meeting. Honored Students are selected by a special AOCS committee based on abstracts submitted and previous academic accomplishments.

The five awardees, their universities and topics for presentations in Honolulu are:

Kenneth E. Hundrieser, Department of Nutritional Science, University of Connecticut, Storrs, Connecticut, "The Effect of Body Size and Postpartum Weight Change on Fatty Acids in Human Milk."

David B. Josephson, Department of Food Science, University of Wisconsin, Madison, Wisconsin, "Slime-Associated Lipid-Derived Volatile Aroma Compounds Related to the Life Cycle Stages of Salmon (*Oncorhynchus sp.*)."

Christopher C. Parrish, Department of Oceanography, Dalhousie University, Halifax, Nova Scotia, "Lipid Production in a Marine Alga Using Cage Culture Turbidostats for Continuous Automated Culture with Lipid Class Measurement by the Chromarod-Iatroscan (TLC/FID) System."

Mary S. Perez, Department of Biochemistry, St. Louis University Medical Center, St. Louis, Missouri, "Mechanism of the Assembly of Lipid-Linked Oligosaccharides in the Rough Endoplasmic Reticulum Membrane."

Laura A. Woolett, Department of Animal Science, Iowa State University, Ames, Iowa, "Effects of Type of Dietary Fat on Lipid and Glucose Metabolism in Pigs."

Each Honored Student will receive a complimentary registration for the meeting as well as funds to defray housing and travel expenses.

Placement Center

The 14th AOCS Placement Center will be conducted during the annual meeting to be held May 14–18, 1986, in Honolulu, Hawaii.

The center is designed to bring together employers and job applicants in subject areas served by AOCS.

Job applicants should submit resumes on the form printed in this issue of *JAOCS*. Applicants who will attend the meeting may request that their names and addresses be kept confidential through the use of code numbers. Resumes of applicants unable to attend the meeting cannot be kept confidential.

Employers also are requested to use the form printed in this issue of *JAOCS*. All forms will be posted in the placement center. If an employer or company wishes anonymity, a code number will be assigned. Employers who are unable to attend the meeting but are seeking new employees are encouraged to submit job listings.

Forms from applicants and employers should be mailed to arrive at the AOCS office in Champaign before April 18, 1986. There is no charge to applicants who are AOCS members or to student nonmembers who register and submit applications before April 18; there is a $10 fee for nonmembers who register by April 18 and $25 for nonmembers who register after April 18. There is no fee to employers listing jobs. No one will be allowed to participate in the placement center without a meeting registration badge. Job applicants and employers should check at the placement center in Honolulu for final instructions after picking up their registration materials.

SHORT COURSE

Food uses of protein

The tentative program for the AOCS Short Course on Food Uses of Whole Oil and Protein Seeds has been announced by short course chairmen E. W. Lusas, Texas A&M University; Wai-Kit Nip, University of Hawaii, and D. R. Erickson, the American Soybean Association.

The short course is designed to provide a comprehensive review of the food uses, with minimum processing, of oilseeds, legumes and nuts. The short course will be held May 12–14, 1986, at the Sheraton Makaha on the island of Oahu in Hawaii. Registration fee is $300.

Participants may pick up registration materials from 5 to 7 p.m., Sunday, May 11, at the Sheraton Makaha. The tentative technical program:

Monday, May 12

Session I, Chairman, Dr. David Erickson, American Soybean Association, St. Louis, Missouri

- Introduction by Dr. Erickson
- World Soybean Production, Availability and Variety Difference, Dr. Keith J. Smith, American Soybean Association, St. Louis, Missouri.
- General Uses of Whole Soybean (Fresh Vegetables, Canned, Snacks, Soy Butter, Active and Deactivated Full-Fat Flours), Dr. Dale W. Johnson, Food Ingredients Inc., Golden Valley, Minnesota.
- Principles of Soy Milk Production, Dr. Steven Chen, American Soybean Association, Taipei, Taiwan.
- Review of Soymilk Processing by Manufacturers' Representatives, with presentations invited by Alfa Laval, Sweden; Cherry-Burrell Corp., United States; Eden Foods, United States; Tetra Pak Inc., United States; Stork, Hong Kong or United States; STS-Soya Technology Systems, Singapore; and Takai, Tofu and Soymilk Equipment Co., Japan.

Buffet lunch and display of soy processing equipment.

