Ikawa², S. Tanaka¹, Y. Watanabe¹, N. Kishimoto²

¹*Biomaterials and Commodity Chemicals Research Division, Osaka Municipal Technical Research Institute, Japan,*

²*Department of Applied Biological Chemistry, Faculty of Agriculture, Kinki University, Japan*

O-109 COMPOSITIONAL ANALYSIS OF POLICOSANOL, LONG-CHAIN ALIPHATIC ALCOHOLS, IN SUGARCANE (*SACCHARUM OFFICINARUM L.*) AND OKINAWAN BROWN SUGAR PRODUCTS

[[[10239]]] Y. Asikin¹, M. Takahashi², N. Hirose³, D.-X. Hou⁴, K. Takara², K. Wada²

¹*United Graduate School of Agricultural Science, Kagoshima University, Japan,* ²*Faculty of Agriculture, Department of*

Bioscience and Biotechnology, University of the Ryukyus, Japan, ³*Okinawa Prefectural Agricultural Research Center,*

Japan, ⁴*Faculty of Agriculture, Department of Biochemical Science and Technology, Kagoshima University, Japan*

O-110 IMPROVEMENT OF FLAVOR BY DECREASING THE OXIDIZED FLAVOR DURING THE MOLDING PROCESS

[[[10157]]] M. Yasui¹, A. Inada¹, N. Gotoh², S. Wada²

¹*Katsubushi and Dashi Research Department, Yamaki Co., Japan,* ²*Department of Food Science and Technology, Tokyo University of Marine Science and Technology, Japan*

Biochemistry & Biotechnology (Oral 40)

13:00 - 14:20

Rehearsal Room 1 (B1F)

Chairperson: Manfred P. Schneider (*Bergische University Wuppertal, Germany*)

O-111 SALMON LECITHIN: A NEW SOURCE OF LC- PUFA NANOCARRIER IMPROVING THE BIOMOLECULES ACTIVITIES

[[[10020]]] M. Linder, N. Belhaj, B. Maherani, E. Arab-Tehrany

Laboratoire d'Ingenierie des Biomolecules, Universite de Lorraine/ ENSAIA, France

O-112 LYSOPHOSPHATIDYLSERINE FORM DHA WAS THE MOST EFFECTIVE AS SUBSTRATE FOR BRAIN DHA ACCRETION

[[[10196]]] K. Takahashi¹, T. Tsushima¹, T. Ohkubo², K. Onoyama¹, M. Linder³

¹*Faculty of Fisheries Sciences, Hokkaido University, Japan,* ²*NOF Corporation, Japan,* ³*Laboratory of Biomolecular Engineering, Nancy University, France*

O-113 ANALYSIS OF SPHINGOLIPIDS IN CITRUS FRUITS

[[[10151]]] K. Takayanagi¹, M. Takeuchi², M. Kamiya², Y. Tokuji², M. Kinoshita², K. Mukai¹, M. Ohnishi²

¹*Unitika Ltd., R&D Center, Japan,* ²*Department of Food Science, Obihiro University of Agriculture and Veterinary Medicine, Japan*

O-114 EVALUATION OF ANTIOXIDANT ACTIVITY OF STERYL FERULATES IN RICE VS. OTHER GRAINS

[[[10226]]] L. Nystroem, D. Zhu

Institute of Food, Nutrition and Health, ETH Zurich, Switzerland

Wednesday, October 3, 2012

ISF Plenary Lectures

9:00 - 11:00

Conference Room (L)-A (3F)

Chairpersons: Kiyotaka Sato (*Hiroshima University, Japan*)

Toshihiro Ito (*Kitasato Research Center for Environmental Science, Japan*)

ISF-1 DEVELOPMENT OF EXPORT-STABLE HIGH-QUALITY BELGIAN CHOCOLATE PRODUCTS

[[[10353]]]

Koen Dewettinck

University of Gent / Cacaolab, Belgium

ISF-2 STRUCTURE AND FUNCTION OF GANGLIOSIDES IN THE DEVELOPING NERVOUS SYSTEM

[[[70009]]]

Robert K. Yu

Institute of Molecular Medicine and Genetics and Institute of Neuroscience, Medical College of Georgia, Georgia Health Sciences University, USA

Kaufmann Memorial Lecture

11:00 - 12:00

Conference Room (L)-A (3F)

Chairperson: Hiroyuki Shimasaki (*University of Human Arts and Sciences, Japan*)

HUMAN STUDIES USING ISOTOPE LABELED FATTY ACIDS: ANSWERED AND UNANSWERED QUESTIONS

[[[10343]]]

Edward Emken

Midwest Research Consultants, USA

Awards Ceremony

8:50 - 9:00

Conference Room (L)-B/C (3F)

45th and 46th Japan Oil Chemists' Society (JOCS) Award Lectures

45th JOCS Award for Young Scientist

9:00 - 9:30

Conference Room (L)-B/C (3F)

Chairperson: Yukishige Kondo (*Tokyo University of Science, Japan*)

FORMATION OF HIGHLY FUNCTIONAL MOLECULAR ASSEMBLIES IN SUPERCRITICAL CARBON DIOXIDE

[[[70077]]]

Masanobu Sagisaka

Hirosaki University, Japan

46th JOCS Award for Young Scientist

9:30 - 10:00

Conference Room (L)-B/C (3F)

Chairperson: Kenji Aramaki (*Yokohama National University, Japan*)

DEVELOPMENT OF COMMERCIALY AVAILABLE GEMINI SURFACTANTS

[[[70078]]]

Kenichi Sakai

Tokyo University of Science, Japan

45th JOCS Award

10:10 - 11:00

Conference Room (L)-B/C (3F)

Chairperson: Nagao Totani (*Kobe Gakuin University, Japan*)

**METABOLISM AND BIOLOGICAL ACTIVITIES OF AROMA CHEMICALS FROM
ESSENTIAL OIL**

[[[70079]]]

Mitsuo Miyazawa

Kinki University, Japan

46th JOCS Award

11:10 - 12:00

Conference Room (L)-B/C (3F)

Chairperson: Makio Iwahashi (*Kitasato University, Japan*)

STUDIES ON REACTIVE OXYGEN SPECIES BY MEANS OF BIOMIMETIC APPROACHES

[[[70080]]]

Makoto Yuasa

Tokyo University of Science, Japan

Foundation Meeting of Asian Society for Oleo Science

14:00 - 17:00

Special Conference Room (3F)

Oil, Fat & Lipid in Human Nutrition

Grand Hall 3F Foyer

P-1 EFFECTS OF DIETARY TRANS FATTY ACIDS ON FAT ACCUMULATION AND METABOLIC RATE IN RATS

[[[10049]]] M. Ochiai¹, K. Fujii¹, H. Takeuchi², T. Matsuo¹

¹Faculty of Agriculture, Kagawa University, Japan, ²Department of Food and Nutrition, Toyama College, Japan

P-2 ESTABLISHMENT OF A CELL-BASED ASSAY SYSTEM FOR EXPLORING INHIBITORS OF ACTIVE GHRELIN PRODUCTION

[[[10294]]] S. Oiso¹, M. Nobe¹, K. Nakamura², H. Kariyazono¹

¹Department of Pharmaceutical Health Care Sciences, Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan, ²Department of Biopharmaceutics, Nihon Pharmaceutical University, Japan

P-3 INHIBITORY EFFECTS OF SOME FATTY ACIDS ON ACTIVE GHRELIN PRODUCTION IN A STABLE GHRELIN-EXPRESSING AGS-GHRL8 CELL LINE

[[[10297]]] Y. Yamaguchi, S. Oiso, M. Nobe, H. Kariyazono

Department of Pharmaceutical Health Care Sciences, Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan

Surfactants & Interface Science

Grand Hall 2F Foyer

P-4 OLEIC ACID-BASED GEMINI SURFACTANTS WITH A QUATERNARY AMMONIUM HEADGROUP

[[[10055]]] Y. Saito¹, W. Matsuda¹, Y. Takamatsu², T. Endo¹, K. Sakai³, H. Sakai¹, B. Kitiyanan⁴, M. Abe¹

¹Faculty of Science and Technology, Tokyo University of Science, Japan, ²Miyoshi Oil & Fat Co., Ltd, Japan, ³Research Institute for Science and Technology, Tokyo University of Science, Japan, ⁴The Petroleum and Petrochemical College, Chulalongkorn University, Thailand

P-5 SYNTHESIS AND SURFACTANT PROPERTIES OF NOVEL HYBRID TYPE CORYNOMYCOLIC ACID

[[[10066]]] K. Tamaki, S. Sumida, T. Oida, T. Kawase

Department of Chemistry and Materials Technology, Kyoto Institute of Technology, Japan

P-6 NONIONIC GEMINI SURFACTANT BASED ON 3-AMINO-1, 2-PROPANEDIOL AS A HYDROPHILE

[[[10097]]] Y. Migita, T. Oida, T. Kawase

Department of Chemistry and Materials Technology, Kyoto Institute of Technology University School, Japan

P-7 SMALL-ANGLE NEUTRON AND X-RAY SCATTERING STUDY ON AGGREGATION PROPERTIES OF AMPHIPHILIC DENDRIMER SOLUTIONS

[[[10110]]] H. Iwase¹, T. Yoshimura², A. Ebihara², M. Shibayama³

¹Research Center for Neutron Science and Technology, Comprehensive Research Organization for Science and Society, Japan, ²Graduated School of Humanities and Sciences, Nara Women's University, Japan, ³Institute for Solid State Physics, The University of Tokyo, Japan

