

NOTICIARIO

REUNIONES Y CONGRESOS CELEBRADOS

MODERN DEVELOPMENTS IN FOOD LIPIDS

Sixty five participants originating from seventeen countries met in Aarhus during April 21-25, 1997 at a conference devoted to Modern Developments in Food Lipids. The meeting was organised by *International Food Science Centre A/S* as a celebration to mark five decades devoted to lipid science by *Frank Gunstone*. The three days included invited lectures giving the presentations detailed below, some short volunteer papers, a number of posters, and a successful exhibition with ten exhibitors.

The first lecture on The Essentiality of Oils and Fats for Human Nutrition and Disease (*David F. Horrobin*) clearly indicated the nutritional importance of foods and their relation to several disease conditions. This theme recurred frequently throughout the meeting. This was followed by lectures on Global Market Developments Within Oils and Fats (*Frank Gunstone*) and on Novel Sources and Structured Lipids (*Frank Gunstone*). These outlined the availability and sources of the major oil supplies and new developments toward tailor-made fats which are likely to be more important in the future. Three lectures on oil processing—Trends in Edible Oil Processing (*Wolf Hamm*), Some Negative Aspects of Physical Refining (*Marc Kokken*), and Modification of Oils and Fats in Relation to product Development (*David Allen*)—outlined the methods by which crude oils are processed and modified to furnish the materials from which foods can be produced. Changes based on environmental concerns and health needs were covered in these three lectures. These were followed by a session devoted to Margarine and Baking Fats (*Niels M. Barfod*), Chocolate and Confectionery and its Ingredients (*Clive Barnes*), New Developments in Milk Fats (*Ekkehart Frede*), and Frying Fats (*S. Parkash Kochhar*). The importance of maintaining quality was emphasised in a session devoted to antioxidants with lectures on Rancidity in Health Food Products (*Vijai K. S. Shukla*), Microencapsulated Omega-3 Fatty Acids from Marine Sources (*Per Vilstrup*), Synthetic antioxidants (*Charles A. Henry*), and Natural Antioxidants - From Mechanism

to Applications (*Pierre Lambelet*). Microencapsulation of highly unsaturated oils is of particular interest since it combines the use of antioxidants with appropriate barrier techniques and the production of liquid oils in a solid form which is more easily handled when used in foods or in dietary supplements. The final session covered Vitamins and Minerals - Putting Function into Food (The Market View) (*Eamonn Regan*) and Modern Sources of Decosahexaenoic Acid for Foods (*Claus C. Becker*).

Many of those present showed a considerable interest in the production and use of infant formulae. Concern about the use of oils from genetically modified oilseeds was emphasised and discussed at several points during the conference.

Overall conclusion of the meeting was to give new impetus to functional foods research incorporating essential fatty acids and other active ingredients such as antioxidants to improve the nutritional properties of the food. Such initiatives have already been taken in countries like Korea and Japan, where these functional food products are named after famous scientists. We urgently need to modify our food systems in the Western World so that we can improve our health.

At the Conference Dinner Frank Gunstone was feted with a Hans Christian Andersen-like story of five decades of lipid research (the meeting was in Denmark!) with musical accompaniment and by a presentation of congratulation gifts from International Food Science Centre, Denmark.

This very successful and enjoyable conference was organized by Dr Vijai K. S. Shukla, Director and Elsebeth Bisbo, secretary of International Food Science Centre A/S, Denmark.

Conference proceedings are available at a price of DKK 500 (USD 90) plus postage and handling. A proforma invoice will be sent upon receipt of order. Payment *net of all charges* can be made either by banker's draft of bank transfer to Unibank A/S, DK-1786 Copenhagen V., bank code 2241, account no. 9160121888. As soon as payment has been received, the book will be sent immediately.

Please contact Elsebeth Bisbo, International Food Science Centre A/S, PO Box 44, Sønderskovvej 7, DK-8520 Lystrup, Denmark, Tel: +45 86 22 99 86, Fax. +45 86 22 99 86.

PRÓXIMOS CONGRESOS Y REUNIONES**22nd WORLD CONGRESS AND EXHIBITION
ON THE INTERNATIONAL SOCIETY
FOR FAT RESEARCH (ISF)**

**September 8-12, 1997
Shangri-La Hotel
Kuala Lumpur, Malaysia**

Hosted by the Malaysian Oil Scientists' and Technologists' Association (MOSTA). Sponsored by the largest federation of fats and oils organizations in the world.

ISF President and Congress Chairman: Tan Sri Datuk Dr. Augustine S. H. Ong, Country Heights Education Division, Country Heights Holdings Berhad, No. 1, Jalan Sinar Pagi, Country Heights, 43000 Kajang, Selangor, Malaysia.

Phone: 603-8330570; Fax: 603-8330705

Congress Secretary: Dr. Ting Kueh Soon, MOSTA Secretariat, c/o Spastic Children's Association, 14, Lorong Utara A, P.O. Box 48, 46700 Petaling Jaya, Malaysia.

Phone: 603-7550576/7582393; Fax: 603-7567511.

Tentative Technical Program

The technical program will include plenary and concurrent sessions covering a wide array of topics in the fats and oils industries. The tentative program includes both invited and volunteer speakers, as well as poster papers.

1. ANALYTICAL AND QUALITY CONTROL*Chairpersons:*

Albrecht Dieffenbacher, Nestlé, Switzerland.

Ting-Kueh Soon, Tunku Abdul Rahman College, Malaysia.

Toshihiro Itoh, Kitasato University, Japan.

Hai-Ching Ong, SGS Laboratory Services, Malaysia.

PLENARY LECTURE

Modern Analytical Methods and Quality Control.
Albrecht Dieffenbacher, Nestlé, Switzerland.

KEYNOTE LECTURES*Analysis of Ether Lipids*

Toshihiro Itoh, Kitasato University, Japan.

Quality Management Systems in Oils and Fats.

T. Thiagarajan, Palm Oil Research Institute of Malaysia (PORIM), Malaysia.

Modern Chromatographic and Spectroscopic Methods for the Determination of Fatty Acid Structure.

W. W. Christie, Scottish Crop Research Institute, United Kingdom.

TECHNICAL SESSION*Irradiation of Fish and Beef.*

R. J. Hamilton, Lu Quinn, and J. Caster, Liverpool John Moores University, United Kingdom.

Edible Oil Analysis by Fourier Transform Infrared (FTIR) Spectroscopy.

F. R. van de Voort, McGill University, Canada.

Stereospecific Analysis of Triacylglycerols.

W. W. Christie, Scottish Crop Research Institute, Scotland.

Differential Scanning Calorimetry (DSC) – A Tool in the Evaluation of Fats and Fats Products.

Lenny deMan, deMan Food Technology Services, Canada.

Analysis of Some Quality Parameters of Palm Oil Products Using Near Infrared (NIR) Techniques.

Thin-Sue Tang, Palm Oil Research Institute of Malaysia, Malaysia.

Automated Analytical Chemistry for Process and Production Control.

Hans-Willi Kling, Henkel KGaA, Germany.

Evaluation of Potentiometric Peroxide Value Methods for an Official and Tentative Method of Japan Oil Chemists' Society.

S. Hara, Y. Kohno, M. Aoyama, S. Abe, T. Isobe, M. Kakuta, T. Kuriyama, K. Nakamura, Y. Hirata, and Y. Miyake, Japan Oil Chemists' Society, Japan.

2. ANTIOXIDANTS AND OXIDATION*Chairpersons:*

Lester Packer, University of California, United States
Augustine S. H. Ong, Country Heights Education Sdn, Bhd, Malaysia.

PLENARY LECTURE*Health Effects of Antioxidant Nutrients.*

Lester Packer, University of California (Berkeley), United States.