Session II, Chairman, Dr. Wai-Kit Nip, Department of Food Science and Human Nutrition, University of Hawaii, Honolulu, Hawaii

- Production and Uses of Soybean Sauces, Dr. Shin-ichi Sugiyama, Kikkoman Foods Inc., Walworth, Wisconsin.
- Uses of Common Dry Field Beans (Navy, Pinto, Black, Kidney, etc.), speaker to be confirmed.
- Uses of Pulses in West Asia and North Africa, L. C. Hawtin, International Development Research Center, University of

Biophysical Characterization of Dietary Lipid Influences on Lymphocytes • Dorothy A. Adams, Sara J. Freauff, and Kent L. Erickson

Microsomal UDP-Glucuronyltransferase as a Probe of Its Lipid Environment • David Zakim and Yehosua Hochman

Photolabeling from Inside the Membrane Reveals Factors Affecting Protein Insertion • Bernadine J. Wisnieski and Leora S. Zalman

Permeation of Amphiphilic Solutes Across Lipid Bilayers • John Bramhall

Fatty Acids, Monoglycerides and Sucrose Esters as Anticaries Agents Review • Rachel A. Schemmel and J.J. Kabara

Effect of Monoglycerides on *Mycoplasma pneumoniae* Growth • Ronald D. Fletcher, Ann C. Albers, John N. Albertson, Jr., and Jon J. Kabara

Antimicrobial Properties of Lauricidin in Mechanically Deboned Chicken, Minced Fish and Chicken Sausage • Robert C. Baker, Winnie Poon, Donna Kline, and Dharam V. Vadehra

Effect of Dietary Lecithin on Lipid Metabolism in Rats • M.L.W. Chang and M.A. Johnson

Influence of Bond Location on the Effectiveness of Acyl Chains • William E.M. Lands

Investigations on Lipik Associations Using Myelin Tube Formation • Eugene Neuzil, Jeanne Fourche, and Helene Jensen

The Mode of Action of Cholesteryl 14-Methylhexadecanoate in Protein Synthesis • Zdena Tuháčková and Jan Hradec

Effects of Fatty Acids on Intestinal Transport • Helmut V. Ammon

Comparison of Antibacterial Properties of Lauricidin® and BHA Against Antibiotic Resistant and Sensitive Strains of *Staphylococcus aureus* and *Pseudomonas aeruginosa* • D.V. Vadehra and V. Wahi

Neutralization of Antibacterial Properties of Lauricidin® and BHA by Tweens • D.V. Vadehra, V. Wahi, J. Keswani, and P.J. Asnani

Effects of Fatty Acid Derivatives on the Release of Extracellular Enzymes from Bacteria • J.R. Chipley, P.T. Todd, F. Atchley, and J.J. Kabara

The Inactivation of Bactericidal Fatty Acids by an Enzyme of *Staphylococcus aureus* • Frank A. Kapral and Joel E. Mortensen

Amphiphilic and Proteolytic Activation of *E.coli* Pyruvate Oxidase • Gary B. Leisman, Michael A. Recny, John S. White, and Lowell P. Hager

The Significance of Lipids of Scotochromogenic Mycobacteria for Their Identification, Taxonomy and Immunostimulating Properties • M. Mára, J. Julák, Z. Miková, and C. Michalec

The Subcellular Site of the Cholinergic Breakdown of Phosphatidylinositol: Implications on the Mechanism of Calcium Influx in the Parotid • Yoram Oron, Etta Nadler, and Moncia Lupu

Effect of Phospholipids on the Control of Nuclear DNA Template Restriction • Francesco A. Manzoli, Nadir M. Maraldi, and Silvano Capitani

Biological Effects of Lipid Peroxides: Lipid Peroxication Hypothesis of the Etiology of Multiple Sclerosis • Hubert S. Mickel

Four Hypoglycaemic Compounds That Inhibit ß-Oxidation: 2[5(4-Chlorophenyl) Pentyl] Oxirane-2-Carboxylate (POCA), Hypoglycin, Pent-4-enoate and Valproate: A Comparison of Their Mechanisms of Action • H.S.A. Sherratt, K. Bartlett, and D.M. Turnbull

Examinations on Antitumor, Immunological, and Plant-Growth Inhibitory Effects of Monoglycerides of Caprylic, Capric, and Lauric Acids and Related Compounds • Jon J. Kabara, Masanori Ohkawa, Tetsuro Ikekawa, Tatsuhiko Katori, and Yoshihiro Nishikawa