P-8 SYNTHESIS AND SOLUTION PROPERTIES OF NOVEL ZWITTERIONIC BOLAAMPHIPHILES

[[[10116]]] M. Arakawa¹, K. Torigoe¹, T. Endo¹, K. Sakai², H. Sakai¹, M. Abe¹

¹Department of Pure and Applied Chemistry, Tokyo University of Science, Japan, ²Research Institute for Science and Technology, Tokyo University of Science, Japan

P-9 INFLUENCE OF CHIRALITY IN HYBRID SURFACTANTS ON AQUEOUS MICELLE FORMATION

[[[10161]]] T. Nishi, Y. Takahashi, Y. Kondo

Department of Industrial Chemistry, Tokyo University of Science, Japan

- P-10 SYNTHESIS AND AQUEOUS SOLUTION PROPERTIES OF NOVEL SULFATE-TYPE GEMINI SURFACTANTS FROM OLEIC ACID**
 [[[10215]]] Y. Takamatsu¹, Y. Okabe¹, T. Ogawa¹, K. Sugiyama¹, N. Umemoto², K. Sakai³, H. Sakai^{2,3}, M. Abe^{2,3}
¹Miyoshi Oil & Fat Co., Ltd., Japan, ²Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Japan, ³Research Institute for Science and Technology, Tokyo University of Science, Japan
- P-11 SURFACE PROPERTY AND MISCIBILITY OF A PARTIALLY FLUORINATED AMPHIPHILE (F4H11OH) WITH DIPALMITOYLPHOSPHATIDYLCHOLINE**
 [[[10005]]] O. Shibata, H. Nakahara, A. Ohmine
 Department of Biophysical Chemistry, Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan
- P-12 CONFORMATIONAL CHANGES OF PYRENE-LABELLED PYRANOSE RING AT THE AIR-WATER INTERFACE**
 [[[10098]]] T. Fujisawa¹, K. Sakakibara², T. Mori³, H. Sakai¹, M. Abe¹, J. P. Hill³, K. Ariga³
¹Department of Pure and Applied Chemistry, Tokyo University of Science, Japan, ²Division of Materials Chemistry, Institute for Chemical Research, Kyoto University, Japan, ³World Premier International (WPI) Research Centre for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), Japan
- P-13 EVALUATION OF MOLECULAR STRUCTURE IN MIXED MONOLAYERS OF SODIUM DODECYL SULFATE AND FATTY ACID BY INFRARED EXTERNAL REFLECTION SPECTROSCOPY**
 [[[10112]]] H. Sakai¹, Y. Teduka¹, T. Kawai²
¹Department of Materials Chemistry and Bioengineering, Oyama National College of Technology, Japan, ²Department of Industrial Chemistry, Tokyo University of Science, Japan
- P-14 INFLUENCE OF CHOLESTEROL ON THE PHASE BEHAVIOR AND MORPHOLOGY OF ION PAIR AMPHIPHILE LANGMUIR MONOLAYERS AT THE AIR/WATER INTERFACE**
 [[[10135]]] W.-T. Li, A.-T. Kuo, C.-H. Chang
 Department of Chemical Engineering, National Cheng Kung University, Taiwan
- P-15 ADHESIVE CHARACTERISTICS BETWEEN NITROGEN PLASMA-TREATED POLYMER FILMS AND EPOXY RESIN**
 [[[10142]]] M. Takahashi¹, S. Kanazawa¹, K. Kobayashi¹, K. Takei², H. Iizuka²
¹Department of Chemistry and Energy Engineering, Tokyo City University, Japan, ²Fujimori Kogyo Co., Ltd., Japan
- P-16 HYDROGENATED LECITHIN MONOLAYERS CONTAINING ALCOHOLS WITH DIFFERENT SIDE CHAINS AT THE AIR/WATER INTERFACE WERE INVESTIGATED BY USING A LANGMUIR TROUGH COMBINED WITH A FLUORESCENCE MICROSCOPE**
 [[[10181]]] T.-H. Chou¹, C.-H. Liang², P.-W. Liao¹, C.-W. Chen¹
¹Department of Chemical and Materials Engineering, National Yunlin University of Science and Technology, Taiwan, ²Department of Cosmetic Science, Chia Nan University of Pharmacy and Science, Taiwan
- P-17 PREPARATION OF THE STRATUM CORNEUM LIPID MODEL**
 [[[10252]]] M. Hakoda¹, K. Aburai¹, K. Tanaka², K. Sakai¹, H. Sakai¹, M. Abe¹, S. Hashimoto², K. Sakamoto¹
¹Department of Science and Technology, Tokyo University of Science, Japan, ²NIKKOL GROUP Cosmos Technical Center Co., Ltd., Japan
- P-18 MECHANICAL PROPERTIES OF SURFACE TETHERED POLY (A-METHYLENE-G-BUTYROLOCTONE) FILMS**
 [[[10289]]] Y. Higaki¹, R. Okazaki², A. Takahara¹
¹Institute for Materials Chemistry and Engineering, Kyushu University, Japan, ²Graduate School of Engineering, Kyushu University, Japan
- P-19 A SUPERHYDROPHOBIC SURFACE WITH LOW SURFACE STICKINESS BY SELF-ASSEMBLY OF FLUOROALKYL PHOSPHONIC ACID ON A HIERARCHICALLY MICRO/NANOSTRUCTURED ALUMINA GEL FILM**
 [[[10293]]] W. Ma, Y. Higaki, H. Otsuka, A. Takahara
 Institute for Materials Chemistry and Engineering, Kyushu University, Japan

- P-20 SURFACE PROPERTY OF A PARTIALLY FLUORINATED AMPHIPHILE (F8Hm11OH): BINARY MISCIBILITY WITH DIPALMITOYLPHOSPHATIDYLCHOLINE**
 [[[10299]]] C. Hirano¹, H. Nakahara¹, S. Sakamoto¹, M. P. Krafft², O. Shibata¹
¹*Department of Biophysical Chemistry, Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan,*
²*Systèmes Organisés Fluores et Finalités Thérapeutiques (SOFFT), France*
- P-21 AMINE OXIDE TYPE GELLING AGENTS BASED ON L-PHENYLALANINE STRUCTURE: EFFECT OF ALKYL CHAINS AND SPACER LENGTH ON THEIR GELATION ABILITY**
 [[[10060]]] N. Tokai, R. Kakehashi, S. Yamamura
Osaka Municipal Technical Research Institute, Japan
- P-22 PREPARATION OF PHOSPHOLIPID/CATIONIC SURFACTANT MIXED LIPOSOME**
 [[[10114]]] Y. Tsuji¹, Y. Konno², K. Kusai², K. Ishida², K. Aramaki¹
¹*Graduate School of Environment and Information Sciences, Yokohama National University, Japan,*
²*KOSE Corporation Research Laboratories, Japan*
- P-23 SOLUBILIZATION EFFECT OF PERFUME ON RHEOLOGICAL PROPERTIES OF WORMLIKE MICELLAR SOLUTIONS IN ANIONIC-NONIONIC SURFACTANT AQUEOUS SYSTEMS**
 [[[10159]]] S. Shimizu, K. Aramaki
Graduate School of Environment and Information Sciences, Yokohama National University, Japan
- P-24 CHARACTERIZATION OF MOLECULAR AGGREGATES FORMED BY PEPTIDE BASED GEMINI AMPHIPHILES**
 [[[10183]]] K. Ohno¹, K. Nomura¹, M. Yamamoto², K. Shimizu², Y. Tamura², T. Endo¹, K. Sakai³, K. Sakamoto⁴,
 H. Sakai^{1,3}, M. Abe^{1,3}
¹*Faculty of Science and Technology, Tokyo University of Science, Japan,* ²*Functional Additives Division, Asahi Kasei Chemicals Co., Japan,* ³*Research Institute for Science and Technology, Tokyo University of Science, Japan,* ⁴*Faculty of Pharmacy, Chiba Institute of Science, Japan*
- P-25 EFFECTS OF CHIRALITY AND INTRODUCTION OF ADDITIONAL HYDROGEN BONDING MOIETIES ON GELATION ABILITY OF LONG-CHAIN AMIDE DERIVATIVES**
 [[[10238]]] Y. Ogue, H. Endo, T. Kawai
Tokyo University of Science, Japan
- P-26 HIGHLY SENSITIVE HEAT-INDUCED VISCOSITY TRANSITION OF ELONGATED RIGID MICELLES OF AMIDOAMINE DERIVATIVE**
 [[[10250]]] C. Morita, A. Kikuchi, Y. Imura, T. Kawai
Tokyo University of Science, Japan
- P-27 OIL SOLUBILIZATION-INDUCED ANOMALOUS VISCOELASTIC TRANSITION OF WORM-LIKE MICELLE OF A LONG-CHAIN AMIDOAMINE DERIVATIVE**
 [[[10251]]] A. Kikuchi, C. Morita, Y. Imura, H. Endo, T. Kawai
Tokyo University of Science, Japan
- P-28 FORMATION OF GOLD NANOROD DIMERS AND THEIR SURFACE ENHANCED RAMAN SCATTERING PROPERTIES**
 [[[10058]]] K. Torigoe, M. Kisu, H. Sakai, M. Abe
Department of Pure and Applied Chemistry, Tokyo University of Science, Japan
- P-29 GOLD NANOPARTICLES SYNTHESIZED THROUGH REDUCTION OF TETRACHLORIDE GOLD (III) IONS BY POLY (ETHYLENE OXIDE)-POLY (PROPYLENE OXIDE)-AMINES IN AQUEOUS SOLUTIONS: MORPHOLOGY AND COLLOIDAL STABILITY**
 [[[10123]]] Y. Horiuchi, T. Okada, S. Mishima, T. Sakai
Department of Chemistry and Material Engineering, Faculty of Engineering, Shinshu University, Japan
- P-30 SUPERHYDROPHOBIC & SUPERHYDROPHILIC HIERARCHICAL SURFACE BY OXYGEN PLASMA ETCHING OF PHOTO-CURED MICROSTRUCTURE CONTAINING SILICON MOIETY**
 [[[10124]]] H. Yoon
Department of Chemical & Biomolecular Engineering, Seoul National University of Science & Technology, Korea

