Newsline

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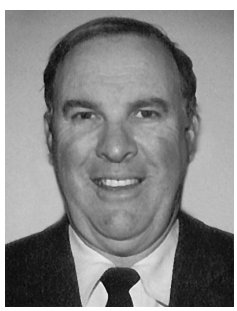
EDITORIAL: ALAN MORTIMER, IUFoST PRESIDENT

Renewed Commitment

This is my first opportunity to write to you as President since I began my term at the conclusion of the 12th World Congress in Chicago in July. I took over from Walter Spiess who has served IUFoST with distinction since he became a German delegate several decades ago, and I would like to acknowledge here the outstanding contribution he has made over that time and, in particular, during the four years he had the honour of being President.

I initially heard of IUFoST some twenty years ago through its then Secretary General Jack Kefford, a fellow Australian. Back then, the principal function of IUFoST was to organise congresses – World Congresses every four years, but also smaller scientific meetings in countries around the globe. I attended IUFoST Congress VII in Singapore in 1987 and have attended all five subsequent Congresses, and have enjoyed the friendship and hospitality offered by the members of the host nation. I have served on the Governing Council, formerly the Executive Committee, since 1998 and it was then I first became aware of some of the IUFoST's future plans and hopes and of some of the complex challenges it faced.



The Union moved into a new millennium with a new constitution, a new structure and an ambitious strategic plan. With the benefit of hindsight, we tried to do too much too soon. We were under-resourced financially and had insufficient voluntary manpower to complete the number of projects that we attempted. This was unfortunate because they were all worthy projects. It has been said that if you want something done, ask a busy person to do it. Members of the IUFoST Governing Council and its various sub committees and task forces work extremely hard and I thank them for their commitment. Like you they all have their own busy professional, social and home lives to manage. For many of you IUFoST is just one more scientific organisation. However, we need your involvement to help us achieve our goals.

At the General Assembly held at the end of the Chicago Congress, six working groups (which had met several times during that week) presented

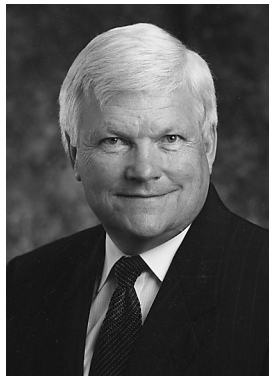
reports on a range of IUFoST activities including publications, service delivery centre review, linkages with other international organisations, communications, membership and adhering body liaison, and scientific programmes. These reports have been circulated widely to all adhering bodies and also to the members of the IUFoST Academy and the feedback we have received will be reviewed during the Management Committee's December conference call. I am optimistic that the information we receive will allow us to undertake a process of prioritisation and allow us to focus our resources on issues specifically relevant to our members. Our focus needs to be on facilitating activities related to food science, which can better be handled collectively than by any single country (member) organisation.

Apart from identifying issues where progress is more likely to be achieved, we need also to assess our capacity to influence outcomes where arguments based on sound science will not necessarily prevail because of the influence of politicians or other decision-makers. We also need to be astute and work closely with like-minded organisations to share both the load and increase the chances of success. An excellent example of this co-operation is in the IUFoST task force, which is in the process of establishing a database that aims to contain details of all research projects relating to improving food quality and availability, especially as it relates to developing countries *(see July/August 2003 Newsline for further details)*. Our collaborative partner in this venture is the international agency mainly concerned with addressing the serious global issue of food insecurity – the United Nations Food and Agriculture Organisation (FAO).

In my part of the world, the days are getting longer as spring moves into summer. My family is thinking about Christmas trees, holidays at the beach and about relatives and friends in other parts of the world. To those of you who also look forward to this time of the year as a major religious celebration, I wish you a very Merry Christmas. To those of you who worship and celebrate in other ways at other times, I wish you a hopeful and peaceful New Year. Maybe, somewhere in all your New Year's resolutions, you could make the decision to devote an hour a week to an IUFoST project. ❑

PROFILE
DAVID R. LINEBACK
IUFoST PRESIDENT-ELECT

Dave grew up in the small town of Liberty, Indiana, and attended a nearby rural public school where his parents taught. After obtaining a BSc 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 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. Dave's research initially focused on characterization of the glucoamylases (amyloglucosidases) that were being used commercially. After five years in that position, an opportunity to join the faculty of the Department of Grain Science and Industry at Kansas State University as Associate Professor occurred. Seven years, during which he was promoted to Professor, were spent there developing a research program in starch science, with an emphasis on starch structure and functionality in food products, and teaching courses in food analysis and in enzyme applications. Dave's first administrative and international experiences occurred at KSU when he was named Assistant Department Head - Instruction, and 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, Thailand. Involvement in international activities has continued since then.