Antitumor and Antileukemic Properties of Synthetic Alkyl-Lysophospholipids (ALP) in Vitro • Wolfgang E. Berdel, Ulrich Fink, Michael Fromm, Bernd Egger, Anneliese Reichert, Kurt S. Zanker, and Johann Rastetter

Final Report on a Combined Intravenous/Oral Phase I Pilot Study of the Alkyl-Lysophospholipid Derivative ET-18-OCH_3 • Wolfgang E. Berdel, Ulrich Fink, Gaby Weiss, Hans P. Emslander, Ingeborg Wüst, Jack Nisenbaum, Ekkehard Thiel, Rudolf Babic, Wolfgang Gössner, Johann Rastetter, and Hans Bloemer

Inhibition of *Staphylococcus aureus* in a Model Sausage System by Monoglycerides • Jon J. Kabara

Regulation of Hepatic Cholesterogenesis by Exogenous Cholesterol Investigated with ^{3}H-Desmosterol Tracer • Edward H. Goh

Recent Trends in Usage of Fats and Oils as Functional Ingredients in the Baking Industry – Nutritive Value • Okkyung Kim Chung and Yeshajahu Pomeranz

British Columbia, Vancouver, Canada.
•African Uses of Cowpeas, Pigeon Peas and Local Protein and Oilseeds, Dr. Bene W. Abbey, University of Port Harcourt, Port Harcourt, Nigeria.

Tuesday, May 13

Session III, Chairman, Dr. Nip
•Manufactured Peanut Products and Confections, Dr. Clyde T. Young, North Carolina State University, Raleigh, North Carolina.
•Native Use of Peanuts, Dr. Esam M. Ahmed, University of Florida, Gainesville, Florida.
•Preparation and Uses of Confectionary Sunflower Seed, Julie Henderson, National Sunflower Association, Bismarck, North Dakota.
•Food Uses of Glandless Cottonseed, Dr. Edmund W. Lusas, Food Protein Research and Development Center, Texas A&M University, College Station, Texas.
•Food Uses of Tropical Nuts and Palm Fruit, Dr. Bluebell Standal, University of Hawaii, Honolulu, Hawaii.
•Food Uses of Coconuts in the Pacific, Nao Wenkam, University of Hawaii, Honolulu, Hawaii.
•Processing and Utilization of Sesame, Billy Green, Sesame Products Inc., Paris, Texas.

Lunch

Session IV, Chairman, Dr. Lusas
•World Uses of Dry Field Peas and Lentils, Dr. Dick L. Auld, University of Idaho, Moscow, Idaho.
•Sprouted Seed Foods, speaker to be confirmed.
•Control of Antinutritional and Toxic Factors in Oilseeds and Legumes, Dr. Irvin E. Leiner, University of Minnesota, St. Paul, Minnesota.
•Nutritional Considerations Relating to Vegetable Protein Diets, Dr. C. E. Bodwell, USDA Protein Nutritional Laboratory, Beltsville, Maryland.
•Nutrition Progress in Vegetable Protein Diet Societies, Dr. Osman Golal, Nutrition Institute, Cairo, Egypt.
•Changing Food Styles and Vegetarianism in Industrial Nations, Dr. Oliver Miller, Loma Linda Foods Co., San Antonio, Texas.

Organizers tentatively have scheduled a "native foods" banquet for Tuesday evening, May 13. Organizers also are arranging visits to local food processing firms for Wednesday morning, May 14, as registrants are bused to Honolulu. Short course registrants who also will attend the joint meeting of the American Oil Chemists' Society and the Japan Oil Chemists' Society will arrive at the Hilton Hawaiian Village in ample time Wednesday afternoon, May 14, to pick up registration materials and attend the opening mixer that evening.

Hydrogenation colloquium

Theoretical and practical aspects of hydrogenation will be thoroughly explored during a May 11–13, 1986, colloquium to be held at the Turtle Bay Hilton Hotel on the island of Oahu in Hawaii.

Participants will gain a better understanding of their hydrogenation operations, toward a goal of being able to improve those operations. The program will consist of discussions, lectures and question-and-answer sessions.

The session on theory of hydrogenation will be led by Robert Allen, internationally known hydrogenation researcher, and Lyle Albright of Texas A&M University. The two are preparing for a presentation of about two hours that will, in the words of colloquium organizer Robert Hastert, "begin with the basics and work its way up through the most sophisticated and far-out."