- P-31 PREPARATION OF HELICAL MESOPOROUS SILICA PARTICLES FROM NON-CHIRAL SURFACTANT**
 [[[10129]]] J. Iwasaki¹, Y. Igarashi¹, H. Sohma¹, T. Endo¹, K. Sakai², M. Abe¹, H. Sakai¹
¹Faculty of Science and Technology, Tokyo University of Science, Japan, ²Research Institute for Science and Technology, Tokyo University of Science, Japan
- P-32 PREPARATION OF COLLOIDAL SILICA PARTICLES USING WATER SOLUBLE SILICONE ALKOXIDE**
 [[[10130]]] K. Hirohashi¹, T. Endo¹, K. Sakai², H. Sakai¹, M. Abe¹, K. Sakamoto¹
¹Faculty of Science and Technology, Tokyo University of Science, Japan, ²Research Institute for Science and Technology, Tokyo University of Science, Japan
- P-33 LIPID NANODISC FORMATION FROM PHOSPHOLIPIDS AND DESIGNED α -HELIX**
 [[[10140]]] Y. Tsukui¹, H. Sakai², M. Abe², D. Kitamoto³, T. Imura³
¹Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Japan, ²Department of Pure and Applied Chemistry, Tokyo University of Science, Japan, ³Research Institute for Innovation in Sustainable Chemistry, National Institute of Advanced Industrial Science and Technology, Japan
- P-34 NANOPARTICLE FORMULATION FOR TRANSDERMAL DELIVERY**
 [[[10146]]] M. Koji, K. Tomoda, K. Makino
 Faculty of Pharmaceutical Sciences, Tokyo University of Science, Japan
- P-35 INHALABLE NANOPARTICLE FORMULATION FOR TREATMENT OF LUNG CARCINOMA**
 [[[10152]]] K. Tomoda, K. Hirota, H. Terada, K. Makino
 Faculty of Pharmaceutical Sciences, Tokyo University of Science, Japan
- P-36 PREPARATION OF TITANIA NANOSKELETON INCORPORATING SENSITIZING DYE FOR THE APPLICATION OF DYE SENSITIZED SOLAR CELLS**
 [[[10172]]] Y. Miyajima¹, T. Endo¹, M. Katuta², N. Koshikawa², H. Sakai³, M. Abe³
¹Faculty of Science and Technology, Tokyo University of Science, Japan, ²Space Environment Utilization Center, JAXA, Japan, ³Faculty of Science and Technology, Research Institute of Science and Technology, Tokyo University of Science, Japan
- P-37 STRUCTURE AND INTERFACIAL PROPERTIES OF SURFACTIN: PEPTIDE-BASED BIOSURFACTANT**
 [[[10182]]] S. Ikeda¹, H. Sakai¹, M. Abe¹, D. Kitamoto², T. Imura²
¹Department of Pure and Applied Chemistry, Tokyo University of Science, Japan, ²National Institute of Advanced Industrial Science and Technology, Japan
- P-38 DIRECT SYNTHESIS OF GOLD NANORODS IN ORGANIC SOLVENTS**
 [[[10190]]] H. Yamada, K. Torigoe, T. Endo, K. Sakai, H. Sakai, M. Abe
 Department of Pure and Applied Chemistry, Tokyo University of Science, Japan
- P-39 PREPARATION AND PROPERTIES OF GOLD NANORODS/TITANIA CORE/SHELL PARTICLES**
 [[[10195]]] H. Yamaguchi, K. Torigoe, T. Endo, K. Sakai, H. Sakai, M. Abe
 Department of Pure and Applied Chemistry, Tokyo University of Science, Japan
- P-40 AQUEOUS SOLUTION PROPERTIES OF CETYLTRIMETHYLAMMONIUM CATION WITH ALKYL CARBOXYLATE ANIONS**
 [[[10198]]] T. Miyachi, Y. Yamamoto, A. Yoshino, K. Taga
 Graduate School of Engineering, Nagoya Institute of Technology, Japan
- P-41 ROD-SHAPED AGGREGATION OF CATIONIC SURFACTANTS AND EFFECTS OF pH, TEMPERATURE AND HYDROPHILIC GROUPS**
 [[[10203]]] S. Higashi¹, K. Watanabe², T. Kato², J. Kuwahara¹
¹Department of Engineering, Fukuoka Institute of Technology, Japan, ²Department of Biological Functions and Engineering, Graduate School of Life Science and Systems Engineering, Japan
- P-42 PREPARATION OF SILICA NANOTUBES IN CATIONIC SURFACTANT MIXTURE**
 [[[10204]]] Y. Igarashi¹, H. Shoma¹, T. Ogura¹, T. Endo¹, K. Sakai², M. Abe³, H. Sakai³
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- P-43 SIDE REDUCTION OF BIOCOMPATIBLE POLYMER MICROCAPSULES PREPARED WITH ELECTRO-CAPILLARY EMULSIFICATION METHOD**
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- P-44 PREPARATION OF TITANIA HOLLOW PARTICLES BY SOL-GEL REACTION IN VESICULAR SUSPENSIONS**
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- P-45 INFLUENCE OF ALUMINA NANOCOATING ON PHOTOCATALYTIC ACTIVITY OF TITANIA PARTICLES**
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- P-46 PREPARATION OF CALCIUM HYDROXYAPATITE PARTICLES HIGHLY DISPERSIBLE IN WATER**
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- P-47 STIMULI-INDUCED CORE-CORONA INVERSION OF MICELLES OF WATER SOLUBLE POLY (METHACRYLOYL AMINOPROPYL-TRIMETHYL AMMONIUM CHLORIDE)-B-POLY (2-(DIMETHYLAMINO) ETHYL METHACRYLATE)**
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- P-48 FRACTIONATION OF ULTRATHIN Au NANOWIRES AND NANOPARTICLES USING A LONG-CHAIN AMIDOAMINE DERIVATIVE**
 [[[10262]]] Y. Imura, K. Tsujimoto, A. Kikuchi, C. Morita, T. Kawai
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- P-49 NOVEL SYNTHESIS OF GOLD@SILICA YOLK/SHELL NANOPARTICLES VIA MICELLE OF ABC TRIBLOCK COPOLYMER AS A SOFT TEMPLATE**
 [[[10275]]] S. Zhai, K. Nakashima
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- P-50 EFFECT OF ADDED SALT CONCENTRATIONS ON SURFACE ADSORPTION OF TYPICAL SURFACTANTS**
 [[[10004]]] H. Nakahara, Y. Moroi, O. Shibata
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- P-51 PHOTOCONTROL OF ADSOLUBILIZATION BY A SPIROPYRAN-MODIFIED SURFACTANT**
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- P-52 SYNTHESIS AND SOLUTION PROPERTIES OF FLUOROCARBON-HYDROCARBON HYBRID TYPE ANIONIC GEMINI SURFACTANTS**
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- P-53 EFFECT OF ZETA POTENTIALS ON BOVINE SERUM ALBUMIN ADSORPTION TO CROWN COMPOSITE RESIN SURFACES *IN VITRO***
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- P-54 SOLUTION PROPERTIES OF POLYMERIZABLE CATIONIC GEMINI SURFACTANTS**
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- P-55 ADSORPTION CHARACTERISTICS OF PHYTOSTEROLETHOXYLATES ON METAL OXIDE SURFACE IN AN APROTIC ROOM-TEMPERATURE IONIC LIQUID**
 [[[10201]]] A. Uka, T. Endo, K. Torigoe, K. Sakai, H. Sakai, M. Abe
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- P-56 EFFECT OF WATER ON INTERFACIAL PROPERTIES OF PHYTOSTEROL ETHOXYLATES (BPS-n) IN IONIC LIQUID**
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- P-57 ANALYSIS OF CLAY PIGMENTS PARTICLES ADHERING TO THE FABRICS**
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- P-58 INTERFACIAL BEHAVIORS OF SUFACTANTS IN WATER/PROPYLENEGLYCOL MIXED SOLVENT AND THE EFFECT OF TEMPERATURE**
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- P-59 BSA ADSORPTION/DESORPTION PROPERTY OF TITANIA/SILICA COMPOSITE FILMS MODIFIED WITH SILANE COUPLING AGENTS HAVING AMINO GROUPS**
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- P-60 ADSORPTION AND AGGREGATION PROPERTIES OF PARTIALLY-FLUORINATED GEMINI QUATERNARY AMMONIUM CHLORIDE SURFACTANTS**
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- P-61 SELF CLEANING OF OILY SOIL CLOTHES BY PHOTOCATALYTIC ACTION OF TiO₂**
 [[[10042]]] K. Tsunoda, S. Okuma, Y. Yoneyama
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- P-62 SOLID MONOGLYCERIDE (FAT) SOIL REMOVAL FROM FABRICS**
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- P-63 INVESTIGATION OF DETERGENCY IMPROVEMENT IN AQUEOUS SYSTEMS USING ARTIFICIALLY SOILED FABRICS**
 [[[10080]]] K. Gotoh, K. Harayama, S. Yoshitaka
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- P-64 APPLICATION OF MES (METHYL ESTER SULFONATE) FOR LIQUID DETERGENT; THE DETERGENCY OF MES FOR SEBUM OIL AND THE O/W INTERFACIAL PROPERTIES**
 [[[10125]]] C. Endo¹, Y. Kamoya¹, M. Kageyama¹, N. Tabori¹, S. Tsukahara²
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- P-65 BICONTINUOUS MICROEMULSION INDUCED BY THE AMPHIPHILIC POLYETHER CONTAINING OXYBUTYLENE GROUP AND ITS APPLICATION**
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- P-66 LONG-LASTING FOAMS FOR HEAVY-DUTY HANDWASHING DETERGENTS BY THE PLANT-BASED INGREDIENT MES (METHYL ESTER SULFONATE)**
 [[10191]] T. Oguma, Y. Kaneko, N. Tabori
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- P-67 ADDITION EFFECT OF VARIOUS CO-SURFACTANTS ON THE ADSORPTION TO AIR-WATER INTERFACE IN POTASSIUM LAURATE AQUEOUS SOLUTION**
 [[10199]] S. Ooshida
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- P-68 VERIFICATION OF CONSUMER TESTS FOR ECOLOGICAL EFFECTS OF COMMERCIAL DETERGENTS**
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- P-69 EFFECT OF ADDED 1-MENTHOL AND CIS-3-HEXEN-1-OL ON RHEOLOGICAL PROPERTIES OF ANIONIC-NONIONIC WORMLIKE MICELLAR SOLUTIONS**
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- P-70 OPTIMIZATION OF DECOLORATION OF DYE OF EMPA COLOUR TRANSFER MONITOR USING PEROXIDASE WITH *p*-IODOPHENOL AS ACTIVATOR**
 [[10309]] A. Higashi, M. Morita
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- P-71 n-HEXADECANE-IN-WATER EMULSIONS AS THERMAL-ENERGY STORAGE FLUIDS: EXTENSION OF SOLID-LIQUID TRANSITION PERIOD OF n-HEXADECANE DROPLETS DISPERSED IN WATER**
 [[10051]] K. Iijima, T. Okada, S. Mishima, T. Sakai
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- P-72 A NEW EMULSION TECHNIQUE BY THE SOFT NANO-PARTICLES: APPLICATION OF THE THREE-PHASE EMULSIFICATION TO THE FOOD CHEMISTRY**
 [[10085]] Y. Imai, M. Koshinuma, K. Toyoda, K. Tajima
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- P-73 A NEW EMULSION TECHNIQUE BY THE SOFT NANO-PARTICLES: APPLICATION OF THE THREE-PHASE EMULSIFICATION TO THE COSMETICS**
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- P-74 EFFECT OF TEMPERATURE ON MICROCHANNEL EMULSIFICATION FOR PRODUCING UNIFORM DROPLETS**
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- P-75 WATER IN SILICONE OIL EMULSIONS PREPARED BY ACTIVE INTERFACIAL MODIFIER: EFFECTS OF OIL PROPERTIES ON DISPERSION STABILITY**
 [[10148]] S. Iijima¹, R. Ikeda¹, T. Endo¹, K. Sakai², H. Sakai², K. Sakamoto³, M. Abe¹
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- P-76 DEVELOPMENT OF THE TECHNOLOGY FOR REALIZING HIGH CONCENTRATION CONTAINING OF UVA ABSORBERS IN THE SUN PROTECTION PRODUCTS**
 [[10150]] M. Endo¹, Y. Ohtsu², T. Mukawa¹, D. Maezawa¹, N. Sato¹, A. Kuroda³, K. Asakura⁴
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- P-77 PREPARATION OF HIGHLY STABLE WATER IN OIL EMULSION WITH HIGH INTERNAL PHASE CONTENT AND LOW VISCOSITY**
 [[10156]] A. Ohba¹, S. Okuda², S. Uozumi², N. Ezaki², T. Endo³, K. Sakai⁴, M. Abe³, H. Sakai³
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- P-78 SOLUBILIZATION OF INDOMETHACIN BY FORMING AMORPHOUS COMPLEX WITH LIDOCAINE**
 [[10174]] Y. Shimada, S. Goto, H. Uchiro, K. Makino, K. Hirota, H. Terada
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- P-79 IMPACT OF CALCULATED PHYSICOCHEMICAL PROPERTY ON DRUG SOLUBILITY IN OIL**
 [[10212]] A. Kitayama, K. Sakai, M. Yoshikawa, H. Sugimura, A. Mizutani
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- P-80 EMULSIFICATION BY POLYION COMPLEX AS ACTIVE INTERFACIAL MODIFIER**
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- P-81 PREPARATION OF NANOBUBBLES WITH HIGH DISPERSION STABILITY IN BLOOD SERUM**
 [[10235]] K. Tsuchiya¹, K. Hayashi², K. Fujiwara³, T. Matsuura⁴, K. Ohkawa⁵, H. Sakai³, M. Abe³, H. Yajima¹
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- P-82 CIRCULARLY POLARIZED PHOTOLUMINESCENT PROPERTIES OF AXIALLY CHIRAL AZEPINIUM-BRIDGED BINAPHTHYL DERIVATIVES**
 [[10032]] Y. Imai¹, T. Kimoto¹, T. Kinuta¹, N. Tajima², M. Fujiki³
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- P-83 EFFECTS OF SODIUM DODECYL SULFATE ON SECONDARY STRUCTURAL CHANGES OF PROTEINS AT HIGH TEMPERATURES UP TO 130 DEGREES**
 [[10073]] K. Takeda, Y. Moriyama
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- P-84 SOLUBILIZATION OF GENISTEIN BY CASEINATE MICELLAR SYSTEM**
 [[10074]] G. Anjani, A. Ohta, T. Asakawa
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- P-85 PHASE BEHAVIOR OF ALKYLAMINE / DICARBOXYLIC ACID AQUEOUS MIXTURES FORMING STRUCTURE LIKE GEMINI-SURFACTANT**
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- P-86 POLYMERIZABLE ANIONIC GEMINI SURFACTANTS: SOLUTION PROPERTIES AND POLYMERIZATION BEHAVIOR**
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- P-87 PROPERTIES OF DILUTE SOLUTIONS OF POLY(BUTYLENE OXIDE)/POLY(ETHYLENE OXIDE) COPOLYMER SURFACTANTS**
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P-88 EFFECT OF AMINO ACIDS ON THE SOLUTION PROPERTIES OF NONIONIC SURFACTANT