KEYNOTE LECTURE*Human Low Density Lipoprotein (LDL) Oxidation, Atherosclerosis and Cardiovascular Disease.*

Alex Sevanian, University of Southern California, United States.

TECHNICAL SESSION*Biological Activity of Tocopherols and Tocotrienols.*

Lester Packer, University of California (Berkeley), United States.

Reactions of β -Carotene with Cigarette Smoke: Is β -Carotene an Antioxidant or a Prooxidant?

Daniel Liebler, University of Arizona, United States.

γ-Tocopherol Traps Mutagenic Electrophiles Such as NO_x and Complements Alpha-Tocopherol: Physiological Implications.

Stephen Christen, University of California (Berkeley), United States.

Oxidative Stability of Polyunsaturated Phosphatidylcholines from Soybean, Chicken Egg and Salmon Egg in Liposomes.

Kazuo Miyashita, Hokkaido University, Japan.

Aqueous Oxidation of Highly Unsaturated Fatty Acid Esters.

Kazuo Miyashita, Hokkaido University, Japan.

The Isoprostanes - Unique Bioactive Products of Lipid Peroxidation: Recent Advances.

Jason D. Morrow, Vanderbilt University, United States.

Antioxidative Effects of Nitrogen-Containing Compounds on Polyunsaturated Lipids.

Yoichiro Totani, Seikei University, Japan.

The Effects of Different Synergistic Acids on the Antioxidant Properties of TBHQ

Kok-Liang Ng, Eastman Chemical Company, Singapore.

Effect of the Triacylglycerol Structure on Autoxidation Products of Eicosapentaenoic Acid.

Yasushi Endo, Tohoku University, Japan.

Antioxidative Components Isolated from Tamarind (Tamarindus indica L.) Seed Coat.

Takanari Tsuda, Tokaigakuen Women's College, Japan.

3. BIOTECHNOLOGY AND NEW CROPS

Chairpersons:

Denis J. Murphy, John Innes Centre, United Kingdom.

Kurt Aitzetmüller, Institute for Chemistry and Physics of Lipids, Germany.

Antoni R. Slabas, University of Durham, United Kingdom

Kazunaga Yazawa, Sagami Chemical Research Center, Japan.

PLENARY LECTURES

Manipulation of Triglyceride Composition of Plants by Selectivity of Acyltransferases.

Antoni R. Slabas, University of Durham, United Kingdom.

The Future of New and Genetically Modified Oilseed Crops in the Twenty-First Century.

Denis J. Murphy, John Innes Centre, United Kingdom.

KEYNOTE LECTURES

Manipulation of Plants Toward Stress.

Norio Murata, NIBB, Japan.

The Development of Industrial Materials from New Crops and their Novel Derivatives.

T. Isbell, National Center for Agricultural Utilization Research, United States.

Investigation of Novel Oilseed Species, Including Minor Tropical Oils.

Kurt Aitzetmüller, Institute for Chemistry and Physics of Lipids, Germany.

Breeding and Genetic Engineering of Short- or Very Long-Chain Oilseed Crops.

S. Knapp, Oregon State University, United States.

TECHNICAL SESSION

Manipulation of Oil Composition by Lipases.

Alistair Mile, Unilever, United Kingdom.

Role of KAS3 in Plant and Oil Palm Cultures.

John Harwood, University of Cardiff, United Kingdom.

Economics of New Oilseed Crops for Industrial and Food Use.

K. Walker, Scottish Agricultural College, Scotland.

Improvement of Brassica Oilseeds and Sinapis alba in Canada.

G. Rakow, Agriculture Canada, Canada.

Analysis of Oilseeds of Crops Cultivable in Temperate Zones.

M. Lechner, Universität Wien, Germany.

Oil Palm Biotechnology.

S. C. Cheah, Palm Oil Research Institute of Malaysia, Malaysia.

High -Oleic Sunflower Varieties and Hybrids in Hungary- Characteristics and Uses.

Janos Hollo, Hungarian Academy of Sciences; Jozsef Peredi, University of Horticulture and Food Industry; and Katalin Kovari, CEREOL Group Research Centre, Hungary.

Production of Structured Lipids by Enzymatic Interesterification: Acyl-Migration During Downstream Purification.

Xuebing Xu, Technical University of Denmark, Denmark.

Enzymatic N-Acylation of Amino Compounds by Fatty Acids.

C. Rouseel, M. Pina, and J. Graille, CIRAD-CP, France.

4. FOOD APPLICATIONS

Chairpersons:

Kurt Berger, Consultant, United Kingdom.

John M. deMan, deMan Food Technology Services, Canada.

KEYNOTE LECTURES

The Interesterification Process and the Utilization of Palm Oil Products.

M.S.A. Kheiri, Danec S.A., Ecuador.

Crystal Networks in Margarines and Shortenings.

John M. deMan, deMan Food Technology Services, Canada.

TECHNICAL SESSION

Performance of Cocoa Butter in Chocolate, with Reference to Cocoa Butter of Different Origins.

H. Kattenberg, Cocoa de Zaan BV, The Netherlands.

Unhydrogenated Fish Oil in Food Products.

Jan Pettersen, Norwegian Herring Oil and Meal Industry Research Institute, Norway.

Emulsion Stability in Relation to Lyotropic Phase Behavior of New Food Emulsion.

S. K. Olesen and N. Krog, Danisco Ingredients, Denmark.

Characteristics and Food Uses of Palm Olein-Sunflower Oil Blends.

J. Peredi, University of Horticulture and Food Industry; and M. Barna, Haynal Imre University of Health Sciences, Hungary.

Changes in Chemical Properties of Olive and Sunflower Oil Used for Deep-Fat Frying.

Aytac Saygin Gumuskesen and Aysel Kavas, Ege University, Turkey.

Uses of Palm Oil and Palm Olein in Hungarian Foods.

J. Peredi, University of Horticulture and Food Industry; and M. Barna, Haynal Imre University of Health Sciences, Hungary.

5. LIPID AND PHOSPHOLIPID CHEMISTRY AND BIOCHEMISTRY

Chairpersons:

Swee-Hock Goh, National University of Singapore, Singapore.

Daniel Pioch, CIRAD-CP (Centre de Coopération Internationale en Recherche Agronomique pour le Développement), France.

Howard R. Knapp, University of Iowa, United States.

Friedrich Spener, Institut für Chemo und Biosensorik, Germany.

PLENARY LECTURE

New Developments in Fatty Acid Desaturases: Biochemistry, Gene Engineering, and Regulation of Gene Expression.

Norio Murata, National Institute for Basic Biology, Japan.

KEYNOTE LECTURES

Molecular Structures of Diacylglycerolkinase and Phosphatidic Acid Phosphatase-A Basis for

Understanding the Importance of Lipids and Their Metabolic Enzymes.

Hideo Kanoh, Sapporo Medical University, Japan.

Mechanisms of Gene Regulation by Fatty Acids, Eicosanoids and Hypolipidemic Drugs.

W. Wahli, Institute of Animal Biology, University of Lausanne, Switzerland.

The Lipid Anandamide: An Endogenous Cannabinoid with Behavioral Function.

R. J. Beninger and P. E. Mallet, Queens University, Canada.

TECHNICAL SESSION

Cell Signaling Through Endocannabinoids: Metabolism and Function of N-Acylethanolamines.

Harald Schmid, University of Minnesota, United States.

Cell Biology and Polyunsaturated Metabolism Studies on Phosphatidyl Serine Synthesis in Mammalian Cells.

Masahiro Nishijima, National Institute of Infectious Diseases, Japan.

The Fatty Acid Binding Proteins: Structures Optimized for Signaling Events.