After seven years at Kansas State University, Dave became Professor and Head of the newly formed Department of Food Science at the Pennsylvania State University. After slightly more than four years, he accepted a position as Professor and Head, Department of Food Science, North Carolina State University, Raleigh where he spent nearly 13 years. In 1993, he accepted 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 at the University of Maryland, College Park in November 1998 where he is assisting in developing the Joint Institute for Food Safety and Applied Nutrition (JIFSAN) as its Director. 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 served as Chair of the Scientific Council and as a member of the Management Committee (1999-2003). He became President Elect in July 2003. He is a Fellow of the International Academy of Food Science and Technology, the Institute of Food Technologists, the Institute for Food Science and Technology (IFST, UK), and the American Association for the Advance of Science (AAAS). 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; the Special Award of Merit (Gold Medal), Japanese Society of Starch Science (now Japanese Society of Applied Glycoscience); and the Outstanding Food Science Award, Department of Food Science, Purdue University.

Dave has presented invited seminars, participated in and organized scientific meetings, or presented short courses in about 20 countries. He has provided leadership for two organizations involved in international development or education, an international program in cereal or food science at two universities, and review teams. Additional international involvement includes serving as member, International Advisory Board, Central Food Research Institute (CFRI), Budapest, Hungary; 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 six grandchildren. When time allows, he enjoys reading and playing golf. ❑

REPORT ON THE PhAction CONFERENCE ROME, OCTOBER 7-9, 2003

By Prof. Malcolm Bourne
IAFoST President and Chair,
IUFoST Post-Harvest Taskforce

INTRODUCTION

The Food and Agriculture Organization of the United Nations (FAO) held a conference entitled, "Global Post-Harvest Systems Initiative for the 21st Century: Linking Farmers to Markets" on October 7-9, 2003 at the FAO Headquarters Office in Rome. Fifty-seven participants from 33 countries and 26 participants from FAO attended the Conference. This was the culmination of a series of five regional workshops that had previously been held in each of the developing regions of the world between September 2001 and March 2002.

CONTENT

The major purpose of the Conference was to consider a 26-page Strategic Frame work Document that was circulated before the meeting, refine it, and endorse it. The abbreviation for this is PhAction.

Goal: To contribute to sustainable economic growth, rural poverty alleviation, and food security in developing countries.

Purpose: To improve the livelihoods of the rural poor by enhancing agro-food systems for a range of local, regional and international markets through sustainable and equitable post-harvest innovations.

The Strategic Framework comprises four Strategies. Each Strategy had one or more sub-strategies called Concept Notes (CN) as follows:

Strategy 1

Developing appropriate policies (macro-level)

- CN1 Trade and market access policy development
- CN2 Business policy development

Strategy 2

Institutional strengthening through collaborative research and capacity building (meso level)

- CN3 Improving market-oriented decision making and market access in agro-food commodity chains and support service providers.
- CN4 Enhancing the competitiveness of rural agro-enterprises through better integration of supply chains and delivery of effective business support services.
- CN5 Developing and disseminating post-harvest technology.
- CN6 Improving the quality and safety of food from smallholder producers and small/medium-scale agro-enterprises.

Strategy 3

Development of competitive and equitable agri-food systems (micro level)

- CN7 Enhancing performance, equity and environmental sustainability of commodity chains.
- CN8 Promoting investment in post-harvest infrastructure.

Strategy 4

Fostering networks, communication and further program development

- CN9 Regional post-harvest networks, communication and further program development.

WORKING GROUPS

About 50% of the time was assigned to working groups representing the following regions: South Asia, East Asia, Africa, Central Asia and the Caucasus, Latin America and the Caribbean, North Africa and the Middle East Island States. I was assigned to the Group #1, South Asia.

The following tasks were assigned to the Working Groups using the Strategic Framework document as a starting point.

- Consider the appropriateness of the strategies to the PhAction initiative.
- Consider the relevance of strategies within the context of your region of special interest.
- Consider the relevance of the Concept Notes to your region, recommend revisions, and prioritize them.

OUTCOME

The revised Strategic Framework and Concept Notes will be sent to all participants after all the recommendations have been considered. These had not been received at the time of writing this report.

When the refined Strategic Framework and Concept Notes are completed, the following sequence of activities will begin:

- Donor reconnaissance
- Proposal development
- Meeting of Donors
- Planning meeting about June 2004 between Donors and PhAction Stakeholders

PERSONAL OBSERVATIONS

For the last 30 years, the term "post harvest food loss reduction" has concentrated on technical and practical issues in reducing post harvest food losses in developing countries because most areas where there is chronic malnutrition are areas where large quantities of harvested food become spoiled and unavailable for human consumption. This represents a double loss: a) loss of valuable nutrients for those who are already malnourished, b) loss of wealth where the people are very poor.

The PhAction program has expanded this definition to mean bringing subsistence farmers into the market economy. This includes marketing, trade policy, business policy, institutional development, investment in infrastructure, program development, forming regional networks and much more. The technical issues in food preservation are still present (see CN5 above), but they have been surrounded with many other factors in development. In other words PhAction covers the almost entire spectrum of sustainable development of which post harvest food loss reduction is just one component.

As I talked with other participants, I discovered that most of them knew nothing about IUFoST. Therefore, I requested, and was given permission to make a short presentation about IUFoST and the resources it could bring to PhAction. The FAO staff helped me prepare an 8-minute power point presentation about IUFoST, which I delivered to the assembled participants on the morning of the last day. The FAO staff kindly photocopied the one-page brochure I was carrying that describes IUFoST and this was made available to all participants.