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P-89 EFFECT OF THE HEAD GROUP OF SURFACTANT ON UNUSUAL BEHAVIOR OF CMCs OF THE BINARY MIXTURES

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P-90 INFLUENCE OF ADDITIVES ON MEMBRANE PROPERTIES OF LIPID VESICLES

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Processing Developments in Oil & Fat Technology

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P-91 INFLUENCE OF WATER CLUSTER FORMATION ON DIELECTRIC BREAKDOWN VOLTAGE OF FATTY ACID ESTERS AS INSULATING OILS

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P-92 INSECTICIDAL EFFECT AND CHEMICAL COMPOUNDS OF THE ESSENTIAL OIL FROM BERGENIA LIGULATA

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Biodiesel & Biofuel

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P-93 ISOLATION OF A NOVEL CELLULASE AND EVALUATION OF ITS ACTIVITY ENCAPSULATED INTO MESOPOROUS MATERIAL

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Biochemistry & Biotechnology

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P-94 EFFECTS OF SPHINGOLIPID METABOLITES ON CELL PROLIFERATION AND CYTOKINE FORMATION IN CACO-2 CELLS

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P-95 APPLICATION OF SUPER PURIFIED SESAME OIL TO COSMETICS WITH ANTIOXIDATIVE ACTIVITY