The session on catalysts and their performance characteristics will include presentations on nickel catalysts by Allen, Albright and

H. B. W. Patterson of Bebington, Merseyside, England. Patterson has completed 40 years' work with Unilever, responsible for many large processing plants, especially in the fields of refining and hydrogenation. T. L. Mounts of the USDA Northern Regional Research Center in Peoria, Illinois, will discuss non-nickel catalysts.

Patterson and James Oldshue of Mixing Equipment Co. Inc. in Rochester, New York, will be the core faculty for a session on equipment, engineering design and processing. Oldshue is an internationally known specialist in mixing. He has participated in seminars in Europe, Australia, Asia, South America and Africa. He is a past president of the American Institute of Chemical Engineers and is presently serving as AIChE treasurer. Oldshue will discuss mixing; Patterson will focus on equipment design and operation. Other specialists are being invited to be members of the discussion panel for this session.

Details still are being worked out for the presentation on feedstock, as well as what other topics should be included. Persons expecting to attend the colloquium are encouraged to contact Hastert at Harshaw/Filtrol Partnership, 30100 Chagrin Blvd., Cleveland, OH 44124, to suggest topics.

The program will be held on Sunday, May 11, and Monday, May 12. As the AOCS-JOCS joint meeting does not begin until Wednesday, May 14, persons planning to attend both events will have a free day.

SHORT COURSE

Physical chemistry

Specialists from seven nations will form the faculty for the AOCS Short Course on Physical Chemistry of Fats and Oils to be held May 12–14, 1986, at the Turtle Bay Hilton on the island of Oahu in Hawaii.

The short course was organized by David N. Holcomb, manager of basic food science at the Kraft Inc. R&D facility in Glenview, Illinois. Short course cochairmen are Niels Krog of Grindsted Products A/S in Brabrand, Denmark, and Kiyotaka Sato of Hiroshima University, Japan.

Tentative speakers and topics include:

John M. de Man, University of Guelph, Canada, Physical Properties of Fats and Oils, An Overview.

Marvin A. Tung, University of British Columbia, Canada, Rheological Principles with Applications to Fats and Oils.

Philip Sherman, Queen Elizabeth College, England, Newer Methods for Evaluating Viscoelastic Properties of Fat Systems (Emulsions).

William R. Croasmun, Kraft Inc., United States, Principles of NMR with Applications to Fats and Oils.

Peter J. Wan, Anderson Clayton Foods, United States, Principles of DSC with Applications to Fats and Oils.

Wolfgang Buchheim, Institut für Chemie und Physik der Bundesanstalt für Milchforschung, Germany, Microscopy of Fats and Oils Including TEM and SEM.

Speaker to be confirmed, X-Ray Diffraction Analysis of Fats and Other Lipids.

David B. Min, Ohio State University, United States, Polymorphism of Fats: An Overview.

Kiyotaka Sato, Hiroshima University, Japan, Crystallization Behavior of Polymorphs of Fats and Fatty Acids.

Jens Birk Lauridsen, Grindsted Products A/S, Denmark, Chemical Structure and Polymorphism of Surface Active Lipids.

Dr. Kobayashi, Osaka University, Japan, Modern Spectroscopic Methods in the Study of Polymorphs of Fats and Fatty Acids.

Dr. Garti, Casali Institute of Applied Chemistry, Israel, Surfactant Additives in Confectionary Fats.

Wolfgang Buchheim, Ultrastructural Characterization of Interfacial Layers in Oil-in-Water Emulsions.

James W. Hagemann, USDA Northern Regional Research Center, United States, Computer Modeling of Polymorphic Phase

Transitions in Triglycerides.

Niels Krog, Grindsted Products A/S, Denmark, Interactions of Surface-Active Lipids with Water, Protein and Starch Components in Food Systems.

Philip Sherman, Interactions of Glycerides with Proteins at Interfaces in Emulsions.

Speaker to be confirmed, Lipid-Protein Interactions.

Drs. Holcomb, Krog and Sato, summary and discussion.

Registrants will gain an understanding of how molecular properties influence the functionality of fats and oils and their interactions with other product ingredients. This would involve such consumer products as margarines, shortenings, salad dressings and others involving emulsifiers in oil-based systems.

