



Newsline

International Union of Food Science and Technology Newsletter



IUFoST

President

Prof. Dr. Ing. W.E.L. Spiess
Germany

Secretary-General/Treasurer

Judith S. Meech
522 Maple Avenue
Oakville, Ontario
Canada L6J 2J4
Tel +1 905 815 1926
Fax +1 905 815 1574
e-mail: iufost@inforamp.net

President-elect

Alan Mortimer
Australia

Past President

Prof. P.A. Biacs
Hungary

Scientific Council Chair

Dr. D.R. Lineback
USA

Governing Council

Prof. G. Campbell-Platt
UK

Prof. F.E. Escher

Switzerland

Prof. T-W Kwon

Korea

Dr. F. Lajolo

Brazil

Dr. K. Mårtensson

Sweden

Ing. E. Mendez

Mexico

Prof. Dr. F.G. Winarno

Indonesia

Reproduction of material in Newsline is invited, with acknowledgement to IUFoST, all enquiries to the Secretary-General.

Home Page:

<http://www.inforamp.net/~iufost>

**SEPTEMBER/
OCTOBER 2000
Number 47
ISSN 0159-4419**

Subscriptions for Libraries and Institutions are US\$ 95 per year. Published three times per year. Submit articles for consideration to:

Judith S. Meech
Newsline Editor
522 Maple Avenue
Oakville, Ontario, Canada
L6J 2J4
Fax +1 905 815 1574
e-mail: iufost@inforamp.net

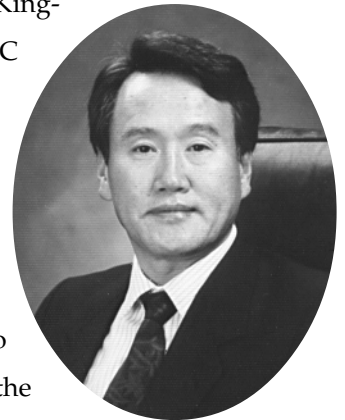
EDITORIAL:

**PROF. SI MYUNG BYUN,
KoSFoST PRESIDENT 2001**

AN INVITATION

On behalf of Korean Society of Food Science and Technology (KoSFoST), the host of the 11th World Congress of Food Science and Technology in Seoul, Korea in April of 2001, I am very pleased to introduce to you the nation and the Society.

Korea is known as the "Land of the Morning Calm", an expression that comes from the *Choson*, the name of Korea's first Kingdom founded by the legendary *Tan-gun* in 2333 BC and lasting until 108 BC, and the last kingdom, which lasted from 1392 to 1910. *Cho* means "morning" and *son* means "bright". The "bright morning" conjures up images of the sun rising over the rice paddies and burning off the wisps of fog in the mountains, a time to be calm and to refresh the spirit before the vigors of the day in the ever-moving, ever-dynamic Korea.



The Korean Peninsula adjoins China in the northwest, while Japan lies to the southeast. Korea encompasses 222,154 square kilometers - almost the same size as Britain or Romania. Throughout history, this geopolitical location has led to much hardship for Korea, including Japan's colonial rule (1910-1945), the tragic division of the land into South and North Korea at the end of World War II, and the devastating Korean War (1950-1953). Nevertheless, thanks to the successful implementation of a growth-oriented economic policy from the 1960s, Korea has achieved remarkable economic development, which has become known as "the Miracle on Hangang River."

With the international exposure of the 24th Summer Olympics, hosted in Seoul in 1988, Korea's economic achievements and the richness of its unique culture were revealed to the world. Once again, in recognition of its soccer prowess, Korea was chosen to co-host the 2002 World Cup. The Korean people by tradition love soccer. More recently, Korea's continued economic achievement was evidenced by its membership in the OECD and WTO in 1996. While Korea was hit hard by the Asian financial crisis in late 1997, it is now well on the road to recovery as a result of the indefatigable spirit of the Korean people.

Korea is thus striving to emerge as an exemplary member of the global community by actively opening its markets and welcoming foreign investment into the country. Moreover, considerable efforts are being exerted to attract wider attention to its traditional culture and arts, which uniquely reflect Korea's history of several thousand years.

KoSfOST was founded 32 years ago in June 1968. At that time, the growth-oriented economic policy of Korean Government had just been implemented and the nation's food industries were still very poor. There were no Food Science Departments in colleges or universities until 1961. Food science and technology was covered at Departments of Agricultural Chemistry, Nutrition or Home Economics.

Nevertheless, the Society's avowed purpose was to promote the development of the nation's food science and technology and food industries as well. In particular, the Society has strongly promoted close cooperation between academia and industry. The environment has become steadily supportive, as the nation has achieved "the Miracle on Hangang River". What is fascinating about Korea is that it has a long history of more than 5,000 years old and we have well harmonized the taste of foods through history.

Currently the Society includes over 1400 individual and 60 industrial group members. The Society is a charter member of IUFOST. The Society publishes three kinds of publications: Food Science and Biotechnology (English); Korean Journal of Food Science and Technology (Korean); and Food Science and Industry (Korean).

With the new millennium ahead, the Society is very pleased to host IUFOST Congress XI with the theme "Paradigm Shift - Harmonization of the Eastern and Western Food Systems". The scientific program is compiled and the concurrent exhibition is engaged with strong sponsorships from public and private sectors. A promising provisional technical program is planned with 8 plenary lectures, 41 symposia, 6 round table discussions, 14 poster sessions, student fellowship presentation and 5 pre-congress short courses. For the Seoul International Food Technology Exhibition, over 500 companies will be exhibiting products and services relevant to food science and technology. Emphasis is on regional topics in preparing the programs. We believe we have a long historical tradition in fermented foods, functional foods and Oriental foods. Among other important issues of food science and technology, we have chosen specially these topics for the Pre-Congress

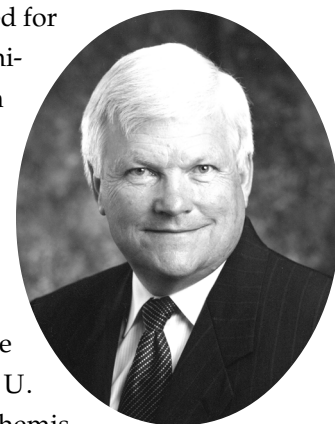
Internet Conference, and thereafter the major outcomes will be presented at the Congress. In such a manner, it is hoped that this Congress will serve as a turning point of the theme for future studies on foods.