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- P-96** **DIETARY MARINE CEREBROSIDES AND LONG-CHAIN BASE AMELIORATED GLUCOSE INTOLERANCE, LIVER AND ADIPOSE TISSUE LIPID METABOLISM IN HIGH FAT DIET INDUCED OBESE MICE**
 [[[10284]]] Y.-M. Wang, L. Du, Z. Gao, J. Xu, C.-H. Xue
College of Food Science and Engineering, Ocean University of China, China
- P-97** **ANTI-AGING EFFECTS OF TAMATSUKURI-KUROMON-SHIROURI (*CUCUMIS MELO VAR. CONOMON*) FOR APPLICATION OF COSMETIC INTEGRANTS**
 [[[10175]]] J. Arai, S. Matsuda, M. Hisama, H. Shibayama
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- P-98** **EFFECTS OF α -MANGOSTIN AND ITS RELATED COMPOUNDS ON THE MAMMALIAN DNA POLYMERASE INHIBITION AND ITS BASED BIOACTIVITIES**
 [[[10099]]] Y. Mizushima, S. Itoh, I. Kuriyama, H. Yoshida
Department of Nutritional Science, Kobe-Gakuin University, Japan
- P-99** **SCREENING OF *IN VITRO* SKIN CARE ABILITY OF MEDICINAL AND EDIBLE PLANTS IN OKINAWA, JAPAN**
 [[[10300]]] M. Takahashi¹, Y. Asikin², K. Takara¹, K. Wada¹
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- P-100** **EFFECT OF MACKEREL SUPPLEMENTATION ON PASSIVE AVOIDANCE PERFORMANCE AND NERVOUS TISSUE FATTY ACID COMPOSITION IN MICE**
 [[[10329]]] S. Y. Hwang, H. M. Choi, S.-Y. Lim
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- P-101** **STABILIZATION OF INSULIN USING CYCLODEXTRIN-GRAFTED CHITOSAN**
 [[[10050]]] Y. Daimon¹, H. Izawa², H. Sakai¹, M. Abe¹, K. Kawakami², K. Ariga²
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- P-102** **BIOTRANSFORMATION OF MONOTERPENES BY *SALMONELLA TYPHIMURIUM* OY1002/2A6 EXPRESSING CYP2A6 AND NADPH-P450 REDUCTASE**
 [[[10067]]] H. Nakahashi, M. Miyazawa
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- P-103** **PHOSPHOLIPASE A₁ GENE FROM *MORITELLA* sp. HFHI0014**
 [[[10126]]] M. Kamata¹, J. Mochizuki², K. Yazawa³
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- P-104** **EVALUATION OF METHANOL RESISTANT MUTANTS OF *GLUCONOBACTER FRATEURII* FOR UTILIZATION OF RAW GLYCEROL DERIVED FROM BIO-DIESEL FUEL PRODUCTION**
 [[[10139]]] S. Sato, H. Habe, K. Sakaki, D. Kitamoto
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- P-105** **ENRICHMENT OF DHA FROM TUNA OIL BY ENZYMATIC REACTION UNDER PRESSURIZED CARBON DIOXIDE**
 [[[10162]]] S. I. Hong¹, N. Ma¹, T. T. Zhao¹, C.-T. Kim², I.-H. Kim¹
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- P-106** **INVESTIGATION OF ACTION MECHANISM FOR PROTEIN TRANSDUCTION DOMAINS BY PHYSICOCHEMICAL MODULATION**
 [[[10164]]] T. Morishita¹, K. Aburai¹, K. Sakai¹, H. Sakai¹, M. Abe¹, S. Futaki², K. Sakamoto³
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- P-107 ENRICHMENT OF PINOLENIC ACID FROM PINE NUT OIL VIA LIPASE-CATALYZED REACTION USING A RECIRCULATING PACKED BED REACTOR**
 [[[10171]]] T. T. Zhao, S. I. Hong, I.-H. Kim
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- P-108 COMPARISON OF THE LIPID COMPOSITION AMONG THREE STRAINS OF THERMOACIDOPHILIC ARCHAEA, METALLOSPHAERA SEDULA TH-2, TA-2 AND HO615**
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- P-109 SYNTHESIS OF VITAMIN B-BINDING PHOSPHOLIPIDS BY PHOSPHOLIPASE D**
 [[[10257]]] M. Hosokawa, T. Kunii, R. Sawada, K. Suzuri, K. Miyashita
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- P-110 Withdrawn**
 [[[10048]]]
- P-111 APPLICATION OF NOVEL BIOSURFACTANT, MANNOYLERYTHRIOL LIPID, FOR SUSTAINABLE COSMETICS**
 [[[10082]]] S. Yamamoto¹, T. Fukuoka², T. Imura², M. Kitagawa³, D. Kitamoto², T. Morita², A. Sogabe³, S. Yanagidani¹
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- P-112 LOW MOLECULAR WEIGHT GELATORS BASED ON GLYCOLIPID BIOSURFACTANTS, CELLOBIOSE LIPID AND SOPHOROLIPID**
 [[[10163]]] D. Kawamura¹, T. Imura², Y. Ishibashi¹, Y. Kikkawa², T. Morita², T. Fukuoka², H. Sakai¹, M. Abe¹, D. Kitamoto²
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- P-113 FUNCTIONAL REGULATION OF ACTIVITIES OF PROTEIN TRANSDUCTION DOMAINS**
 [[[10166]]] H. Kuwahara¹, K. Aburai¹, K. Sakai¹, H. Sakai¹, M. Abe¹, S. Futaki², K. Sakamoto³
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- P-114 CHARACTERIZATION OF ACIDIC SOPHOROLIPID, YEAST GLYCOLIPID BIOSURFACTANT, AS SURFACE ACTIVE MOLECULE**
 [[[10202]]] Y. Hirata, H. Ito, A. Ueda, M. Araki, Y. Oda
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- P-115 ANALYSIS OF THE MEMBRANE PERMEABILITY AND PROPERTY OF STRATUM CORNEUM LIPID (SCL) FOCUSED ON THE SPHINGOLIPID**
 [[[10328]]] K. Aburai¹, S. Yohino¹, H. Watanabe², K. Sakai¹, H. Sakai¹, M. Abe¹, Y. Obata², K. Takayama², N. Loiseau³, W. Holleran³, Y. Uchida³, K. Sakamoto⁴
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- P-116 FOLATE-MODIFIED LIPOSOMES LOADED WITH IRONPORPHYRIN AS ANTICANCER DRUGS**
 [[[10245]]] M. Sato, T. Kondo, M. Yuasa
Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Japan
- P-117 MANGANESE PORPHYRIN COMPLEX-LOADED TRANSFERRIN-PEG-LIPOSOMES AS ANTICANCER DRUGS**
 [[[10249]]] S. Ito, T. Kondo, M. Yuasa
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- P-118 IRON HEMATOPORPHYRIN DERIVATIVE-LOADED LIPOSOMES AS ANTICANCER DRUGS**
 [[[10256]]] H. Iwaori, T. Kondo, M. Yuasa
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- P-119 DEVELOPMENT OF THE METHOD FOR THE OXIDATION PREVENTION OF FRYING OILS**
[[[10187]]] T. Okurano¹, Y. Yanagawa², Y. Yamamoto², Y. Samura¹, M. Sugiura¹, S. Hara²
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- P-120 DETERIORATION BEHAVIORS OF MILK FAT AND STRATEGY FOR ITS EFFECTIVE PREVENTION**
[[[10189]]] S. Hiyama¹, Y. Yamamoto², S. Hara²
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- P-121 COMPARISON OF THE PROTECTIVE EFFECT OF THREE VARIETIES OF SUGARCANE LEAVES ON OXIDATIVE STRESS IN CLONE 9 CELLS**
[[[10012]]] P.-D. Duh¹, C.-P. Lee¹, Z.-T. Chen², P.-Y. Yu³
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- P-122 DEVELOPMENT OF FLUORESCENCE DETECTION METHOD FOR LIPID-DERIVED RADICAL**
[[[10026]]] K. Yamada¹, F. Mito¹, Y. Matsuoka¹, K. Kitagawa¹, T. Yamasaki¹, T. Oishi¹, M. Yamamoto²
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- P-123 DEVELOPMENTS AND APPLICATIONS OF THE COOKING OIL DEGRADATION PREVENTION SYSTEM AND THE FOOD FRESHNESS KEEPING SYSTEM WITH THE POWERFUL ANTIOXIDATIVE EFFECT DERIVED FROM THE IONIC SEMICONDUCTOR**
[[[10144]]] K. Tamura¹, H. Karino²
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- P-124 PREPARATION OF TRIACYLGLYCEROLS CONTAINING CONJUGATED LINOLENIC ACIDS AND CHARACTERIZATION OF THEIR OXIDATIVE BEHAVIORS**
[[[10168]]] Y. Yamamoto, Y. Imori, S. Hara
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- P-125 EFFECTS OF PEPTIDE FRACTIONS WITH DIFFERENT ISOELECTRIC POINTS FROM WHEAT GLUTEN HYDROLYSATES ON LIPID OXIDATION IN PORK MEAT PATTIES**
[[[10186]]] E. Y. Park¹, S. Yamada¹, Y. Matsumura², Y. Nakamura¹, K. Sato¹
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- P-126 EFFECTS OF SURFACTANT TYPE AND THE INTERACTIONS WITH WHEY PROTEIN ISOLATES ON THE OXIDATIVE STABILITY OF WATER-IN- WALNUT OIL EMULSIONS**
[[[10263]]] J. Yi¹, Z. Zhu¹, D. J. McClements², Eric. A. Decker²
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- P-127 PROPERTIES OF THE AMPHIPATHIC SPIN TRAPS IN LIPID MEMBRANE**
[[[10324]]] H. Iwasaki, H. Iwashita, M. Takao, K. Ohki, N. Nagahora, K. Okuma, K. Shioji
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- P-128 HIGHLY EFFICIENT TRANSACYLATION VIA THE PSEUDO-INTRAMOLECULAR PROCESS**
[[[10269]]] N. Nishiwaki, S. Hirai, S. Hirao, J. Sawayama, K. Saigo
School of Environmental Science and Engineering, Kochi University of Technology, Japan