SHORT COURSE

Marine lipids

Speakers have been named for the AOCS Short Course on Marine Lipids and Eicosapentaenoic Acid (EPA) to be held May 11-14, 1986, at the Sheraton Royal Waikoloa Hotel on the big island of Hawaii.

Dr. Robert Ackman of the Technical University of Nova Scotia, Canadian Institute of Fisheries Technology in Halifax, Nova Scotia, Canada, is organizer of the event.

Topics and speakers will be:

Photosynthesis, food chains, basic lipids classes and fatty acids, M. T. Clandinin, University of Alberta, Edmonton, Alberta, Canada.

Fish groups, the fishing industry and fish processing for food, Robert Ackman, Technical University of Nova Scotia, Halifax, Nova Scotia, Canada.

Fish farming and aquaculture—can we modify fish fat with more EPA?, Mitsu Kayama, Hiroshima University, Fukuyama, Japan.

Fish oil types, production, hydrogenation, use in the fats and oils industry, stability, Jean-Louis Sebedio, INRA Station de Receherches, Dijon Cedex, France.

Plans for utilization of fish oils and fractions, safety and quality, J. D. Joseph, National Marine Fisheries Service, Charleston, South Carolina, United States.

Clinical experience with Max-EPA, R. Saynor, Northern General Hospital, Sheffield, England.

Marine biochemicals and prostanoids, speaker to be confirmed.

Fish in the human diet—quantities and varieties, geography, shellfish and cholesterol, R. A. Gibson, Flinders Medical Centre, Bedford Park South, Australia.

Biochemistry of AA, EPA and DHA: the linoleic/linolenic acid balance and vegetable sources, W.E.M. Lands, University of Illinois, Chicago, Illinois, United States.

Other aspects of fish oils—peroxides, cancer, aging, autoimmune disease, K. K. Carroll, University of Western Ontario, London, Ontario, Canada.

Analytical techniques for lipids and fatty acids, Ackman.

Open discussion, all speakers and registrants.

The short course will end in time for participants to travel to Honolulu for the opening mixer on Wednesday evening, May 14, for the American Oil Chemists' Society-Japan Oil Chemists' Society joint meeting.

Antioxidant meeting

An international symposium on the use of antioxidants, their activity and chemical reactions with foods and dietary levels from various sources will be held April 21-23, 1986, at the Loew L'Enfant Plaza Hotel in Washington, D.C., under sponsorship of the Antioxidant Technical Committee of the International Life Science Institute-Nutrition Foundation.

Speakers from the United States, Japan, Canada, Britain, Germany, Italy, Belgium and Denmark will be among those discussing general toxicity, carcinogenicity and genotoxicity of BHA, BHT, propyl gallate, tocopherol and TBHQ. Major panel discussions will consider the mechanism of carcinogenicity of BHA and risk assessment associated with use of antioxidants in foods.

Technical sessions and topics include: Technological Needs and Safety of Food Antioxidants: necessity of antioxidants; methodology for studying antioxidant activity; mechanism of action; chemical reactions with food components; lipid oxidation products in food; EEC approach to antioxidants; Canadian and U.S. intake; toxicology of tocopherols, gallate, TBHQ; and toxicology of vitamin E in rats. Carcinogenicity Studies of Antioxidants: BHT chronic study in rats; phenolic antioxidants as carcinogenesis inhibitors/promoters; mutagenicity and carcinogenicity of lipid oxidation products; early markers of forestomach cancer in the rat; review of forestomach carcinogens and possible mechanism of action; mechanistic studies with BHT; carcinogenic potential of D-mannitol and propylgallate; and mechanism of tumor promotion by phenolic antioxidants. Antioxidants' Chemical and Biological Properties Used in Risk Assessment: toxicological relevance of metabolism; metabolism of BHA in the rat; levels of antioxidants in human and animal adipose tissue; genotoxicity studies on antioxidants; pathology of BHA- and BHT-induced lesions; biological parameters of effects of BHA and other antioxidants in rats—Canadian and European studies; Canadian monkey study of BHA; FDA dog study of BHA; Japanese study in beagle dogs; and BHA study in pigs. Panel discussions will be held after the presentations are completed.

Preregistration deadline is March 14. Registration forms are available from Elaine Auld, International Life Science Institute-Nutrition Foundation, 1126 16th St. NW, Suite 111, Washington, D.C. 20036.