We are prepared to make IUFOST Congress XI a most remarkable and interesting event. I invite you to visit Korea next year and enjoy the taste of Korean traditional foods, culture and history. Above all, I welcome you to Korea. □

PROFILE:
PROF. DAVID R. LINEBACK

Dave grew up in the small town of Liberty, Indiana,

USA and attended a nearby rural public school where his parents taught. After obtaining a B.S degree in chemistry from Purdue University, he worked for about nine months in an organic chemistry laboratory with Monsanto at Dayton, Ohio prior to reporting for duty in the U. S. Army where he served for 21 months in the artillery and chemical corps. This was followed by a Ph.D. degree from Ohio State University where he worked with Professor M. L. Wolfrom in synthetic and structural carbohydrate chemistry. An opportunity then arose to join the laboratory of Professor R. U. Lemieux in the Department of Chemistry at the University of Alberta, Edmonton, Canada, for a postdoctoral fellowship in the physical organic chemistry of carbohydrates. Two wonderful years were spent in an international environment of outstanding individuals intermingling research with discussions of science, international politics, and culture.



After writing over 90 colleges and universities about employment opportunities, an offer was received to join the faculty in the Department of Biochemistry and Nutrition at University of Nebraska, Lincoln, USA. Dave's research initially focused on characterization of the glucoamylases that were being used commercially. An opportunity to join the faculty of the Department of Grain Science and Industry at Kansas State University as Associate Professor occurred five years later. During the following seven years, in which he was promoted to Professor, Dave developed a research program in starch science, with an emphasis on starch structure and functionality in

food products, and taught courses in food analysis and in enzyme applications. Dave's first administrative and international experiences occurred at Kansas State University when he was named Assistant Department Head - Instruction. He also assumed responsibility for an international program involving graduate students who did the research portion of their Ph.D. degrees at the Central Food Technological Research Institute, Mysore, India and the Institute for Food Research and Product Development, Kasetsart University, Bangkok. Involvement in international activities has continued since then.

From Kansas State University, Dave moved to Pennsylvania State University to become Professor and Head of the newly formed Department of Food Science. Just over four years later, he accepted a position as Professor and Head, Department of Food Science, North Carolina State University, Raleigh, where he spent the next 13 years. In 1993, he was offered the position of Dean, College of Agriculture, University of Idaho, Moscow where he had responsibilities for teaching, research, and extension (outreach) programs in agriculture. He accepted his current position as Director of the Joint Institute for Food Safety and Applied Nutrition (JIFSAN) at the University of Maryland, College Park, in November 1998. JIFSAN is a multidisciplinary research, education, and outreach program, with domestic and international components, operated as a cooperative venture between the U.S. Food and Drug Administration (FDA) and the University of Maryland. Public/private partnerships form the base for JIFSAN's programs to provide the scientific basis for a safe, wholesome, food supply. Experts from industry, consumer and trade groups, international organizations, government, and academia pool their resources and ideas to achieve the goals of JIFSAN's programs.

Throughout his career, Dave has been involved in professional societies. He has been President of the American Association of Cereal Chemists (AACC), the Institute of Food Technologists (IFT), and the Council for Agricultural Science and Technology (CAST). He was elected to the Governing Council of the International Union of Food Science and Technology (IUFoST) in 1999 where he serves as Chair of the Scientific Council and as a member of the Management Committee. He was elected a Fellow of the International Academy of Food Science and Technology in 1999, and also is a Fellow of the Institute of Food Technologists and of the Institute for Food Science and Technology (IFST, UK). He has received the Geddes

Memorial Award, American Association of Cereal Chemists, Carl R. Fellers Award, Phi Tau Sigma and Institute of Food Technologists, selected to participate in the Purdue University "Old Masters" program, and the Special Award of Merit (Gold Medal), Japanese Society of Starch Science (now Japanese Society of Applied Glycoscience).

Dave has presented invited seminars, participated in and organized scientific meetings, or presented short courses in 16 countries. Additional international involvement includes serving as Chair, Joint FAO/WHO Expert Consultation on Carbohydrates in the Human Diet, Rome, 1997; opening address, UAE University/FAO Regional Conference on Higher Agricultural Education in the Near East Region, UAE University, United Arab Emirates, 1995; administered Kansas State University USAID 211 (d) program in India and Thailand, 1971-1974; one-month assignment to the University of Peradeniya, Sri Lanka in 1980 to assist in developing food science curriculum, equipment, and facilities; and visits to the Peoples Republic of China in 1983, 1993, and 1994 with an emphasis on food science development.

Dave and his wife, Pat, have three children and five grandchildren. When time allows, he enjoys reading and playing golf. □

NEWS FROM POLAND

PROFESSOR FRANCISZEK KLUZA

CORRESPONDENT

Among numerous conferences, symposiums, seminars, exhibitions and other meetings resulting from the activity of Polish scientists and practitioners in the field of food science and technology, The International Exhibition of Food Ingredients Central & Eastern Europe held from 9-11 May 2000 in Warsaw was really worthy of notice. The Exhibition was accompanied by an international scientific conference organized by the Polish Food Technologists Society (PFTS).

There were 152 companies from 31 countries, including USA, Japan, UK, and Germany that participated in the international exhibition FI Central & Eastern Europe. Moreover, many potential contracting parties from Russia, Ukraine and other countries from the former eastern block visited the exhibition.

Advances in processing, application and promotion of ingredients were assessed by the international committee of Prof. P. Biacs, Prof. H. Reimerdes, Prof. A. Rutkowski who awarded prizes for new products (International Finished Food Award) and quality improvements of ethnic foods.

The international conference accompanying the exhibition looked at new initiatives in development of food ingredient application in three basic spheres: ingredient effect on food tastiness (taste components typical of authentic food ethnical beverages and potentials for their industrial production, significance and technology of vegetable fermentation), food texture (importance of food emulsions and selection of emulsifiers and stabilisers, phospholipide function, food emulsion flavouring and their industrial production conditioning), functional food (probiotic products, probiotic starter cultures in fermented sausages, Se-enriched fermented beverages, mineral enriched yeast biomass, new products and technologies).