Friedrich Spener, Institut für Chemo und Biosensorik, Germany.

Cloning of Rat Phospholipase D Isoforms.

Satoshi Yamashita, University of Gunma, Japan.

*Characterization of Novel Phospholipases in the Yeast *Saccharomyces Cerevisiae*.*

Friedrich Paltauf, Graz University of Technology, Austria.

Fatty Acid Synthesis by an Eicosapentaenoic Acid-Producing Bacterium.

Akhiro Kawaguchi, University of Tokyo, Japan.

Oxygenases Acting on Polyunsaturated Fatty Acid Synthesis.

Sakoyu Shimizu, Kyoto University, Japan.

Novel Fluorogenic Lipids for a High-Performance Lipase Assay.

Albin Hermetter, Graz University of Technology, Austria.

Lipid Oxidation-Protein Interactions in vivo.

Howard R. Knapp, University of Iowa, United States.

Phospholipid Hydroperoxides Found in Plasma, Blood Cells, and Liver of Several Fishes.

Toshiaki Ohshima, Dinfei Qiao, Hideki Ushio, Hideaki Yamanaka and Chiaki Koizumi, Tokyo University of Fisheries, Japan.

Biosynthetic Pathway of Ricinoleate-containing Tryglicerides in Castor Microsomes.

Giann-Tsyh Lin, United States Department of Agriculture, United States.

6. MINOR COMPONENTS/CONTAMINANTS

Chairpersons:

Yuen-May Choo, Palm Oil Research Institute of Malaysia, Malaysia.

Aldo Uzzan, French Fats and Oils Research Institute, France.

TECHNICAL SESSION

Red Palm Oil-A New Vegetable Oil Containing Carotenoids and Other Natural Antioxidants.

Yuen-May Choo, Palm Oil Research Institute of Malaysia, Malaysia.

Dolichols and Polyprenols in Palm Oil.

K. K. Carroll and N. Guthrie, University of Western Ontario, Canada.

Oxidation of Oils During Frying.

W. W. Nawar, University of Massachusetts, United States.

Minor Components from Rice Bran Oil.

Akio Kato, Akio Tanaka, and Keizou Tanabe, National Chemical Laboratory for Industry; and Masakazu Yamaoka, National Institute of Bioscience and Human Technology, Japan.

7. OILS AND FATS IN HUMAN NUTRITION

Chairpersons:

David Kritchevsky, The Wistar Institute, United States
Kenshiro Fujimoto, Tohoku University, Japan.

Eva Kurucz, Association of the Margarine Producers and Appliers, Hungary.

PLENARY LECTURE

Food Intake and Energy Requirements

Nevin S. Scrimshaw, The United Nations University, United States.

KEYNOTE LECTURES

Triglyceride Structure and Atherosclerosis.

David Kritchevsky, The Wistar Institute, United States.

Tocotrienols and Cancer.

K. K. Carroll, University of Western Ontario, Canada.

TECHNICAL SESSION

The Effect of Maternal Diet and Neonatal Dietary Manipulation on Retinal n-3 Fatty Acids in the Guinea Pig.

Andrew Sinclair, Royal Melbourne Institute of Technology, Australia.

The Role of Lipids in Immunology.

David Klurfeld, The Wistar Institute, United States.

Health Effects of trans-Unsaturated Fatty Acids

Robert Nicolosi, University of Massachusetts (Lowell), United States.

Dietary Fats and Immune Indices Related to Food Allergy.

Michihiro Sugano, Kyushu University, Japan.

Non-Glyceride Components of Oils and Fats and Their Nutritional and Health Significance.

B. S. Narasinga Rao, Private Consultant, India.

Fat Intake in the South African Population: Implications for Health.

A. J. S. Benadé, Medical Research Council, South Africa.

Dietary Fat and Its Influence on Energy Balances.

Philip James, The Rowett Research Institute, Scotland.

Palm Oil and Human Nutrition.

Mohamad Amr Hussein, National Nutrition Institute, Egypt.

Effect of Vitamin E and β -Carotene on Lymphoma Cells.

Muhammad Anwar Wagar, Aga Khan University, Pakistan.

Cardiovascular Effects of Edible Oils and Antioxidants.

M. Abeywardena, CSIRO (Commonwealth Scientific and Industrial Research Organization), Australia.

Tocotrienols from Palm Oil Inhibit the Growth of Estrogen-Responsive Human Breast Cancer Cells.

N. Kalanithi, Palm Oil Research Institute of Malaysia, Malaysia; R. Stephen, R. Dils, P. Darbre, University of Reading, United Kingdom.

Essential Fatty Acid Status in Children with Extra-and Intrahepatic Cholestasis.

A. Christophe and E. Robberecht, University Hospital, Belgium.

Production of Docosahexaenoic Acid-Enriched Eggs with a Proprietary Feed Supplement.

Lloyd A. Horrocks, Docosa Foods Ltd., United States and David Latshaw, The Ohio State University, United States.

8. OLEOCHEMICALS

Chairpersons:

Salmiah Ahmad, Palm Oil Research Institute of Malaysia, Malaysia.

PLENARY LECTURE

Malaysia: The Future Oleochemical Center of The World.

Yusof Basiron and Salmiah Ahmad, Palm Oil Research Institute of Malaysia, Malaysia.

TECHNICAL SESSION

New Approaches for Fructose-Based Surfactants.
A. M. van der Heijden et al., Delft University of Technology, The Netherlands.

Alternate Processes for the Production of Methyl Ester Sulfonate.

Keith D. Hovda, Chemithon, United States.

Fatty Alcohol Production from Natural Oils and Fats.

M. Hoffmann and N. Palauschek, Lurgi, Malaysia and Germany.

Softening Performance and Physico-Chemical Properties of Cationic-Anionic Mixed Surfactant System.

Hiroo Miyasaka, Jun Yokoyama, Shuichi Nihei, and Teruhisa Satsuki, Lion Corporation, Japan.

Methyl Ester Sulfonates in Laundry Soap, Detergent Bars, and Powder Detergents for the Asian Hand-Washing Laundry Market. Rodrigo Olmedo, Detertec S. A., Ecuador.

Synthesis and Aggregation Behavior of Amphiphilic Nickel (II) Complex Coordinating Lipophilic Glyceryldiamine Ligand.

Shuichi Osanai and Takeyuki Makino, Keio University, Japan.

9. PHYSICAL, CHEMICAL AND ENVIRONMENTAL ASPECTS

Chairpersons:

Thin-Sue Tang, Palm Oil Research Institute of Malaysia, Malaysia

Kiyotaka Sato, Hiroshima University, Japan.

W. W. Christie, Scottish Crop Research Institute, Scotland
Ah-Ngan Ma, Palm Oil Research Institute of Malaysia, Malaysia.

PLENARY LECTURE

Kinetic Properties of Molecular Interactions and Phase Behavior of Fats.

Kiyotaka Sato, Hiroshima University, Japan.

KEYNOTE LECTURES

Crystallization Rate and Solidification Behavior of Cocoa Butter as Influenced by Saturated and Unsaturated Phosphatidylcholine.

Paul S. Dimick, Pennsylvania State University, United States.

Tailor-Made Fats: What Are Needed? How Are They Obtained?

Frank D. Gunstone, Mylnefield Research Services Ltd., Scotland.

Chemical Changes During Industrial Frying Using Palm and Sunflower Oils.

J. L. Sebedio, INRA, France.

The Bulk Packaging of Edible Fats Without Cartons.

Paul Pattyn, Pattyn, Belgium.