- P-129 HIGH-THROUGHPUT AND SENSITIVE ANALYTICAL METHOD FOR 3-MONOCHLOROPROPANE-1, 2-DIOL FATTY ACID ESTERS IN EDIBLE OILS BY SUPERCRITICAL FLUID CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY**
[[[10061]]] K. Hori¹, A. Matsubara², T. Uchikata², K. Tsumura¹, E. Fukusaki², T. Bamba²
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- P-130 IDENTIFICATION OF UNUSUAL NON-METHYLENE-INTERRUPTED FATTY ACIDS IN GONADS OF ARCHAEOGASTROPODS BY USING A COMBINATION OF ARGENTATION TLC AND CAPILLARY GC-MS**
[[[10113]]] H. Kawashima
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- P-131 CHARACTERIZATION OF γ -ORYZANOL IN JAPANESE RICE BY LIQUID CHROMATOGRAPHY/QUADRUPOLE-TIME-OF-FLIGHT MASS SPECTROMETRY**
[[[10121]]] M. Takino¹, K. Kawakami², A. Fujita²
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- P-132 CHARACTERIZATION AND STRUCTURAL STUDIES OF SELECTED SEED OILS FROM EAST AFRICA USING ESI-FTICR, NMR AND GC-MS**
[[[10311]]] S. O. Yeboah¹, Y. Mitei²
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- P-133 ABNORMALITY IN LDL AND HDL PARTICLES IN HEMODIALYSIS PATIENTS BY HIGH PERFORMANCE GEL PERMEATION CHROMATOGRAPHY**
[[[10068]]] M. Yanagawa¹, T. Matsushima¹, M. Hoshino², T. Nonaka², R. Kawamoto³, S. Miyake⁴, K. Shimokado⁵, M. Okazaki³
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- P-134 EFFECTS OF EXTRACTION PROCEDURE, TITRATION VOLUME, AND DETERIORATION DEGREE ON INTERMEDIATE PRECISION OF AV AND POV**
[[[10133]]] S. Sato, K. Yoshikawa, E. Kimachi, N. Fukaya, H. Goto, N. Yoshii, T. Igarashi
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- P-135 LIPOPROTEIN SUBCLASS CHOLESTEROL AND TRIGLYCERIDE LEVELS BY GEL PERMEATION HPLC IN SEPARATED GROUPS BY HDL-CHOLESTEROL LEVELS IN HEALTHY POPULATION**
[[[10277]]] M. Okazaki¹, M. Ai², M. Yoshida², S. Miyake³, K. Koyama³, J. Takahashi⁴, K. Shimokado⁵
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- P-136 CLINICAL UTILITIES OF SERUM LIPOPROTEIN ANALYSIS BY GEL PERMEATION HPLC, COMPARED WITH ROUTINE METHODS**
[[[10305]]] S. Yamada¹, T. Imai¹, M. Yanagawa², T. Matsushima², A. Tanaka³, N. Tomie⁴, K. Shimokado⁴, M. Ai⁵, R. Kawamoto⁶, M. Okazaki⁶
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- P-137 PREPARATION OF pH-SENSITIVE LIPOSOMES DESIGNED TO DDS APPLICATION**
[[[10327]]] A. Aoki¹, H. Akaboshi², T. Ogura³, T. Suekuni³, N. Tobori³, T. Kondo², M. Yuasa²
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- P-138 CONSTRUCTION AND EXPRESSION OF FLUOBODY AGAINST GINSENOSESIDES FOR THE FLUORESCENCE-BASED IMMUNOASSAY**
 [[[10017]]] S. Sakamoto¹, Y. Tanizaki², B. Pongkitwitoon², O. Shibata¹, H. Tanaka², S. Morimoto²
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- P-139 EFFICIENT SILKWORM EXPRESSION OF A FLUORESCENT SINGLE DOMAIN ANTIBODY AGAINST PLUMBAGIN USING *BOMBYX MORI* NUCLEOPOLYHEDROVIRUS BACMID DNA SYSTEM**
 [[[10018]]] S. Sakamoto¹, B. Pongkitwitoon², W. Putalun³, K. Maenaka⁴, H. Tanaka², O. Shibata¹, S. Morimoto²
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- P-140 CHEMILUMINESCENT POLYPHENOL DENDRIMERS**
 [[[10028]]] M. Nakazono¹, H. Agawa¹, S. Nanbu², K. Zaitu¹
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- P-141 ANALYSIS OF LIPIDS IN WATER EXTRACTS FROM RICE**
 [[[10030]]] S. Kawase
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- P-142 ANALYSIS OF GLYCAN IN WATER EXTRACTS CONTAINING LIPIDS OF RICE**
 [[[10084]]] S. Kawase
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- P-143 DEVELOPMENT OF A SIMPLE METHOD FOR DETERMINATION OF NON POLAR COMPOUND CONTENT IN HEATED OILS**
 [[[10104]]] W. Tsuzuki
 National Food Research Institute, National Agriculture and Food Research Organization, Japan
- P-144 CLEANING FOR POLYETHYLENE TEREPHTHALATE FILM IN AQUEOUS SOLUTIONS USING ULTRASONIC WAVES**
 [[[10155]]] Y. Tagawa¹, Y. Nagai², K. Gotoh²
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- P-145 FLUORESCENCE COLOR TUNING BY CONTROL OF PHENOL-PHENOXIDE BALANCE WITH WATER ADDITION FOR DEVELOPMENT OF A VOLATILE AND NONVOLATILE MOLECULAR MEMORY**
 [[[10236]]] M. Akamatsu¹, T. Mori², K. Okamoto², H. Sakai¹, M. Abe¹, J. P. Hill², K. Ariga²
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- P-146 DISTRIBUTION OF OIL SPILLED IN THE SLUDGE AT KESENUMA BAY AND THE DAMAGES CAUSED BY THE GREAT EAST JAPAN EARTHQUAKE AND TSUNAMI**
 [[[10254]]] S. Wada¹, Y. Iida², T. Maruyama², Y. Onaga¹, H. Kawano¹, Y. Ikeda¹, H. Yamakawa¹, H. K. Nakamura¹
¹Department of Food Science and Technology, Tokyo University of Marine Science and Technology, Japan, ²Japan Institute for Oils & Fats & Foods Inspection, Japan
- P-147 ON-LINE COLUMN-SWITCHING HPLC/APCI-MS ANALYSIS OF ENANTIOMERIC GLYCIDYL FATTY ACID ESTERS IN REFINED EDIBLE OILS**
 [[[10288]]] Y. Itabashi¹, S. Yoshioka¹, T. Suzuki², K. Nishimura³, T. Takamura⁴, M. Suzui⁵, H. Tsuda⁵, A. Kuksis⁶
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P-148 A SIMPLE HOMOGENEOUS METHOD FOR MEASUREMENT OF TRIGLYCERIDE LEVELS IN HDL

[[[10307]]] S. Usui, T. Ikeda, S. Kusachi

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P-149 DEVELOPMENT AND VALIDATION OF ELISA AND EASTERN BLOTTING TECHNIQUE FOR THE ANALYSIS OF HESPERIDIN IN KAMPO MEDICINES

[[[10321]]] O. Morinaga, K. Matsuo, K. Fujita, T. Uto, Y. Shoyama

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Lipid Nutrition & Human Health

Grand Hall 3F Foyer

P-150 HIGH LEVELS OF DOCOSAHEXAENOIC ACID IN THE LIPIDS OF SKIPJACK TUNA, KATSUWONUS PELAMIS, RANGING OVER BOTH THE PACIFIC AND INDIAN OCEANS

[[[10027]]] H. Saito¹, R. Watanabe¹, A. Takashima¹, H. Saito², Y. Sasaki³, Y. Ebina³, T. Oshima³, I. Fusejima³

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P-151 EFFECTS OF SHORT-TERM FEEDING OF BETA-CONGLYCININ ON THE CONCENTRATIONS OF PLASMA LIPID AND GLUCOSE IN GROWING RATS

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P-152 THE EFFECT OF SPHINGOLIPID ORAL ADMINISTRATION ON EXPERIMENTAL INFLAMMATORY BOWEL DISEASE MODEL MICE

[[[10075]]] K. Arai¹, M. Kinoshita², K. Miake³, K. Aida⁴, M. Ohnishi²

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P-153 EFFECTS OF DIETARY CONJUGATED GAMMA-LINOLENIC ACID ON BODY FAT MASS AND SERUM AND LIVER LIPID CONCENTRATIONS IN RATS

[[[10218]]] K. Hashimoto, K. Koba

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P-154 ANTI-OBESITY EFFECTS OF FISH OIL AND FUcoxANTHIN ON DIET-INDUCED OBESITY MODEL MICE

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P-155 PREVENTIVE EFFECT OF METABOLIC SYNDROME BY DIETARY UNRIPE APPLE IN RATS FED DIET CONTAINING LARD

[[[10230]]] T. Azuma¹, K. Osada¹, E. Aikura², H. Imasaka², M. Handa²

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P-156 POTENTIAL OF OMEGA-3 FATTY ACIDS-RICH SUPPLEMENT TO MODULATE INTERFERON-GAMMA PRODUCTION OF CD4 POSITIVE CELLS FROM PATIENTS WITH HEART DISEASES

[[[10308]]] K. Nakamura¹, H. Iwase¹, R. Kamata¹, E. Sekiguchi¹, S. Hirano¹, S. Oiso², H. Kariyazono², R. Sakata³