A significant event during the conference was the meeting on cooperative activities between representatives of the German Food Technologists Society (GDL) and the Polish Food Technologists Society. This meeting resulted in an agreement on areas of cooperation between the two societies. The agreement, signed by Prof. N. Barylko-Pikielna on behalf of Poland and Prof. H. Buckenhueskes for Germany, covers mutual exchange of experience in food science and technology as well as mediation in professional contacts between Polish and German members and institutions of science and industry. Other aspects of the agreement also include mutual release from membership fee for both Society presidents, exchange of professional journals, organization of common scientific conferences with members of both societies and a special focus on education. □

POOR STORAGE HAMPERS AFRICA'S FOOD EFFORTS

**CHARLES JOWI
KENYA CORRESPONDENT**

Four out of every 10 tonnes of food grown in east, central and southern

Africa is lost due to poor post harvest storage according to a 4-day regional workshop on food security and safety action plan held in Nairobi recently.

The Vice Chancellor of Jomo Kenyatta University of Agriculture and Technology, Prof. Ratemo Michieka, said that countries in the region had to urgently evolve better ways of handling agricultural produce if they were to effectively tackle the twin blights of poverty and hunger on the continent.

“Our countries have great potential in attaining self-sufficiency. But I believe we have to practice good post harvest techniques. This way, half of our problems would be solved,” he said.

The Vice Chancellor challenged researchers in Africa to formulate cost-effective and viable options to stem the problem of storage that severely put a lid on food production.

The forum sponsored by the Japan International Cooperation Agency and hosted by JKUAT, brought together over 30 delegates from Uganda, Tanzania, Rwanda, Ethiopia, Zimbabwe and Zambia.

The dean of the faculty of Agriculture-JKUAT proposed harnessing traditional storage techniques. “There is need to re-engineer some of the folk methods to ensure their relevance, wider adaptability and cost effectiveness,” he said.

The dean said that food security and safety would remain, however, elusive unless countries put in place the necessary infrastructure for transportation from surplus to deficit areas and exchange of information.

The workshop came at a time when the region and Kenya particularly is in the throes of the spectre of unrelenting famine. □

20TH ANNIVERSARY OF THE RAPID MICROBIOLOGY WORKSHOP

PROFESSOR DANIEL FUNG

From July 6 to July 14, 2000, a total of 185 scientists from 20 countries and 25 states celebrated

the 20th Anniversary of the International Workshop on Rapid Methods and Automation in Microbiology at Kansas State University, Kansas, USA. The celebration involved a three-day mini-symposium with 20 US and international speakers including scientists from France, Germany, Hungary, Brazil, Australia, Thailand, Belgium, and Canada who gave stimulating and timely lectures on rapid methods and food safety issues.

Dean O. Cliver of KSU delivered the Paul A. Hartman Memorial Lecture entitled “Detecting Viruses and Protozoa-the ‘Other Foodborne Disease Agents’”. The rest of the week was devoted to lectures and hands-on activities in all aspects of rapid detection of microbes in foods, clinical, industry, and environmental samples. A gold medallion was struck for the occasion.

The 21st workshop will be held from July 6 - 13, 2001, and the Paul A. Hartman Memorial Lecture will be delivered by Larry Beuchat on “Rapid Detection of Foodborne Pathogens in Fresh Produce”. Daniel Y.C. Fung is the initiator and director of the workshop since 1980. □

ADHERING BODY PROFILE
THE EGYPTIAN SOCIETY OF FOOD
SCIENCE AND TECHNOLOGY
PROFESSOR AHMED GIBRIEL
CORRESPONDENT

The Egyptian Society of Food Science and Technology was established on June 6, 1968. The Society's geographic area of activity is within Egypt, in collaboration with Arab countries, as well as on an international level whenever possible. Our objectives are mainly the advancement and development of food science and technology by all means available. The society encourages research projects and provides members with means of discussing and publishing research work carried out within their institutes. The society also tries to secure means of free exchange of information and ideas among all scientists and professionals from universities, research institutes and food industry centres, tourism industry, and many other related disciplines.

The society also plays an important role in raising the educational level in our area of interest. The society is trying to fulfill these aims through:

- Invitations to regular meetings, symposia, conferences.
- Strengthening cooperation and scientific exchange among workers in the field of food science and technology at the national, Arabic countries and international levels.
- Providing scientific advice and help to national food industry organizations whenever possible.
- Publishing regular issues of "The Egyptian Journal of Food Science and Technology" which is the official scientific journal of the society.

This Journal accepts submitted contributions on both national and international levels.

The Egyptian Society has organised the following activities:

- The 1st National conference on Food Science and Technology held in Cairo, 1974.
- The 1st Arabic conference on Food Science and Technology held in Cairo, 1976.
- The 2nd Arabic conference on Food Science and Technology held in Riyadh, Saudi Arabia.
- The 1st International conference on New Developments in Food Science and Technology held in Cairo, 1981.
- The 1st African conference on Food Science and Technology held in Cairo, 1983.
- Two conferences on Food Science and Technology

of the Mediterranean countries held in Cairo: 1986, 1989.

- 3rd, 4th, 5th, and 6th Arabic conferences on Food Science and Technology held in Cairo: 1990, 1991, 1993 and 1999 respectively.
- 1st, 2nd and 3rd conferences on Food Science and Technology in the service of tourism held in Cairo: 1987, 1994 and March 2000. □

NEWS FROM VENEZUELA
CYTED PROJECTS

PROF. MARÍA S. TAPIA
CORRESPONDENT

Greetings from Caracas! We are happy to inform you that the inter-

national coordination of a new CYTED project has been awarded to Venezuela, in the Instituto de Ciencia y Tecnología de Alimentos, Facultad de Ciencias, Universidad Central de Venezuela.

CYTED is the Spanish acronym for "Science and Technology for Development," an Ibero-American Scientific and Technological Cooperation Program created in 1984 in Spain as an international and multilateral program within the framework of the Inter-Institutional Agreement between the 21 Ibero-American countries. Organisations such as BID, CEPAL, OAS, and UNESCO participate as observers. The general objective of the CYTED program is the promotion of cooperation in the field of applied research and technological development and innovation, to achieve scientific and technological goals transferable to productive systems, coordinating existing resources through the linking of universities, research and development centers and regional industries. Also, its purpose is to adapt to the social policies of Ibero-American countries in order to help them achieve productive modernization and the enhancement of their life standards, acting as a bridge for the cooperation between Latin America and Europe.