TECHNICAL SESSION

Modification of Crystallization Rates of Palm Oil and Cocoa Butter in Oil-Water Emulsions Examined with Ultrasonic Velocity Measurements.
T. Horie, N. Kaneko, T. Hirose, T. Katsuragi, T. Tagawa, S. Ueno, and K. Sato, Hiroshima University, Japan.

Synchrotron Radiation of X-Ray Diffraction Study of Phase Behavior of POP-PPO and POP-OPO Binary Mixtures

A. Minato, S. Ueno, J. Yano, K. Smith, and K. Sato, Hiroshima University, Japan.

Polymorphism in γ -Linolenic Acid.

A. Miyazaki, J. Yano, S. Ueno, M. Suzuki, and K. Sato, Hiroshima University, Japan.

Polymorphic Properties of Palm Oil and Hydrogenated Palm Oil

Leny deMan, deMan Food Technology Services, Canada.

Polymorphism Polytypism and Martensitic Transition of Petroselinic Acid.

Fumitoshi Kaneko, Osaka University, Japan.

A Novel Approach Towards Pollution Abatement in Palm Oil Industry.

Ah-Ngan Ma, Palm Oil Research Institute of Malaysia, Malaysia.

Wastewater Treatment Method for Oilseed Processing Plant.

K. K. Khoo, De Smet (M) Sdn. Bhd., Malaysia.

10. RAW MATERIALS AND PROCESSING

Chairpersons:

B. Bek-Nielsen, United Plantations Bhd., Malaysia.

Gengwang Zhang, Chinese Cereals and Oils Association, China.

S. Krishnan, Aarhus Oliefabrik A/S, Malaysia.

Wong Seong, Oiltek Sdn. Bhd., Malaysia.

Kati Kovari, CEREOL Research, Hungary.

PLENARY LECTURE

World Oils and Fats Scenario in the 21st Century

B. Bek-Nielsen, United Plantations Berhad, Malaysia.

KEYNOTE LECTURE

Exotic Fats.

Sushil Goenka, Foods, Fats and Fertilisers, Ltd. India.

TECHNICAL SESSION

Soybean Lecithin Production in China.

Gengwang Zhang, Chinese Cereals and Oils Association, China.

Improved Agitation Technique in Oils and Fats Modifications.

Anthony Athanassiadis, Consultant, Belgium.

Optimization of Chemical Transesterification of Palm Oil Using RSM.

T. Haryati, Y. B. Che Man, A. Asbi, H. M. Ghazali, and L. Buana, University Pertanian Malaysia, Malaysia.

Microbial Enzyme Technology in Processing Oilseeds and Oils for Better Food Uses.

D. K. Bhattacharyya, University of Calcutta, India.

Production Technology for Tocotrienols and Tocopherol-Rich Fraction (TRF) from Rice Bran and Industrial Grade Rice Bran Oil.

Z. M. Beg, M. Minhajuddin, and J. Iqbal, J. N. Medical College, India.

Hydrolysis of Sunflower Oil with Immobilized Lipase.

S. P. Chaurasia, S. R. Patwardhan, and M. K. Trivedi, Indian Institute of Technology, India.

Kinetic of trans Isomer Fatty Acid Formation During Heating.

K. Kovari, J. Denise, Z. S. Kemeny, K. Recseg, CEREOIL; and F. Zwoboda, G. Henon, LESIEUR Alimentaire, Hungary.

Physical Refining of Rapeseed Oil.

J. Cmolik, W. Schwarz, and Z. Svoboda, SETUZA a. S., Czech Republic.

Hexane, Heptane, and Isopropyl Alcohol as Extraction Solvents for Soybean Flakes: Extraction Rate and Oil Quality.

Aytac Saygin Gumuskese and Fahri Yemiscioglu, Ege University, Turkey.

Electro-Filtration-A New Technology for Vegetable Oil Purification After Bleaching.

Gunter Borner et. al., ÖHMI Forschung und Ingenieurtechnik GmbH, Germany.

Solvent-Free Enzymatic Interesterification.

Sandra Ainsworth, Australian Food Industry Science Center, Australia.

SoftColumn™ Technology-Experience from the Field.

Olle Stenberg, Alfa Laval Separation AB, Sweden.

Fat Crystallizers with Stirring Surfaces-Theory and Practice.

Klaus Weber and Thomas Willner, KRUPP Extraktionstechnik GmbH, Germany.

New Innovations and Improvements in the Edible Oil Industry.

Z. Leibovitz and Z. Balicer, HLS Ltd., Industrial Engineering Co., Israel.

The Influence of Crude Palm Oil Quality on Bleachability and Final Color after Deacidification.

Werner Zschau, Süd-Chemie AG, Germany.

A Review of Borohydride Purification of Triglyceride and Natural Product-Based Surfactants.

Michael M. Cook, Morton International Inc., United States.

JOCS/AOCS JOINT SYMPOSIUM ON SURFACTANTS AND DETERGENTS NEW HORIZONS IN ASIA FOR THE 21st CENTURY

You may register for this symposium alone or attend these sessions as part of your ISF technical registration.

Co-general Chairs:

Kenkichi Oba, Lion Corporation, Japan.

Jerome H. Collins, Procter & Gamble Company, United States.

TUESDAY AFTERNOON, SEPTEMBER 9

KEYNOTE ADDRESS

Market and Technologies of Detergents and Toiletries in Asia. Speaker to be announced, Unilever.

SESSION I: NEW SURFACTANTS FOR DETERGENTS AND TOILETRIES

Chairperson: Peter Lorenz, Henkel Asia-Pacific Ltd., Hong Kong.

Sugar-Based Surfactants,
Karlheinz Hill, Henkel KGaA, Germany.

Washing Behaviors of Fatty Methylester Sulfonates.

Salmiah Ahmad, Palm Oil Institute of Malaysia (PORIM), Malaysia.

Use of High-Active Alpha Olefin Sulfonates in Laundry Products

Kirk H. Raney, Shell Chemical, United States.

Surfactants with Mildness to Skin and Hair for Toiletry Uses

Kiyoshi Miyazawa, Shiseido, Japan.

WEDNESDAY MORNING, SEPTEMBER 10

SESSION II: VARIOUS ASPECTS OF DETERGENT PRODUCT TECHNOLOGIES

Chairperson: Jerome H. Collins, Procter & Gamble Company, United States.

Advances in Powder Detergent Technologies
Shigeru Tamura, Kao Corporation, Japan.

Markets and Technologies of Detergent Bars
James Keaser, Colgate-Palmolive, Malaysia.

Benefits and New Technologies in Liquid Detergents

Mark Mao, Procter & Gamble Far East Inc., Japan.

SESSION III: ENVIRONMENTAL ASPECTS, ANALYSIS, AND QUALITY CONTROL IN SURFACTANTS AND HOUSEHOLD PRODUCTS

Chairperson: Petar Sobic, Unilever Research Port Sunlight Laboratories, United Kingdom.

Worldwide Trends of Environmental Regulation on Chemicals

William D. Hopping, Procter & Gamble Far East Inc., Japan

WEDNESDAY AFTERNOON, SEPTEMBER 10

Hygienic Aspects in Toiletries and Cosmetics Manufacturing.

Aranya Monosroi, Chiang Mai University, Thailand.

Improvements in the Quality Control and Analysis of Detergents.

Ryozo Nakai, Kao Corporation, Japan.

SESSION IV: NEW BUILDER SYSTEMS FOR DETERGENTS

Chairperson: Kenneth F. Schone, BASF Corporation, United States.

Some Trials for New Inorganic Builders.

Peter Jürges, Hoechst Aktiengesellschaft, Germany.

Washing Effects of Polymer Builders in Laundry Process.

Peter Neumann, BASF AG, Germany.

SESSION V: TOPICS OF THE CURRENT TECHNOLOGIES

Chairperson: Rikio Tsushima, Kao Corporation, Japan.