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P-157 COMPOSITIONAL ANALYSIS AND BIOACTIVITIES OF THE ESSENTIAL OIL FROM LEMONGRASS

[[[10053]]] Y. Mizushina¹, M. Mitoshi¹, H. Nakayama², K. Sugimoto², I. Kuriyama¹, T. Jippo³, K. Kanazawa⁴, H. Yoshida¹

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P-158 STRUCTURE ELUCIDATION AND BIOACTIVITIES OF SAPONINS AND OTHER HIGHLY-POLAR CONSTITUENTS OF SHEA NUTS

[[[10214]]] J. Zhang, M. Kurita, A. Yamamoto, Y. Nishimoto, M. Fukatsu, T. Akihisa
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P-159 LIMONOIDS FROM THE *n*-Hexane EXTRACT OF *MELIA AZEDARACH* FRUITS

[[[10217]]] X. Pan¹, Y. Nakamura¹, T. Kikuchi¹, M. Matsumoto¹, K. Koike², T. Akihisa¹
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Food Structure & Functionality

Grand Hall 3F Foyer

P-160 THE PRODUCTION OF COCOA BUTTER EQUIVALENT FROM A BLEND OF MANGO SEED KERNEL FAT AND PALM OIL MID-FRACTION

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P-161 THE EFFECT OF SORBITAN FATTY ACID ESTERS ON CRYSTALLIZATION OF PALM OIL

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P-162 CRYSTALLIZATION OF TRIACYLGLYCEROLS IN O/W EMULSION TYPE CHOCOLATE

[[[10207]]] S. Izumikawa¹, M. Ochi¹, H. Hodoh¹, K. Sato¹, S. Ueno¹, M. Kurosu², S. Kosugi², T. Kondo², T. Koyano²
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P-163 NUMERICAL MODELING OF MULTI-VISCO-ELASTIC CONTACT MODEL IN DISCRETE ELEMENT METHOD -APPLICATION TO DYNAMICS OF MARGARINE IN KNEADING MACHINE-

[[[10019]]] Y. Shimizu¹, H. Tachi¹, H. Ito², T. Sadakane², T. Yamaguchi²
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P-164 RAMAN MICROSPECTROSCOPIC *IN SITU* STUDY OF PORCINE FAT CRYSTAL POLYMORPHISM

[[[10024]]] M. Motoyama¹, M. Ando², K. Sasaki¹, H. Hamaguchi³
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P-165 EFFECT OF SUGARS ON THE PHASE DIAGRAM OF POLYOXYETHYLENE SORBITAN MONOOLEATE/WATER/VEGETABLE OIL SYSTEM AND ON THE PREPARATION OF NANO-EMULSIONS

[[[10318]]] S. Gohtani, M. Miyanoshta, S. Ikeda
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P-166 IMPROVEMENT OF FUNCTIONAL PROPERTIES OF LOW-CHOLESTEROL EGG YOLK BY PHOSPHOLIPASE A2

[[[10143]]] R. Sasabe¹, K. Matsumiya¹, A. Handa², Y. Matsumura¹
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P-167 EFFECT OF THE ADDITIVES AND EMULSIFIERS ON THE STABILITY OF O/W EMULSION USING PALM OIL

[[[10153]]] T. Deguchi¹, S. Matsumoto¹, H. Hondo¹, S. Ueno¹, K. Sato¹, S. Arima², A. Ogawa²
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P-168 EMULSION STABILITY AND ANTIOXIDANT ACTIVITY OF PROTEIN HYDROLYSATES FRACTIONS

[[[10180]]] H. Miya¹, E. Y. Park¹, Y. Matsumura², K. Matsumiya², Y. Nakamura¹, K. Sato¹

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P-169 THE EFFECT OF FATTY ACID CHAIN LENGTH OF POLYGLYCEROL FATTY ACID ESTERS EXERTED ON CRYSTALLIZATION OF PALM OIL

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Thursday, October 4, 2012

Plenary Lecture 5

9:00 - 10:00**Concert Hall (4F)**Chairperson: Mitsuo Miyazawa (*Kinki University, Japan*)**PL-5 DESIGNER BRØNSTED ACID CATALYST - RAPID SYNTHESIS OF POLYKETIDES**[[[10345]]] **Hisashi Yamamoto***Department of Chemistry, The University of Chicago, USA/ Chubu University, Japan*

Plenary Lecture 6

10:00 - 11:00**Concert Hall (4F)**Chairperson: Takeshi Kawai (*Tokyo University of Science, Japan*)**PL-6 OLEO SCIENCE IN MARINE WORLD**[[[10242]]] **Shigeru Deguchi***Institute of Biogeosciences, Japan Agency for Marine-Earth Science and Technology, Japan*

Surfactants & Interface Science (Oral 41)

11:10 - 12:30**Conference Room (L)-A (3F)**Chairperson: Hideki Sakai (*Tokyo University of Science, Japan*)**O-115 Invited paper: FROM REVERSE MICELLES TO REVERSE VESICLES: PRINCIPLES FOR MODULATING SELF-ASSEMBLY IN NONPOLAR ORGANIC SOLVENTS**[[[10330]]] **S. R. Raghavan***Department of Chemical & Biomolecular Engineering, University of Maryland, College Park, USA***O-116 Plenary: APPLICATIONS OF SURFACTANTS IN PETROCHEMICAL INDUSTRY - AN OVERVIEW**[[[70021]]] **A.T. Mirajkar***Unitop Chemicals Pvt. Ltd., India***O-117 MAGNETIC SURFACTANTS AND THEIR APPLICATIONS**[[[10333]]] **P. Brown, C. Butts, J. Eastoe***School of Chemistry University of Bristol, UK*

Surfactants & Interface Science (Oral 42)

12:30 - 13:30**Conference Room (L)-A (3F)**Chairperson: Srinivasa R. Raghavan (*University of Maryland, USA*)**O-118 WORMLIKE MICELLE FORMATION IN AQUEOUS SOLUTIONS OF PEPTIDE-BASED GEMINI AMPHIPHILES**[[[10185]]] **K. Nomura**¹, **M. Yamamoto**², **K. Shimizu**², **Y. Tamura**², **R. G. Shrestha**¹, **T. Endo**¹, **K. Sakai**³, **H. Sakai**¹, **K. Sakamoto**¹, **M. Abe**¹¹*Faculty of Science and Technology, Tokyo University of Science, Japan,* ²*Functional Additives Division, Asahi Kasei Chemicals Corporation, Japan,* ³*Research Institute for Science and Technology, Tokyo University of Science, Japan*

O-119 STRUCTURAL ANALYSIS OF WORMLIKE MICELLES FORMED BY TRIMERIC SURFACTANTS[[[10222]]] T. Kusano¹, H. Iwase², T. Yoshimura³, M. Shibayama¹¹The Institute for Solid State Physics, The University of Tokyo, Japan, ²Comprehensive Research Organization for Science and Society, Japan, ³Nara Women's University, Japan**O-120 OLEIC ACID - BASED GEMINI SURFACTANTS WITH CARBOXYLIC ACID HEADGROUPS**[[[10193]]] N. Umemoto¹, Y. Takamatsu², K. Sakai³, T. Endo¹, H. Sakai¹, M. Abe¹¹Department of Pure and Applied Chemistry, Tokyo University of Science, Japan, ²Miyoshi Oil & Fat Co., Ltd., Japan, ³Research Institute for Science and Technology, Tokyo University of Science, Japan**Biochemistry & Biotechnology (Oral 43)****11:10 - 12:10****Conference Room (L)-B/C (3F)**Chairperson: Toshihiro Nagao (*Osaka Municipal Technical Research Institute, Japan*)**O-121 ROLE OF LIPASE SUPER-INDUCERS IN CO-SUPER-PRODUCTION SYSTEM OF LIPASE AND SURFACE-ACTIVE PROTEIN FROM PSEUDOMONAS-LIKE BACTERIA**[[[10223]]] M. Ishizuka¹, H. Ishibashi¹, T. Miyagawa¹, R. Osawa¹, M. Sekiya¹, R. Katagiri¹, R. Yoshizawa¹, N. Sato¹, M. Yamaguchi¹, G. Akanuma¹, K. Ushio²¹Department of Applied Chemistry, Faculty of Science and Engineering, Chuo University, Japan, ²Department of Applied Chemistry and Biotechnology, Niitama National College of Technology, Japan**O-122 BOOST DEEP CLEANING AND GET NATURAL WHITENESS THROUGH ENZYMES**[[[10248]]] H. Sakaguchi¹, N. B. Schack², Y. Suzuki¹, M. Jonsson³, S. Friis-Jensen⁴¹Application Technology, Novozymes Japan Ltd., Japan, ²Household Care Customer Solution, Novozymes A/S, Denmark, ³Household Care Marketing, Novozymes A/S, Denmark, ⁴Household Care Marketing Asia, Novozymes China Investment Co., Ltd., China**O-123 MOISTURIZING PROPERTIES OF GLYCOLIPID BIOSURFACTANTS, MANNOSYLERYTHRITOL LIPIDS, TOWARD HUMAN SKIN**[[[10081]]] S. Yamamoto¹, T. Morita², T. Fukuoka², T. Imura², S. Yanagidani¹, A. Sogabe³, D. Kitamoto², M. Kitagawa³¹Tsuruga Institute of Biotechnology, TOYOBO, Japan, ²Research Institute for Innovations in Sustainable Chemistry, National Institute of Advanced Industrial Science and Technology (AIST), Japan, ³Biochemical Department, Toyobo Co., Ltd., Japan**Biochemistry & Biotechnology (Oral 44)****12:10 - 13:10****Conference Room (L)-B/C (3F)**Chairperson: Koretaro Takahashi (*Hokkaido University, Japan*)**O-124 MULTIFACETED SMALL-ANGLE SCATTERING APPROACHES TO PROTEINS IN SOLUTION: HOW TO LEARN PROTEIN-PROTEIN INTERACTION AND THREE DIMENSIONAL MOLECULAR STRUCTURES**[[[10325]]] T. Sato¹, K. Yanase¹, H. Sakai², T. Komatsu³¹Division of Chemistry and Materials, Shinshu University, Faculty of Textile Science and Technology, Japan, ²Waseda Bioscience Research Institute in Singapore, Singapore, ³Department of Applied Chemistry, Faculty of Science and Engineering, Chuo University, Japan**O-125 NON-REM SLEEP PROMOTION BY CROCIN ISOLATED FROM SAFFRON**[[[10301]]] Y. Shoyama¹, M. Masaki², K. Aritake², H. Tanaka³, Z.-L. Hung², Y. Urade²¹Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan, ²Department of Molecular Behavioral Biology, Osaka Bioscience Institute, Japan, ³Graduate School of Pharmaceutical Science, Kyushu University, Japan