CYTED's subprograms include several areas of knowledge; food preservation is one of them. Within this subprogram, CYTED has promoted and carried out nearly 16 pre-competitive research projects. This new project is titled "Emerging Technologies for Preservation of Foods Important to Ibero-America". As we know, processes that involve extensive heating of foods inactivate microorganisms while altering nutrients and sensory attributes. These negative effects are common to most other food preservation techniques (low a_w by dehydration or high salt or sugar content, low pH, refrigeration, freezing, etc), if

(cont'd page 8)

INTERNATIONAL EVENTS OF INTEREST

2000

NOVEMBER 8-10 2nd Int'l. Symposium on Food Packaging, Vienna, Austria. Contact: ILSI-Europe, Avenue E Mounier, 83-Box 6, B-1200 Brussels, Belgium. Tel: +32 2 771 0014, Fax: +32 2 762 0044, e-mail: Anh@ilsieurope.be.

NOVEMBER 19-22 7th ASEAN Food Conference 2000, Metro Manila, Philippines. Contact: Food Processing Division, Industrial Technology Development Institute, DOST Compound Gen Santos Avenue, Bicutan, Taguig, Metro Manila, Philippines, e-mail: jgbautista@pacific.net.ph, web: www.home.pacific.net.ph

NOVEMBER 20-22 Health Ingredients Europe, Frankfurt, Germany. International exhibition and conference for ingredients for health, functional and organic foods. Contact: Ivonne Twigt, Miller Freeman BV, Tel: +31 346 559444, Fax: +31 346 573811, e-mail: mbos@unmf.com, web: www.fi-events.com/hi

NOVEMBER 20-24 6th Latinoamerican Meeting of Food Microbiology and 2nd Argentinian Symposium of Food Preservation, Buenos Aires, Argentina. Contact: Congress Secretariat, Santiago del Estero 1154, 1075 Buenos Aires, Argentina, Fax: + 54 11 4306 3663, e-mail: 5061@foodcontrol.com

NOVEMBER 22-24 ICFOST-2000, Indian Convention of Food Scientists and Technologists. Mysore, Karnataka, India. Contact R. Naresh, Convenor, c/o ICFOST-2000 Secretariat; AFST (I), CFTRI Campus, Mysore 570013, Karnataka, India, Tel: +91-0821-515557; Fax +91-0821-518670, e-mail: afsti@vsnl.com

NOVEMBER 29-DECEMBER 3 Edward G. Perkins Memorial Conference, "Recent Trends in Food Lipids: Applications, Analytical Techniques and Practical Sessions." Bristol Hotel, Gurgaon, New Delhi, India. Contact Elsebeth Bisbo, IFSC A/S, P.O. Box 44, Sønderkovvej 7, DK-8520 Lystrup, Denmark Tel: +45-86-22-99-86; Fax +45-86-22-99-96, e-mail: ifsc@image.dk

DECEMBER 4-5 Food Safety Objectives (FSO-2000), Public Health, HACCP and Science, Georgetown University, Washington D.C., USA. Contact: Phillipa Orme, Tel and Fax: + 44 (0) 1235 868811, e-mail: p.orme@dial.pipex.com

EVENTS IN **RED** ARE SPONSORED BY IUFOST.

2001

JANUARY 23-26 10th Anniversary of the International Food Science Center A/S, "Consumer Health - A Challenge to the Lipid Industry." SAS Radisson Scandinavia Hotel Aarhus. Contact Elsebeth Bisbo, IFSC A/S, P.O. Box 44, Sønderkovvej 7, DK-8520 Lystrup, Denmark Tel: +45-86-22-99-86; Fax +45-86-22-99-96, e-mail: ifsc@image.dk

FEBRUARY 2-4 1st World Congress on Fetal Origins of Adult Disease. The Oberoi Towers, Mumbai, India. Contact: Alifiya S. Motiwala, SNEHA/MRC Secretariat, c/o Centre for the Study of Social Change, MN Roy Human Development Campus, Plot 6, Block F, Opp. Gov't. Colony, Bldg. 326, Bandra (East), Mumbai 400 051, India. Tel: +91-22-6516439, Fax +91-22-6516438, e-mail: mcsc@vsnl.com

MARCH 28-30 Int'l. Institute of Refrigeration, Rapid Cooling of Food. University of Bristol, United Kingdom. Contact Conference Organiser, FRPERC, Univ. of Bristol, Churchill Bldg., Langford, Bristol BS40 5DU, United Kingdom Tel: +44-117-928-9239, Fax +44-117-928-9314, e-mail: frperc-conf@bristol.ac.uk

APRIL 3-5 FI Asia -China. International exhibition and conference on food ingredients, semi-finished products, product development and quality control, Shanghai, China. Contact: Ivonne Twigt, Miller Freeman BV, Tel: +31 346 559444, Fax: +31 346 573811, e-mail: Roudejans@unmf.com, web: www.fi-events.com/asia

APRIL 22-27 11th World Congress of Food Science and Technology, Seoul, Korea, organised by KoSFoST. Contact: Korean Society of Food Science and Technology, 635-4 Yeoksam-Dong, Kangnam-Ku, Seoul 135-703, Korea. e-mail: congress2001@seoul.kosfost.or.kr, web: www.congress2001.or.kr

MAY 16-18 IFIA Japan 2001: The Future of Food in the 21st Century. Tokyo International Exhibition Centre, Tokyo, Japan. Contact E.J. Krause & Associates, Inc. at + 301 493 5500, Fax + 301 493 5705, e-mail: hart@ejkrause.com, web: www.ejkrause.com.

MAY 22-24 FI Asia. International exhibition and conference on food ingredients, semi-finished products, product development and quality control, Singapore. Contact: Ivonne Twigt, Miller Freeman BV, Tel: +31 346 559444, Fax: +31 346 573811, e-mail: Roudejans@unmf.com, web: www.fi-events.com/asia

The opinions expressed in this newsletter are the opinions of the contributors and do not necessarily represent the official position of IUFOST *Newsline* and should not be interpreted as such.