New Detergent Enzymes Based on Biotechnology.

Erik Gormsen, Novo Nordisk A/S, Denmark.

Enhanced Bleaching Systems for Detergents.

Michel E. Burns, Procter & Gamble Company, United States.

Fluorescent Whitening Agents in the Presence of Bleaching Systems-The Chances and Challenges.

Juergen Kaschig, Ciba Chemikalien GmbH, Germany.

INTERNATIONAL CONFERENCE ON THE PHYSICAL PROPERTIES OF FATS, OILS, AND EMULSIFIERS WITH APPLICATIONS TO FOOD

The International Conference on the Physical Properties of Fats, Oils, and Emulsifiers with Applications to Foods will be held September 21-25, 1997 at the Swissôtel in Chicago, Illinois, USA. This American Oil Chemists' Society sponsored conference features 35 international speakers presenting the latest information regarding fats, oils, and emulsifiers. Presentations will focus on crystalline properties and applications to foods, applications in baking, confections, dairy, margarine/shortening products, and engineering aspects of processing, and methods of physical analysis. Two new papers have been added to

the technical program, *Fractal Fats and Polymorphic Fats: Plastic Fat Rheology is Governed by the Fractal Nature of the Fat Crystal Network and by Crystal Polymorphism*, by Alejandro G. Marangoni, University of Guelph, Canadá, and *Fat Bloom in Chocolate*, by Richard Hartel, University of Wisconsin, USA. A one-day tabletop exhibit of new technologies and services will also be held on September 24, with invited exhibitor sessions in the afternoon.

To receive a registration brochure please contact the American Oil Chemists' Society, Meetings & Exhibits Department, P. O. Box 3489, Champaign, IL 61826-3489 USA

Phone: 1-217-359-2344, Fax: 1-217-351-8091

E-mail: meetings@aocs.org.

CONFERENCIA SOBRE SUPLEMENTOS ALIMENTARIOS PARA ESTUDIAR LA PONENCIA DE LA COMISIÓN SOBRE LA NORMATIVA EUROPEA

Bruselas, 23 de septiembre de 1997

El 23 de septiembre de 1997 se celebrará en el Palacio de Congresos de Bruselas una importante conferencia a fin de examinar las posibles opciones de cara a la futura normativa europea en materia de suplementos alimentarios. Responde a una iniciativa de la EHPM (European Federation of Health Product Manufacturers' Associations).

Dicha Ponencia es el primer paso hacia la posible promulgación de leyes de la UE en materia de suplementos vitamínicos y minerales. Esta legislación afectará de manera importante a todos quienes se dedican a la producción, distribución, empleo y reglamentación de tales suplementos, ya que podría alterar profundamente la estructura del mercado y la disponibilidad de estos productos dentro de la UE.

Basil Mathioudakis, de la DG III de la Comisión Europea, abordará los aspectos clave de la Ponencia. Representantes de los gobiernos nacionales, asesores científicos, expertos del sector, representantes de los consumidores y diputados del Parlamento Europeo presentarán y comentarán la situación actual y las opciones de cara al futuro.

«Recibimos con satisfacción la Ponencia y estamos ansiosos por intercambiar opiniones y llegar a un consenso», manifestó Simon Pettman, Director de Asuntos Europeos de la EHPM. «Actualmente no existe ninguna política común europea en materia de suplementos alimentarios, y en los últimos años han dado pie a la creación de más barreras al comercio en la UE que cualquier otra categoría de alimentos. Los problemas se derivan de las diferencias existentes entre las leyes y prácticas nacionales».

Según la legislación de algunos países, como el Reino Unido y los Países Bajos, los suplementos se

equiparan en general a los alimentos, mientras que en otros países, como en España, estos productos a menudo se consideran medicamentos, aunque no contengan más que pequeñas cantidades de vitaminas y minerales.

Al discutir sobre las leyes nacionales vigentes y los puntos de vista de la ciencia, el sector y el consumidor en un debate abierto, se espera que la Conferencia sobre Suplementos Alimentarios de la EHPM contribuya de modo significativo a establecer un procedimiento común.

La Conferencia, titulada «La reglamentación de los suplementos alimentarios en la UE: visión de futuro», está patrocinada por Capsugel, división de Warner Lambert y líder mundial en la fabricación de cápsulas duras. La asistencia está abierta a todos, pero el número de plazas es limitado y se asignarán por orden de recepción de las solicitudes. La cuota de inscripción asciende a BEF 8.500. Para solicitar el programa y el impreso de registro, póngase en contacto con Ms Veerle Limbos, EHPM Conference Organiser, Rijksweg 11, B-2880 BORNEM, Bélgica; Tfno.: + 32 3 890 05 17, Fax: + 32 3 889 26 22.

Para más información sobre la conferencia de la EHPM, póngase en contacto con:

Terry Woodger, EHPM Conference Press Office
Tfno.: + 44 1276 451 647, Fax: + 44 1276 452 852
E-mail: 100552.565@compuserve.com

Para más información sobre la normativa europea en materia de alimentos, póngase en contacto con: Simon Pettman, Director of European Affairs, EHPM

Tfno.: + 32 2 218 14 70 Fax: + 32 2 219 73 42.

TOWARDS NEW FATS AND OILS THROUGH BIOTECHNOLOGY – BASIC RESEARCH AND APPLICATIONS

The production of fats and oils by means of biotechnology and genetic engineering is a subject of public controversy. This is one of the reasons for the German Society for Fat Science (DGF) and the Working Group Plant Lipids to cordially invite you to the Joint Symposium.

«Towards New Fats and Oils through Biotechnology – Basic Research and Applications», Bonn, October 6-8, 1997.

Another reason is the need for scientific orientation, how to deal with the enormous progress made in biochemical methods and molecular biology techniques and how to apply new knowledge to chemoenzymatic processes or to breeding transgenic plants.

The University Club Bonn is an ideal forum for lively and rewarding discussions. Since the political center of Germany is still located in Bonn, we hope that our

symposium will help to clarify some of the issues and advance public discussion.

Scientific Program

Monday, Oct. 6, 1997

- 11:30 *Opening Ceremony*
W. Umbach, President of DGF
W. Boland, Working Group Plant Lipids
- 11:45 *R. Verger, Marseille*
Lipase structure-function relationships
- 12:30 *Poster demonstration and lunch break*
- 14:30 *Structural and functional biology of enzymes acting on lipids*
B. G. Fox, Madison, WI
The fundamental, versatile role of diiron enzymes in lipid metabolism
- 15:05 *W.-H. Schunk, Berlin*
Structure and function of fatty acid-hydroxylating cytochrom P-450 systems
- 16:10 *J. Pleið, Stuttgart*
Determinants of the specificity of lipases
- 16:45 *R. Ulbrich-Hofmann, Halle/Saale*
Phospholipidanalogs-chemoenzymatic syntheses and properties as enzyme effectors
- 17:20 *Selected Oral Communication*
- 18:00 *DGF-Convention*
- 19:30 *Public Event (in German language)*
M. Teuber, Zürich
Foods modified by gene technology: necessary, beneficial, natural?