O-126 ANTI-INFLAMMATORY EFFECT OF 17-HYDROXY-JOLKINOLIDE B, A DITERPENOID FROM EUPHORBIA FISCHERIANA, IN LIPOPOLYSACCHARIDE-STIMULATED MURINE MACROPHAGES

[[[10302]]] T. Uto¹, G.-W. Qin², O. Morinaga¹, Y. Shoyama¹

¹Department of Pharmacognosy, Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan,

²Department of Phytochemistry, Shanghai Institute of Materia Medica, The Chinese Academy of Sciences, China

Oil, Fat & Lipid in Human Nutrition (Oral 45)

11:10 - 12:10

Conference Room (M)-A/B (3F)

Chairperson: Kazuo Miyashita (*Hokkaido University, Japan*)

O-127 DIETARY FUcoxANTHIN, A MARINE CAROTENOID, SUPPRESSES HEPATIC STEAROYL-CoA DESATURASE 1 IN MICE

[[[10194]]] F. Beppu, T. Shinoda, M. Hosokawa, K. Miyashita

Faculty of Fisheries Sciences, School of Fisheries Sciences, Hokkaido University, Japan

O-128 FATTY ACID AND FUcoxANTHIN CONTENTS OF MALAYSIAN BROWN SEAWEEDS AND INHIBITORY EFFECT OF FUcoxANTHIN ON HUMAN LUNG CANCER (H1299) CELL LINE

[[[10267]]] I. Jaswir¹, D. Noviadri¹, H. M. Salleh¹, M. Taher², K. Miyashita³

¹Department of Biotechnology Engineering, International Islamic University Malaysia, Malaysia, ²Faculty of Pharmacy, International Islamic University Malaysia, Kuantan, Pahang, Malaysia, ³Graduate School of Fisheries Sciences, Hokkaido University, Hakodate, Hokkaido, Japan

Oil, Fat & Lipid in Human Nutrition (Oral 46)

12:10 - 12:50

Conference Room (M)-A/B (3F)

Chairperson: Kazuo Miyashita (*Hokkaido University, Japan*)

O-129 EPIGALLOCATECHIN GALLATE (EGCG) AND RESVERATROL REGULATE LIPOLYSIS IN THE RAT AND HUMAN FAT EXPLANT

[[[10008]]] N. Zawawi¹, J. Brameld², A. Salter², G. Tan³

¹Department of Food Science, Universiti Putra Malaysia, Malaysia, ²Department of Nutritional Sciences, School of Bioscience, University of Nottingham, Nottingham, Nottinghamshire, UK, ³University of Nottingham, Royal Derby Hospital, Derby, Derbyshire, UK

O-130 ALTERNATIVE PATHWAY OF n-3PUFA IN HepG2 CELL FROM ALPHA LINOLENIC ACID TO EPA VIA NON-METHYLENE INTERRUPTED FATTY ACID

[[[10096]]] T. Tsukui¹, M. Hosokawa², H. Saito³, K. Miyashita²

¹School of Bioscience and Biochemistry, Tokyo University of Technology, Japan, ²Faculty of Fisheries Sciences, Hokkaido University, Japan, ³National Research Institute of Fisheries Science, Fisheries Research Agency, Japan

Food Structure & Functionality/ FSFF (Oral 47)

10:00 - 11:10

Reception Hall (1F)

Chairperson: Yasuki Matsumura (*Kyoto University, Japan*)

O-131 Invited paper: STRUCTURE & STABILITY OF MIXTURES OF FOOD EMULSIONS, FOAMS & DISPERSIONS

[[[10244]]] B. S. Murray

School of Food Science & Nutrition, University of Leeds, UK

O-132 ENCAPSULATION OF BAICALEIN IN OIL-IN-WATER EMULSION DROPLETS

[[[10322]]] W. Treesuwan¹, S. Ichikawa², W. Zhang^{2,3}, M. Nakajima^{2,3}, M. A. Neves^{2,3}, K. Uemura³, I. Kobayashi³
¹*Institute of Food Research and Product Development, Kasetsart University, Bangkok, Thailand,* ²*University of Tsukuba, Japan,* ³*National Food Research Institute, NARO, Japan*

O-133 STABILITY PROPERTIES OF β -LACTOGLOBULIN EMULSION WITH ADDED OCTENYL SUCCINIC ANHYDRIDE MODIFIED β -GLUCAN FROM BARLEY

[[[10265]]] S.-T. Hong, U.-S. Lee, J.-S. Bae, Y.-S. Jeong, J.-W. Kim
Department of Food Science and Technology, Chungnam National University, Korea

Food Structure & Functionality/ FSFF (Oral 48)**11:15 - 12:15****Reception Hall (1F)**

Chairperson: Satoshi Arima (*Mitsubishi-kagaku Foods Co., Japan*)

O-134 DEVELOPMENT AND STABILITY OF FOOD-GRADE EMULSIFIED MICROEMULSIONS

[[[10313]]] D. Rousseau, R. Rafanan
Department of Chemistry and Biology, Ryerson University, Canada

O-135 PREPARATION CHARACTERISTICS OF WATER-IN-OIL-WATER EMULSIONS CONTAINING HIGH CONCENTRATION OF L-ASCORBIC ACID BY MICROCHANNEL EMULSIFICATION

[[[10228]]] I. Kobayashi¹, N. Khalid^{1,2}, M. A. Neves^{1,3}, K. Uemura¹, M. Nakajima^{1,3}
¹*Food Engineering Division, National Food Research Institute, NARO, Japan,* ²*Graduate School of Agriculture and Life Sciences, University of Tokyo, Japan,* ³*Faculty of Life and Environmental Sciences, University of Tsukuba, Japan*

O-136 PHYSICAL PROPERTIES OF MAYONNAISE STABILIZED WITH DRIED EGG YOLK AS AFFECTED BY SPRAY DRYING TEMPERATURE

[[[10276]]] A. Handa, R. Kawashima, Y. Okuda, M. Kubo, M. Ariizumi
R&D Division, Kewpie Corporation, Japan

Food Structure & Functionality/ FSFF (Oral 49)**12:20 - 13:20****Reception Hall (1F)**

Chairperson: Soon-Taek Hong (*Chungnam National University, Korea*)

O-137 PROPERTIES OF THE SWEET-TASTING PROTEIN, THAUMATIN

[[[10266]]] T. Masuda¹, A. Sano¹, K. Ohta¹, W. Taguchi¹, A. Tsukahara¹, F. Tani¹, N. Kitabatake²
¹*Division of Food Science and Biotechnology, Graduate School of Agriculture, Kyoto University, Japan,* ²*Department of Foods and Human Nutrition, Notre Dame Seishin University, Japan*

O-138 FUNCTIONAL PROPERTIES OF LIPOPHILIC PROTEINS FRACTIONATED FROM SOY PROTEIN ISOLATE

[[[10231]]] J. Sirison¹, K. Matsumiya¹, M. Samoto², H. Hidaka³, M. Kouno², Y. Matsumura¹
¹*Laboratory of Quality Analysis and Assessment, Division of Agronomy and Horticultural Science, Graduate School of Agriculture, Kyoto University, Kyoto, Japan,* ²*Food Science Research Institute, Fuji Oil Co., Ltd., Ibaraki, Japan,* ³*Oils & Fats, Processed Foods R&D Center, Fuji Oil Co., Ltd., Osaka, Japan*

O-139 STRUCTURAL CHANGES OF BOVINE LACTOFERRIN BY SOPHOROLIPIDS AT NEUTRAL AND ACIDIC pH

[[[10188]]] K. Matsumiya¹, Y. A. Suzuki², Y. Hirata², Y. Nambu¹, Y. Matsumura¹
¹*Graduate School of Agriculture, Kyoto University, Japan,* ²*Saraya Co.,Ltd., Japan*

Food Structure & Functionality/ FSFF (Closing Remarks)

13:20 - 13:25

Reception Hall (1F)

CLOSING REMARKS

[[[70075]]]

Y. Matsumura

Graduate School of Agriculture, Kyoto University, Japan