JUNE 23-27 Institute of Food Technologists (IFT) Annual Meeting, Morial Convention Center, New Orleans, Louisiana, USA. Contact: IFT, 221 N. LaSalle Street, Suite 300, Chicago, Illinois, USA 60601-1291. Tel: +1 312 782 8424, Fax: + 1 312 782 8348, e-mail: info@ift.org

JULY 6-13 International Workshop and Mini-Symposium on Rapid Methods and Automation in Microbiology XXI, Kansas, USA. Contact: Daniel Fung, Workshop Director, Kansas State University, Animal Science and Husbandry, 139 Call Hall, Manhattan, Kansas, 66506-1600, USA, Tel: + 785 532 5654, Fax: + 785 532 -5681, e-mail: dfung@oznet.ksu.edu.

AUGUST 27-31 17th IUNS International Congress of Nutrition 2001 on Modern Aspects of Nutrition - Present Knowledge and Future Perspectives, Vienna, Austria. Contact: Dr. I. Elmadfa, Institute of Nutritional Sciences, Althanstrasse 14, A-1090 Vienna, Austria, Tel: + 43 1 31 336 8213, Fax: + 43 1 31 336-773, e-mail: ibrahim.elmadfa@univie.ac.at

NOVEMBER 5-7 FI Europe. International exhibition and conference on food ingredients, semi-finished products, product development and quality control, London, UK. Contact: Ivonne Twigt, Miller Freeman BV. Tel: +31 346 559444, Fax: +31 346 573811, e-mail: mbos@unmf.com, web: www.fi-events.com/hi

NOVEMBER 13-17 2nd IUPAC-International Symposium on Sweeteners: Comprehensive Studies on Developments in the 21st Century, Hiroshima, Japan. Contact: 2nf IUPAC-ISS Secretariat, c/o Prof. Kazuo Yamasaki, Institute of Pharmaceutical Sciences, Faculty of Medicine, Hiroshima University, Hiroshima 734 8551, Japan, Tel: + 81 82 257 5285, Fax: + 81 257 5289, e-mail: yamasaki@pharm.hiroshima-u.ac.jp, web: http://hey.to/iss/

NOVEMBER 27-29 FI Central Eastern Europe, Moscow, Russia. International exhibition and conference on food ingredients, semi-finished products, product development and quality control. Contact: Ivonne Twigt, Miller Freeman BV, Tel: +31 346 559444, Fax: +31 346 573811, e-mail: Roudejans@unmf.com, web: www.fi-events.com/cee

2002

MARCH 5-7 Functional Foods 2002. Netherlands Congress Centre, Den Haag, Netherlands. Contact: Fiona Angus at Leatherhead Food Research Association, Randalls Road, Leatherhead, Surrey, KT22 7RY, United Kingdom, Tel: + 44 1372 376761, Fax: +44 1372 386 228



11TH WORLD CONGRESS OF FOOD SCIENCE AND TECHNOLOGY

PARADIGM SHIFT —
HARMONIZATION OF EASTERN AND WESTERN FOOD SYSTEMS

SEOUL, KOREA, APRIL 22 – 27, 2001

For information and to register, visit the Congress XI website at www.congress2001.or.kr, or write to: Congress Secretariat, c/o Korean Society of Food Science and Technology, 635-4 Yeoksam-Dong, Kangnam-Ku, Seoul 135-703, Korea, e-mail: congress2001@seoul.kosfost.or.kr, fax: + 82 2 553 8453"

With Congress XI in Seoul, The International Union of Food Science and Technology (IUFoST) breaks its tradition of holding world congresses every four years. Congresses every two years will allow a much faster and more intensive communication flow between leading scientists in the area of food science and technology and related fields of science. This shorter interval between congresses also allows IUFoST to bring more focus and exposure to important developments for critical evaluation by colleagues from around the world. Congress XI is designed as a platform to present and absorb scientific and technical knowledge.

Our Korean hosts have already undertaken tremendous efforts to make Congress XI a remarkable event. East Asia is a place where food processing on an industrial scale has a long tradition and where fermentation techniques, the basis for modern food biotechnology, or functional foods, have been well known for centuries. Not only special types of foods but also modern technologies are at home in East Asia. Our Korean hosts have carefully selected all the ingredients for an exciting congress.

It is my pleasure and privilege to invite the world community of Food Science and Technology to come to Seoul and participate in the 11th World Congress of Food Science and Technology," — *Prof. Walter Spiess, President, IUFoST*

"Under the Congress theme, *Paradigm Shift-Harmonization of the Eastern and Western Food Systems*, the scientific program is compiled and the concurrent exhibition is engaged with strong support from public and private sectors. The technical program is planned with 8 plenary lectures, 41 symposia, 6 round table discussions, 14 poster sessions, student fellowship presentations and 5 pre-congress short courses. Over 500 companies also will be exhibiting products and services at the Seoul International Food Technology Exhibition.

It is an honour for the food professionals in Korea to invite you to this unique world congress in the New Millennium. See you all in Seoul, the capital city of the Land of Morning Calm. " — *Prof. Tai-Wan Kwon, Chairman Organising Committee, Congress XI*

www.congress2001.or.kr

(from page 5)

applied extensively for shelf-life extension. Currently, with the objective of potential commercial application, alternative approaches to either thermal or non-thermal conventional treatments are being developed and investigated to meet demands for minimal quality changes, added value and guaranteed safety. For preservation methods to conform to this context, they should offer equilibrium between these aspects, and many processing options other than heat can be considered nowadays. Many of these technologies involve real novel techniques, but also others, not normally considered novel as such, can have this term applied to them when used in foods in the context of the actual trends of minimal processing and quality.

This project will deal with such technologies for obtaining foods that will meet the demands of the modern food industry, in the Latin-American Region, using the associated and inherent concept of combination of preservation factors. Technologies considered in the project are those addressed by the participating research groups based on their knowledge, expertise, availability of funds for research and interest: high hydrostatic pressures, high intensity pulsed electric fields, ultrasound, microwave, vacuum impregnation, bio-control, modified atmospheres, natural antimicrobials, etc. These countries are Argentina, Mexico, Spain and Venezuela with several national research groups involved. Gustavo Barbosa-Cánovas, from Washington State University, is an important collaborator and participant.