Tuesday, Oct. 7, 1997

- Plant lipid synthesis and regulation*
- 08:30 *M. Rohmer, Strasbourg*
Elucidation and distribution of the mevalonate-independent pathway for isoprenoid biosynthesis
- 09:05 *E. Blée, Strasbourg*
The Peroxygenase pathway, biosynthesis of phytooxylipins
- 09:40 *Selected Oral Communication*
- 10:30 *K. Wasternak, Halle/Saale*
Jasmonic acid: biosynthesis, signal transduction, gene expression
- 11:05 *I. Fleussner, Halle/Saale*
Lipoxygenase-catalyzed oxygenation of complex lipids
- 11:40 *Selected oral communication*
- 12:00 *Poster demonstration and lunch break*
- 14:00 *Application of enzymes in and for consumer-ready products*
B. Winter, Darmstadt
Applications of phospholipases in the food industry

- 15:35 *U. Bornscheuer, Stuttgart*
Synthesis of structured triglycerides by lipase catalysis
- 15:40 *B. Hauer, Ludwigshafen*
Optical active intermediates by lipase catalysis
- 16:15 *M. Egmond, Vlaardingen*
Modification of lipases for application in detergent systems
- 17:30 «Haus der Geschichte», guided tour
- 20:00 Symposium-Dinner at the University-Club

Wednesday, Oct, 8, 1997

Engineering and breeding new oil crops

- 08:30 *M. Frentzen, Hamburg*
Acyltransferases: from basic science to modified seed oils
- 09:05 *L. Yuan, Davis, CA*
Plant lipid biotechnology: application of molecular genetics and protein engineering
- 09:40 *A. J. Kinney, Wilmington, DE*
Genetic engineering of soybean oil food and non-food uses
- 10:45 *H. Batut, Toulouse*
New sunflower and soybean cultivars for novel vegetable oil types
- 11:20 *W. Friedt, Gießen*
Recent developments and future prospects of developing rapeseed cultivars with modified oil composition
- 12:00 *Executive statement on biotechnology policy*
- 12:30 *Farewell and lunch buffet*

For more information

Deutsche Gesellschaft für Fettwissenschaft
Postfach 90 04 40
D-60444 Frankfurt am Main
Phone, +49 69 7917-533
Fax, +49 69 7917-564

VII MEETING ON INDUSTRIAL APPLICATIONS OF ENZYMES

Barcelona 25-26 noviembre 1997

Nos complace anunciarles la celebración del VII Meeting on Industrial Applications of Enzymes, que tendrá lugar en Barcelona los días 25 y 26 de noviembre, organizadas por el Grupo Profesional de Bioquímica y Biotecnología de la Asociación de Químicos del Instituto Químico de Sarriá (A-IQS).

Como en ediciones anteriores, dichas Jornadas son un punto de encuentro para todas las personas que, directa o indirectamente, trabajan en el sector de las enzimas industriales. Los participantes provienen

de toda Europa y de diferentes áreas: investigación, marketing, aplicaciones prácticas, etc.

El próximo noviembre tienen la oportunidad, en Barcelona, de reunirse e intercambiar conocimientos desde los diferentes sectores de las aplicaciones de las enzimas. Los patrocinadores son productores europeos de enzimas que aprovechan la ocasión para presentar sus últimas novedades en dicho campo.

Para completar las conferencias de los investigadores invitados, provenientes de diferentes Universidades y de la Industria, se convoca una sesión de posters, donde presentar los trabajos más recientes en los temas sugeridos.

Las conferencias programadas para la presente edición tratarán de los siguientes temas:

- Enzimas en la industria de panificación
 - proteasas, laccasa y otros enzimas: nuevas aplicaciones
 - producción de aromas vía enzimática
 - legislación europea sobre la utilización de enzimas
- Nuevas tendencias en la industria alimentaria
 - organismos genéticamente modificados (OGM)
 - plantas transgénicas en alimentación humana y animal
 - legislación en la utilización de organismos modificados genéticamente

Se distribuirá entre todos los asistentes un libro con el texto de todas las ponencias y un resumen de los posters presentados, junto con documentación técnica de las empresas patrocinadoras y colaboradoras.

Las Jornadas están pensadas y diseñadas para ofrecer a los participantes la oportunidad de intercambiar información: preguntas, respuestas y buscar soluciones a problemas que puedan ser comunes. Si usted trabaja en uno de los temas mencionados «Producción de Pan» y/o «OGM en la industria alimentaria» y áreas relacionadas, le invitamos y animamos a presentar su trabajo más reciente en forma de póster, para favorecer la interacción entre la industria, la universidad y centros de investigación.

Durante las Jornadas se entregará el IV Premio Europeo A-IQS en Tecnología Enzimática. Este premio quiere promover la investigación precompetitiva en innovación de procesos o productos que incorporen o estén relacionados con tecnología enzimática.

Para más información:

Secretaría de las Jornadas
Asociación de Químicos del IQS
Vía Augusta, 390
08017 Barcelona
Tel. 93/203 89 00
Fax. 93/280 42 76
E-mail: aiqs@iqs.url.es

PALM AND COCONUT OILS FOR THE 21st CENTURY: SOURCES, PROCESSING, APPLICATIONS, AND COMPETITION

The American Oil Chemists' Society (AOCS), in cooperation with the Asian and Pacific Coconut Community, the Malaysian Oil Palm Growers' Council, the Palm Oil Refiners Association of Malaysia, and the Philippine Coconut Producers' Association, will sponsor the World Conference and Exhibition on Palm and Coconut Oils for the 21st Century: Sources, Processing, Applications, and Competition in Bali, Indonesia, February 15-19, 1998. The conference will be held at the Bali International Convention Centre.

The World Conference and Exhibition on Palm and Coconut Oils for the 21st Century will focus on the rapidly growing worldwide importance of palm, palm kernel, and coconut oils in the oleochemicals marketplace. The event is a follow-up to previous conferences:

Oleochemicals: Into the 21st Century (1990) and World Conference and Exhibition on Lauric Oils: Sources, Processing, and Applications (1994). The members of the Executive Committee are: General Chairperson, Robert T. Betz, Henkel Corporation, USA; Local Chairperson, Tarmidzi Rangkuti, Federation of Indonesian Vegetable Oils and Fats Associations, Indonesia; and European Chairperson, Willem Jan Struyck, Unichema International, The Netherlands.

An important part of the conference will be a major exhibition by suppliers to the industry. The industry-wide exhibition will provide the opportunity to meet with suppliers and discuss products and services for the oleochemicals marketplace.

A distinguished international committee is producing a technical program which will be of interest to those who do research and marketing in areas related to palm and coconut oils. The conference will explore the following areas of interest:

- Economics of Palm and Coconut Oils in the World Market.
- Supply and Regional Economics of Palm and Coconut Oils in the World Market.
- Processing of Palm and Coconut Oils.
- Applications-Food.
- Applications-Industrial Including Cleaning and Detergents.
- Applications-Personal Care.

For more information:

AOCS

Meetings & Exhibits Department-IN4

P. O. Box 3489

Champaign, IL 61826-3489 USA

Phone: 1-217-359-2344

Fax: 1-217-351-8091

ENERGY AND FOOD INDUSTRY

The International Commission for Agricultural and Food Industries (CIIA) and the Hungarian Scientific Society for Food Industry (MÉTE), are organizing an International Symposium on «Energy and Food Industry» to be held in Budapest, from 14 to 16 September, 1998.

The Symposium will deal with topical issues of energetics in food industry and food processing, novel technical and technological results, potentials for application, as well as the exploitation of renewed sources of energy and questions of environment protection, in the field of energetics.

Scientific Program:

I. Energetic issues of food industrial operations.

1. Up-to-date processes of extraction and separation in food industry and energetic problems involved.
 - a) Mechanical operations (pressing, filtering, centrifugation).
 - b) Condensation.
 - c) Extraction (traditional and non conventional, e.g. supercritical), distillation.
 - d) Other processes of separation (diffusion, absorption, etc.).
 - e) Hybrid and other operations (membrane diffusion, extrusion).
2. Conservation technologies in food industry and energetic evaluation.
 - a) Drying.
 - b) Pasteurization, sterilization.
 - c) Freezing, deep-freezing.
3. Utilization for energy purposes and neutralization of by-products and wastes.
 - a) Processing potentials of solid waste as feed, energy carrier, etc.
 - b) Energetic aspects of sewage processing.
 - c) Treatment of atmospheric impurities.