In industrialized countries, new strategies have been launched in order to satisfy the sophisticated modern consumer, using “revolutionary” technologies and totally novel products. In emerging and less industrialized countries, the needs of consumers are satisfied using less innovative solutions like the adaptation of formulations and packages of pre-existing brands on the basis of a modest re-engineering. Both these approaches could be considered extreme. Therefore, an alternative for the Latin American region could include the use of conventional preservation methods which are simple, well understood and economically feasible, and optimize them either in the context of the combined methods approach, or, with the contribution of an emerging process, to obtain products of superior quality that satisfy the demands of the modern consumer of the region.

We know that emerging technology and modern “know how” will blend successfully only if regional raw materials and foods can be incorporated. This makes their use a “must” for a project investigating such aspects.

Another issue for the success of the “emerging” approach would be to count on local suppliers of equipment and guarantees of maintenance. This is a challenge. Consumers and the food industry of the region are not uninformed about new trends in food processing and are becoming more and more aware of the existing “new” quality criteria. Also, they are constantly exposed to what the media generates on these topics. For these reasons, Latin American food scientists have the responsibility of re-orientating their investigation towards emerging approaches, so as not to be left behind the new global developments in this field and to miss market and research opportunities.

PREVIOUS CYTED FOOD PRESERVATION PROJECTS

The evolution of the Food Preservation Sub-Program of CYTED began with the multinational project called “Intermediate Moisture Foods Important to Ibero-America”, which ran from 1986 to 1991. José Miguel Aguilera from the Pontificia Universidad Católica de Chile was the coordinator. This project promoted research in the areas of intermediate moisture foods (IMF) and combined methods technology. The promising results of this first project gave rise to the need for research in combined methods or hurdle technology to develop high-moisture fruit preservation techniques. This second CYTED project was called “Bulk Fruit Preservation by Combined Methods Technology”, and was carried out from 1991 to 1994, with Jorge Welte-Chanes from Universidad de Las Américas-Puebla, Mexico as head of the project. The main objective was to develop simple and inexpensive preservation processes for obtaining intermediate or final products as a contribution to diversify the Ibero-American fruit industry and to reduce post-harvest losses.

From 1995 to 1998, a third multinational collaborative project within the food preservation subprogram: “Development of Minimal Processing Technologies for Food Preservation” was carried out. The main objectives of this concerted action project were:

- a. Contribute with basic knowledge about the effect of the different preservation factors and their interaction on microorganisms and sensory, physical, and chemical properties of selected food products, as well as on the ultra structural alterations of their tissues, and the transport phenomena involved in the different stages of preservation procedures.
- b. Develop minimal processing technologies to obtain high-moisture food products with physicochemical properties and sensory attributes similar to their fresh

counterparts, stable at ambient temperature or under refrigeration, according to the proposed storage, distribution, and retail conditions.

Argentina, Chile, Mexico, Portugal, Spain, and Venezuela were the six countries involved in this project, which was coordinated by Stella M. Alzamora from the University of Buenos Aires of Argentina. The investigations performed dealt with a large variety of topics, such as mass transport modeling in solid food-liquid operations (i.e., vacuum or atmospheric osmotic dehydration); physicochemical, biochemical, and structural characterization of minimally processed plant foods; response of pathogenic bacteria and spoilage microbial flora to emerging preservation factors and their interactions with other environmental stresses; ultra structure-mechanical behavior relationships in fruit tissues, cheese and egg gels, as affected by various processes; fruit and vegetable preservation using controlled/modified atmospheres; development and/or optimization of combined technologies for obtaining high moisture minimally processed fruits using vacuum impregnation, edible films, natural antimicrobials and high hydrostatic pressures, and salting of fish and cheese by vacuum impregnation; application of high hydrostatic pressures to liquid whole egg, avocado, cheese, milk, recovery poultry meat, and yogurt, among others.

CYTED links gracefully with alternate modes of cooperation as was the case with the "Multinational Project on Biotechnology and Foods", of the Organization of American States, and the project coordinated by M. Tapia on "Fruit Preservation by Combined Methods". European Union Programs such as "Life Sciences and Technologies for Developing Countries", was linked with the project "Development of Minimally Processed Products from Tropical Fruits, Using Vacuum Impregnation Techniques". This project, coordinated by Dr. Pedro Fito of the Universidad Politécnica de Valencia, ran from January 1995 to December 1998 and involved institutions from Spain, Mexico, Venezuela, Argentina, and Portugal. Most of the participants were also involved in the above-mentioned CYTED project. The main objective of the project was to develop minimally processed products from tropical fruits. The physical, chemical, and sensory characteristics of the final products would be as similar as possible to the raw material, and they would be stable at room temperature or refrigeration, according to commercial practices in each country. The processes were based on vacuum impregnation operations (VI); vacuum osmotic dehydra-

tion (VOD), and pulsed vacuum osmotic dehydration (PVOD). The project comprised the following tasks:

- determination of kinetics parameters during vacuum impregnation and osmotic dehydration processes;
- basic microbiologic and physicochemical studies;
- New products and process design, and d. microbiological, physicochemical, and sensory stability during processing and storage.

A major part of the latter projects focused on the optimization of combined preservation technologies for obtaining high-moisture fruit products (HMFP). Most of these technologies were developed as part of the previous projects of the CYTED and the OAS on bulk preservation of fruits by combined methods. Hurdles used for the stabilization of HMFP included reduction of water activity (a_w) and pH, mild heat treatment, and addition of preservatives. The preservation process combining these factors was very simple and consisted of fruit blanching, followed by an a_w depression step through osmotic dehydration with simultaneous incorporation of additives, achieving final values after equilibration of a_w 0.94–0.98, pH 3.0–4.1 (adjusted with citric or phosphoric acid), 400–1,000 ppm potassium sorbate or sodium benzoate, and, generally 150 ppm sodium bisulfite. The processing of some fruits (i.e., banana purée and pomalaca) included a slight thermal treatment after packing or a hot filling stage. The osmotic dehydration treatment was made at room temperature by placing fruit slices in concentrated sugar aqueous solutions (glucose, sucrose, maltodextrins, corn syrups, or their mixtures and additives). In the cases of purées and some whole fruits (i.e., strawberries), the fruit, humectant(s), and additives were mixed in required proportions (blending). In the optimization of these combined technologies, three aspects received consideration:

- The equilibration stage, where vacuum techniques were used for the osmotic dehydration process and/or incorporation of additives,
- The use of antimicrobials of natural origin as replacement (total or partial) of sorbates and other synthetic additives, and
- The use of high pressure to process delicate fruit products and/or reduce or substitute synthetic additives. Most of the workshops, meetings, interactions between partners, and other activities, as well as dissemination of the scientific information that was generated, were organized and/or shared within the framework of both projects.