II. Special energy problems of certain branches of food industry.

III. Potentials and results of up-to-date energy economy.

1. Efficiency of exploitation and use of energy in food industry (e. g. non-conventional sources of energy geothermal, solar, biomass).
2. Relations with technologies of environment protection.

IV. Legislation preferences and effect of their enforcement in food industrial energy economy (quality control environment protection, etc.).

Papers and posters are invited to be presented at the Symposium on the topics given above.

During the Symposium, there will be on the site of the meeting an exhibition arranged on the topic of energetics in food processing.

Symposium Secretariat:
Hungarian Scientific Society for Food Industry (MÉTÉ)
Dipl. Ing. Dr. Zoltán HERNÁDI, managing director
H-1027 Budapest, Fő utca 68,
Phone: (36-1) 214-6691, Fax: (36-1) 214-6692.

OTRAS NOTICIAS

VIII PREMIO A LA CALIDAD DEL ACEITE DE OLIVA VIRGEN EXPOLIVA '97

Con motivo de la celebración de EXPOLIVA '97, Feria Internacional del Aceite de Oliva e Industrias Afines, durante los días 1 al 4 de octubre de 1997, se convoca el PREMIO A LA CALIDAD DEL ACEITE DE OLIVA VIRGEN, ateniéndose a las siguientes bases:

PRIMERA.— El objetivo del Concurso es premiar la firma o persona que presente la mejor muestra de aceite de oliva virgen.

SEGUNDA.— Podrá presentar muestras cualquier productor de aceite de oliva virgen.

TERCERA.— La toma de muestras se realizará ante Notario. De cada depósito se tomará una muestra compuesta por tres frascos de color topacio de 500 ml cada uno. El aceite será extraído de los depósitos propiedad de la almazara. Los depósitos deberán tener una capacidad entre 20.000 y 50.000 kg. Podrán presentarse cuantas muestras de distintos depósitos se crean oportunas, a fin de que el volumen total de éstas sea representativo de la producción de la almazara. En ningún caso, el número total de muestras presentadas por una misma firma será superior a diez. Los frascos estarán rotulados con un número, y serán lacrados con el sello de Notario.

Los tres frascos deberán ser enviados a la Fundación para la Promoción y el Desarrollo del Olivar y del Aceite de Oliva, con domicilio en el Paseo de la Estación, n.º 25, 6.ª planta, 23008 Jaén. Teléf. +34 (9) 53/274976 – 274965; Fax +34 (9) 53/276219, acompañados de un sobre incluyendo el Acta Notarial de todas las muestras y los datos identificativos del concursante (nombre o razón social, dirección, localidad, provincia, teléfono y fax).

CUARTA.— La fecha límite de presentación de muestras finalizará a las 14,00 horas del día 20 de agosto de 1997.

QUINTA.— El Jurado será nombrado por la Fundación para la Promoción y el Desarrollo del Olivar y del Aceite de Oliva y el Consejo Oleícola Internacional.

SEXTA.— Recibidas las muestras, éstas serán depositadas por el Gerente de la Fundación en una Notaría, cuyo titular, una vez identificadas las mismas, procederá a la asignación de claves secretas que servirán de referencia al Panel de Cata.

SÉPTIMA.— Las muestras serán sometidas al Panel de Catadores y al Laboratorio de Análisis que el Jurado determine.

OCTAVA.— Vistos los resultados de los análisis químicos y organolépticos, el Jurado fijará el orden de los premios. La representatividad de la muestra global sobre el volumen producido, será tenido en cuenta mediante la utilización de la siguiente fórmula:

$$P_f = P_1 + (P_2 + \dots + P_n) \cdot 0,001 \quad n \leq 10$$

a lo que

- P_f = puntuación final.
- P_1 = Puntuación de la muestra que haya obtenido mayor valor de las presentadas por la almazara.
- $P_2, \dots, P_n$ = Puntuación del resto de las muestras presentadas por la almazara.

NOVENA.— El Notario actuante relacionará las firmas que corresponden al orden de premios fijado por el jurado.

DÉCIMA.— Los premios consistirán en diploma acreditativo para los tres primeros y un Primer premio consistente en un Viaje Promocional para dos personas al país que elija la firma que presente el aceite ganador. El viaje será programado de forma conjunta con la Fundación para la Promoción y el Desarrollo del Olivar y del Aceite de Oliva y el coste justificado no excederá de 1.000.000 de pesetas (un millón de pesetas). El viaje promocional deberá realizarse en un plazo no superior a un año a partir de la fecha de concesión del premio.

UNDÉCIMA.— El Fallo del Jurado será inapelable, y a su criterio, los premios podrán declararse desiertos.

25 PROYECTOS AAIR SOBRE ALIMENTOS F-FE 233/96

Flair-Flow II is a co-operative project of the EU AAIR and VALUE programmes. It comprises a network (in 16 European countries) of circa 300 key people disseminate food R & D results to the European food industry and to other end-users.

Director de la Red Nacional
Dr. Jesús Espinosa Mulas
Instituto del Frío
Ciudad Universitaria
28040 Madrid
Tel.: 544 56 07
Fax: 549 36 27

Director del Proyecto F-FE
Dr. T. R. Gormley
The National Food Centre
Dunsinea, Dublín 15
Irlanda
Tel.: 38 32 22
Fax: 38 36 64

Los títulos abreviados de 25 proyectos AAIR, que hasta la fecha no han sido figurados en documentos de 1 página FLAIR FLOW, se relacionan a continuación junto con el nombre, país y número de fax del

coordinador. Para más información contactar con el coordinador, o por fax, con Mr. L. Breslin en la Comisión de la UE. Bruselas (003-22-29-64-322) para solicitar la publicación (EUR 16257 EN) titulada «AIR Food Projects Synopses».

- 2311: Cultivos transgénicos: H. Noteborn (NL), +31.8370.177.17.
- 1563: Esterilidad del aire en industrias alimentarias. D. O' Callaghan (IE), +353.25.325.63.
- 2185: Riesgos para la salud de sustancias tóxicas naturales presentes en alimentos. J. Gry (DK), +45.39.66.01.00.
- 2342: Seguridad de procesos y productos biotecnológicos. J. van Der Kemp (NL), +31.340457224.
- 0245: Sistemas caseína/hidrocoloides como ingredientes funcionales. M. Marrs (GB), +44.1372.38.62.28.
- 2322: Evaluación sensorial de quesos de pasta dura. E. Hunter (GB), +44.31.650.49.01.
- 1207: Proteínas de alta pureza a partir de suero. C. De Kruif (NL), +31.83.80.50.400.
- 1881: Enfriamiento rápido de carne de vacuno vs calidad. R. Joseph (IE), +353.1.8383684.
- 1577: Estabilidad oxidativa de carne y productos cárnicos. L. Skibsted (DK), +45.35.28.32.10.
- 1456: Control microbiológico en las industrias cárnicas. M. Hinton (GB), +44.934.85.21.70.
- 1931: Producción de compuestos aromáticos de zumo de manzana. S. Gaeta (IT), +39.15.572251.
- 1263: Nuevas herramientas para la reproducción de plantas. J.M. Seng (FR), +33.1.49.88.17.97.
- 1500: Razas patógenas en hierbas de girasol. J. Melero-Vara (ES), +34.57.29.34.29.
- 1961: Calcio y calidad de frutos. J. Pech (FR), +33.62.13.65.41.
- 2158: Degradación oxidativa de grasas vegetales. J. Empis (PT), +351.1.848.00.72.
- 2215: Optimización de la textura de frutas tratadas térmicamente. I. Dea (GB), +44.13.72.38.62.28.
- 2087: Banco de datos sobre alimentación basados en encuestas sobre presupuestos familiares. A. Trichopoulou (GR), +30.1.643.65.36.
- 2421: Ácidos grasos trans y CVD en Europa. G. van Poppel (NL), +31.3404.579.52.
- 1315: Modelos para pronosticar la elección de alimentos por los consumidores. R. Shepherd (GB), +44.1.734.26.79.17.
- 1025: Seguridad y calidad de materiales de envasado en contacto con los alimentos. A. Feigenbaum (FR), +33.26.50.61.52.
- 2360: Estabilidad de aditivos plásticos en simuladores de alimentos. L. Castle (GB), +44.603.50.11.23.
- 1017: Rendimiento de autoclaves rotativos discontinuos a sobrepresión. M. Hendrickx (BE), +32.16.32.19.97.
- 1126: Identificación de especies de atún enlatadas. I. Mackie (GB), +44.224.87.42.46.
- 1496: Mejora de la calidad y seguridad de pescado fresco. R. Kirby (PT), +351.2.59.03.51.