The book "Minimal Processing of Fruits. Fundamental Aspects and Applications", was published this year by Aspen Publishers, and edited by Alzamora, Tapia and López-Malo. This book covers selected trends in minimal processing of fruit and vegetables, and tries to summarize progress made in the field by important scientists from different parts of the world, that should be known and disseminated to government, industry and the commercial community. It is designed to serve primarily as a reference book for those involved in the diverse aspects of the broad area of minimally processed fruits and vegetables and also interested in its future potential. The results of the multinational projects "Development of minimal processing technologies for food preservation" (Project XI.3 of the CYTED Program), and "Development of preservation techniques for tropical fruits using vacuum impregnation" (STD-3 Program of European Commission) are summarized and presented as new technologies for fruit preservation in one part of the book.

See you next time amigos! □

ASEAN NEWS

**BY ENG. JOSE BAUTISTA
PAFT CORRESPONDENT**

The Philippines will host the 7th ASEAN Food conference from November 19-22, 2000 in Manila. The theme of the conference is "ASEAN Food Science and Technology: Moving Towards the New Millennium".

Held every three years, this year's conference is being organized by the ASEAN Committee on Science & Technology (COST) and the Federation of Institutes of Food Science and Technology in the ASEAN (FIFSTA), and supported by the ASEAN Foundation and International Life Sciences Institute (ILSI), Department of Science and Technology (DOST), Department of Agriculture and the Philippine Association of Food Technologists, Inc. (PAFT).

The ASEAN Food Conference serves as a regular forum for food technologists, scientists, engineers, industry managers and executives, government personnel and educators from the region. The conference brings them together with their counterparts from other parts of the world where they can discuss and exchange ideas and experiences regarding scientific and technological issues and developments relating to food science and technology.

Furthermore, the conference intends to promote awareness of emerging technologies, trends and opportunities in the field as these affect social and economic

development in the ASEAN.

Topics to be discussed include food nutrition and health, food safety, food standards and regulations, food processing and the environment, processing and packaging technologies, post harvest technologies, food biotechnology, developments in food science, food analysis and testing, human resource development, and small and medium scale food industries.

For further details, please inquire at: the Secretariat, 7th Asean Food Conference 2000, Food Processing Division, Industrial Technology Development Institute (ITDI), Department of Science and Technology (DOST), DOST Compound, Gen. Santos Avenue, Bicutan, Taguig, Metro Manila, Philippines, Tel. +632 837-2071, Fax. +632 837-3167 or e-mails to: jgbautista@pacific.net.ph or nea@agham.dost.gov.ph or itdi@pacific.net.ph (c/o Eng. Jose G. Bautista III), or visit our website at <http://home.pacific.net.ph/~itdi> or <http://www.dost.gov.ph/DOST/ITDI/7thASEAN.html> □

CODEX MEETING REPORT

JOINT FAO/WHO CODEX COMMITTEE AD HOC INTERGOVERNMENTAL TASK FORCE ON ANIMAL FEEDING, DENMARK

The first meeting of the Joint FAO/WHO Codex Alimentarius Commission (Codex) ad hoc Intergovernmental Task Force on Animal Feeding was held in Copenhagen from 13-15 June 2000. Delegations attended from 40 Codex member countries and from 15 international intergovernmental and non-governmental organizations. IUFoST was represented by John R. Lupien, Former Director of the FAO Food and Nutrition Division, and Adjunct Professor of Food Science at the University of Massachusetts.

The Codex Alimentarius Commission has for many years dealt with different aspects of food production and processing that have importance for animal feed and feeding practices. These include pesticide residues, heavy metals, mycotoxins, pathogenic microorganisms and other problems related to feed ingredients and the use of veterinary drugs in feed. However, Codex progress was slow in addressing animal feed problems specifically because discussions were dispersed among several Codex committees, none of which have animal feed as a specific focus or priority. Because of recent European problems of dioxin contaminated animal feed and animal products, use of

sewage sludge in animal feed, and bovine spongiform encephalopathy (BSE or “mad cow disease”) the Codex Executive Committee and the Commission in their June 1999 meetings decided to create an ad hoc Intergovernmental Task Force on Animal Feeding. Denmark agreed to host the meetings of this ad hoc Task Force, which has a four year period to produce final Codex results.

The first session of the Task Force gave detailed consideration to a Draft Code of Practice related to the feeding of animals, whether from grazing/free range feeding, on-farm produced feed, or commercially produced feed for farm animals or aquaculture. Background papers were circulated to Codex member countries and observer international non-government organizations prior to the meeting and many comments were received and tabulated for meeting consideration. Many of the comments were contradictory. The report of the meeting and the background papers are available on the FAO website <http://www.fao.org.nutrition> along with other detailed information Codex and on FAO work on food quality and safety.

Meeting discussions on the original draft code and comment received was somewhat confused and inconclusive. Recent European feed contamination problems led to overly specific proposals for the draft code in some cases, while more general aspects of interest to all member countries were omitted or not discussed in detail. Differences between grazing, farm prepared feeds, and commercially prepared feeds, including medicated feeds, nutritive and pharmaceutical additives sold as premixes or contained in bulk feeds all needed additional separate discussions and clarity. All of these points will need further discussion at future meetings of the Task Force, as well as the specific interests and concerns of developing countries, which in many cases were somewhat different from those of European and other developed countries.

On the basis of the June meeting discussions a new draft code will be prepared for consideration of all interested Codex parties. It will be circulated in the second half of 2000, and discussed for possible approval by the Task Force at its next meeting in Copenhagen from 19-21 March, 2001. The Codex Secretariat at FAO Rome, in cooperation with the FAO Division of Animal Production and Health will call for further comments from all interested parties, and put comments into an FAO electronic conference site. The June 2000 Task Force meeting emphasized the need for cooperation by several disciplines in improving the quality and safety of animal feeds and animal feeding

practices, including attention by food scientists and technologists. □

IN THE NEWS

AUSTRALIA

Alan Mortimer, was the recipient of the Australian Institute of Food Science and Technology Inc.’s most prestigious award, the Award of Merit, at the annual AIFST convention held in August.

The Award of Merit is bestowed on a member of AIFST each year for outstanding contributions in the field of food science and technology. Contributions in research, development, academic and other areas relating to food science and technology and to the Institute are considered in the conferring of this award.

Prior to 1968, it was called the IFT Australian Award, a reflection of the fact that from 1951-1967, Australian food scientists belonged to the Australian Section of IFT. AIFST was created in 1967.

Over 700 delegates attended the 33rd Annual AIFST convention, which was held in Brisbane Convention and Exhibition Centre from August 20-23. The convention theme was “Millennium Marketing through Food Science and Technology” and the keynote speaker was Robert M. McMath, Adjunct Professor of Marketing and Ithaca College, New York, USA.

CANADA

At the CIFST Annual Meeting in Winnipeg on July 18, Jack Meyers was presented with the President’s Award for 2000.

The President of the Canadian Institute of Food Science and Technology (CIFST), contacted Jack by letter dated May 31, and informed him that he had been chosen as the recipient of the Award. In the letter, he stated: “I would like to recognise the very great contribution that you have made, not only to CIFST, but also to the CIFST Scholarship Trust and, of course, to IUFoST, where you have given Canada, and CIFST, a presence.”

The President, Dr. Digvir Jayas, indicated that this is only the second time this award has been given out. The award is presented to a member chosen by the president at his or her sole discretion. Dr. Jayas had followed Jack’s involvement from a distance and with great admiration for the contribution he had made to CIFST and IUFoST over many years.

Jack attended the Annual General Meeting, followed

by a meeting of the Board of Directors of the Scholarship Trust and Trustees of the Scholarship Trust meeting. A reception to honour award winners was held in the President's Suite and then the banquet and award ceremonies took place.

No one knew who was receiving the President's Award and when Dr. Jayas named Jack, the group stood to cheer.

HUNGARY

Peter Biacs was honoured recently on the occasion of his 60th Birthday by an article in the Slovak Food Research's publication "Bulletin of Food Research". The article reviewed his many accomplishments within IUFOST and leadership role in national and international affairs for food science and technology.

UNITED KINGDOM

Congratulations to Ralph Blanchfield, who has been appointed to the position of Adjunct Professor, Michigan State University, USA.

IUFOST REMINISCENCES

NATO'S INVOLVEMENT IN THE CONCEPTION OF IUFOST

In 1960, several British scientific societies and the UK Government

organised a conference in London in recognition of the Centenary of the 1860 Food and Drugs Act (UK). It was also the 150th anniversary of Appert's publication on the preservation of foods in sealed containers.

In the week prior to the Food and Drugs conference, Professor John Hawthorn convened a symposium on Recent Advances in Food Science at the Glasgow Royal College of Science and Technology, which later metamorphosed into Strathclyde University. [The proceedings, edited by Professor Hawthorn and a colleague J. Muil Leitch, were published in 1962 by Butterworths]. The Glasgow symposium, to which food scientists from many nations were invited, was financed by a substantial grant from the Office of the Science Adviser to the North Atlantic Treaty Organisation, NATO. During the 1950s and 1960s NATO evinced a significant interest in food technology. The food and nutrition research laboratory in Toronto, of which I was director, carried out an extensive study for NATO on the bulk storage of food grains examining alternative methods conducive to stockpiling at dispersed sites.

One evening following dinner during the Glasgow symposium, Professors Hawthorn and EC Bate-Smith invited a group to meet to discuss the concept of an international food science society. The discussion was splendidly stimulated by Professor Hawthorn's supply of

malt whiskey from a Hebridean distillery. The group included Emil Mrak and George Stewart from Davis, California, a fellow Canadian Bill Geddes, Dean of Agricultural Biochemistry at the University of Minnesota, Professor H D Kay from the dairy research institute at Reading, Tim Anson, an American employed with the Lever Organisation. Sadly I am the last survivor of that Glasgow group.

The notion of international scientific societies was not unique. ICSU, its predecessor and the supporting family of national academies and scientific unions had existed since 1919. The Glasgow group was of the opinion, however, that the time was ripe to create an international food science society, since several national food science and technology institutes were in existence. Our British hosts undertook to pursue the idea and the result was the food science congress convened in London in 1962, the first of the series of which Korea will be the host to the eleventh.

The subsequent history of IUFOST is amply recorded in the archives, but perhaps not everyone is aware of NATO's early intervention. □

By Joseph H. Hulse, Past President, IUFOST

SECRETARIAT NEWS

The World of Food Science

The joint IUFOST/IFT Electronic Magazine, "The World of Food Science", has been launched and the third issue is scheduled for October. Join us online to read this exciting new publication and let us have your views and contributions. The site to visit is www.worldfoodscience.org.

Nominations

The nominations have now closed for the Governing Council, 2001-2003. Professor Walter Spiess and Mr. Alan Mortimer have been nominated unopposed for the positions of President and President-elect in the years 2001-2003. All IUFOST voting delegates will receive a ballot to be completed for those nominated to Governing Council positions.

Service Delivery Centres

More volunteers are always needed for the IUFOST Working Groups in our Service Delivery Centres. Offers of time, expertise and administrative support are all welcome.

The Distance Education Task Force is compiling details of Distance Education Courses available around the world. Please send us details of such courses and programmes underway in your country. Similarly, The Core-Curricula Task Force is compiling data on core-curricula and they require copies of course outlines at the national and local levels.

To send materials and to volunteer, please contact Judith Meech, Secretary-General, IUFOST, 522 Maple Avenue, Oakville, Ontario, Canada, L6J 2J4. Telephone: + 1 905 815 1926, Fax: + 1 905 815 1574, E-mail: iufost@inforamp.net. Check the IUFOST website for more information on IUFOST activities at www.inforamp.net/~iufost.

Newsline

The last issue of NEWSLINE, June 2000, is available through the IUFOST website at www.inforamp.net/~iufost. If you would like to receive a printed copy, please contact the IUFOST Secretariat.