1921: Formaldehído y dimetilamina en productos de la pesca. H. Rehbein (DE), 49.40.38905.200.

SUBSTANCIAS TÓXICAS NATURALES PRESENTES EN ALIMENTOS VEGETALES: EVALUACIÓN DE RIESGOS F-FE 242/97

Flair-Flow II is a co-operative project of the EU AAIR and VALUE programmes. It comprises a network (in 16 European countries) of circa 300 key people disseminate food R & D results to the European food industry and to other end-users.

<i>Director de la Red Nacional</i> Dr. Jesús Espinosa Mulas Instituto del Frío Ciudad Universitaria 28040 Madrid Tel.: 544 56 07 Fax: 549 36 27	<i>Director del Proyecto F-FE</i> Dr. T. R. Gormley The National Food Centre Dunsinea, Dublín 15 Irlanda Tel.: 38 32 22 Fax: 38 36 64
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Se ha establecido una red europea (proyecto de acción concertada AAIR) con 33 participantes, entre los que figuran 5 industrias, pertenecientes a 15 países de Europa. Su tarea consiste en recopilar y procesar los datos relativos a sustancias tóxicas naturales presentes en alimentos vegetales, con el fin de evaluar los riesgos para la salud humana e identificar estrategias para minimizar estos riesgos. El título abreviado del proyecto es NETTOX.

Los investigadores participantes en el proyecto se incluyen en tres grupos: química, toxicología y base de datos. El grupo de química está preparando un documento de partida que incluye los siguientes temas: papel de las sustancias tóxicas en los vegetales; directorio de científicos; relación de plantas; relación de sustancias tóxicas; datos sobre la ingesta humana (revisiones de la información nacional procedente de los distintos países europeos); programas de control y vigilancia (basados en un cuestionario enviado a los participantes); evaluación del riesgo basada en los datos existentes. Este grupo está, asimismo, estableciendo un sistema de criterios de calidad para los datos composicionales.

El grupo de toxicología ha preparado un documento de partida sobre evaluación de la seguridad de las sustancias tóxicas en vegetales en relación con los siguientes temas: terminología; estudios y parámetros de toxicidad; márgenes de seguridad; importancia de los estudios mecanísticos; hábitos dietéticos, grupos de riesgo y susceptibilidad; evaluación de la seguridad, cuantificación. El grupo también está abordando el tema de los criterios de calidad aplicables a los datos toxicológicos.

El grupo base de datos ha desarrollado una estructura para una futura y posible base de datos composicionales de la UE. En la actualidad, el grupo continúa su trabajo en relación con: investigación de la aplicabilidad de los sistemas descriptivos existentes sobre alimentos; acceso a la información toxicológica; exploración de las posibilidades de incluir datos sobre la

ingesta de alimentos; investigación sobre la forma de suministrar la información para que sea útil y bien recibida por las autoridades reguladoras, organismos de investigación e industrias.

Estos trabajos deberán servir de fundamento para establecer una futura base de datos de la UE y un sistema de información sobre las sustancias tóxicas presentes en los alimentos vegetales y los constituyentes protectores.

Para más información: Contactar con el Dr. J. Gry, National Food Agency of Denmark, Moerkhoej Bygade 19, DK-2860 Soeborg, Dinamarca. Tel: +45-39696600; Fax: +34-39660100.

CONTROL DE LA ESTERILIDAD DEL AIRE EN LA ELABORACIÓN Y ENVASADO DE ALIMENTOS F-FE 246/97

Flair-Flow II is a co-operative project of the EU AAIR and VALUE programmes. It comprises a network (in 16 European countries) of circa 300 key people disseminate food R & D results to the European food industry and to other end-users.

<i>Director de la Red Nacional</i>	<i>Director del Proyecto F-FE</i>
Dr. Jesús Espinosa Mulas	Dr. T. R. Gormley
Instituto del Frío	The National Food Centre
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En este proyecto se están investigando las últimas técnicas para controlar la calidad de aire en las plantas de elaboración de alimentos con el fin de proteger al consumidor de las contaminaciones debidas a este elemento. El aire puede transportar suciedad o microorganismos o una combinación de partículas de suciedad y microorganismos asociados. Los logros conseguidos hasta la fecha se resumen en los cuatro apartados siguientes:

Análisis «in situ» de la contaminación microbiana, incluye un gran número de toma de muestras de aire y el aislamiento e identificación de los microorganismos mediante técnicas bioquímicas convencionales, así como basadas en métodos genéticos. El muestreo se llevó a cabo en diversas áreas de la fábrica, tanto

húmedas como secas, con un alto nivel de contaminación. La mayoría de los microorganismos identificados fueron bacterias, principalmente *Staphylococcus spp* no patógeno, incluyendo *S. epidermis*, *S. saprophyticus*, *S. sciuri*, *S. hominis*, *S. xylosus* y *S. capitis*. Los per-cusores de esporas aislados se encontraron principalmente en las áreas de desembalado y envasado y fueron *Bacillus lichenformis*, *B. amyloliquefaciens* y *B. Subtilis*. Las colonias de hongos identificadas fueron *Penicillium*, *Cladosporium* y *Aspergillus spp*.

El examen de un filtro usado de una fábrica de leche en polvo puso de manifiesto que las partículas de polvo de leche dominaban en cuanto a la contaminación que se encontró en la cara de admisión del filtro. No hubo evidencia de crecimiento microbiano en la otra cara del filtro. El conteo de colonias de una muestra de un filtro usado, expresada en forma de unidades precursoras de colonias (cfu) por metro cúbico de aire filtrado fue similar (12-50 cfu/m³) a los conteos obtenidos a partir de muestras de aire de admisión en una planta de elaboración de alimentos; predominaban las levaduras (26%), hongos (5%) y precursores de esporas (68%).

La eficacia del filtro de aire fue evidente por la reducción del número de partículas contadas a partir de muestras tomadas en la admisión de aire al local en relación con las que se encontraron en el aire de la sala de manipulación y en el de elaboración. La reducción fue independiente del tamaño de las partículas y concordante con los niveles de filtración utilizados. Los ensayos se repitieron para obtener un perfil estacional.

Se ha ideado un aparato para tomar muestras permanentemente a intervalos regulares de tiempo durante muchas horas en correspondencia con un turno de trabajo. Este sistema suministra información que puede relacionarse con la causa de elevados conteos y de esta forma poder establecer las oportunas medidas correctoras. En la actualidad, se está mejorando esta técnica.

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