I asked where the proposed database of names of people and their special interests in post harvest fits into the overall plan because Ralph Blanchfield's taskforce has been very active in developing such a database. I was told it comes under Strategy 4, Concept Note 9, "Regional post-harvest networks, communication, and further program development."

A PhAction Newsletter was made available to all participants. The PhAction Secretariat comprises three institutions working jointly: 1) Natural Resources Institute (NRI)

Food Security Department, U.K.; 2) Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), Programme Cultures Alimentaires (CALIM), France; 3) Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH Post Harvest Project. Future issues of the newsletter will be distributed electronically. To be put on the electronic mailing list contact Rick Hodges, Natural Resources Institute, Central Avenue, Chatham Maritime, Kent ME4 4TB United Kingdom, email: R.J.Hodges@greenwich.ac.uk. I recommend that a short article describing IUFoST be prepared and submitted to this Newsletter. ❑

NEWS FROM INDIA

By G.A. Krishna
CFTRI Correspondent

PROTEOLYTIC ACTIVITY RICH SPICE POWDER FOR TENDERIZATION OF MEAT

Tenderization of tough meat enhances its demand in the preparation of a number of traditional and comminuted products. With this in mind, CFTRI developed a process for tenderization of layer chicken meat using proteolytic activity rich spice powder. The spice is treated with a selected polar organic solvent under optimized conditions to obtain a proteolytic activity rich dry powder. This powder is used for tenderizing tough meat by immersing meat in potable water containing optimized quantity of the spice powder under specified conditions. The advantage of the process is the use of natural ingredients and shorter treatment period to obtain tender and flavour rich meat.

A CONTINUOUS LEMON CUTTING MACHINE

The Pickle industries are facing problems in cutting the large quantities of fruits to the required shape and size continuously, particularly lemon. The Central Food Technological Research Institute, Mysore, India has designed and developed a continuous circular cutting device for lemon and other similar fruits. The lemon flows into the pockets of the centralizing disc due to the gradient of the inlet chute. The whole lemon is cut into four pieces when the centralizing disc carrying the whole lemon moves against the multi-edged cutter. The lemons, cut to four pieces, are dropped on to the outlet chute when the centralizing disc moves away from the multi-edged cutter. The outlet chute will discharge the cut lemon into the tray/vessel. The machine can be operated with or without electric power. It has a capacity of cutting lemon at the rate of 100-150 Kg/hr.

DR. V. PRAKASH, FOOD TECHNOLOGIST AND DIRECTOR, CFTRI, AWARDED FRSC

Dr. V. Prakash, Director, Central Food Technological Research Institute, Mysore, India, had the honour of receiving the Fellowship of the Royal Society of Chemistry (FRSC), UK on 26th September, 2003.

The Royal Society of Chemistry (RSC), founded in the year 1841, is one of the oldest Professional Bodies for chemists. Senior scientists with distinguished careers and experience in the field of chemistry are admitted to the fellowship every year. ❑

IUFoST SPONSORED EVENTS

FUTURE TECHNOLOGIES FOR FOOD PRODUCTION AND FUTURE FOOD SCIENTISTS

By Nils Bengtsson
SIK Correspondent

INTERNATIONAL CONFERENCE IN GOTHENBURG, SWEDEN, JUNE 2-4, 2003

This international two-day symposium was organised by the Lift-programme, an industry oriented Swedish programme for research and PhD education, now in operation for five years, coordinated by SIK, and engaging some 35 PhD students. The oral presentations as well as the posters in the technology part were divided into sessions for food structure, food freshness and food processing, while a fourth session dealt with PhD training of food scientists. Papers and posters were presented by invited speakers/scientists as well as by PhDs emerging from the Lift programme. Some highlights from the conference are given in the following.

FOOD STRUCTURE

In his talk, P.J.Lillford, University of York, UK, started the various presentations of new knowledge by discussing what we don't know about food structure and why it matters. A test of our state of knowledge is the accuracy by which we can design structures whose perceived properties are accurately predicted.

J.M.Aguilera, Universidad Católica de Chile, had studied and quantified structural changes in foods by image analysis in such economically important surface phenomena as the caking of amorphorous food powders,

colour change in banana ripening and fat bloom in chocolate.

Camilla Olsson, SIK, gave a paper on rheological and microstructural measurements on â-lactoglobulin particle gels at initial state of fracture. Rheological measurements were performed using a Stress Tech rheometer, and equivalent microstructural data were obtained by monitoring the gel microstructure during successive deformation under a confocal scanning microscope. The project presented data that open up new possibilities to understand microstructure-rheology relationships.

In his talk on structuring in plant materials: from molecules to mechanics, M.Gidley, Unilever R&D, UK, pointed out the bewildering range of structural types and cellular architectures that makes it difficult to interpret material properties measured at the macroscopic level in terms of underlying micro-and molecular structures.

In his work on plant cell adhesion, C.B. Faulds, Institute of Food Research, Norwich, UK, had studied two systems that appear to involve cell adhesion, depending on the chemical structure of the plant system. pectin-rich material and tissues more resistant to thermal-induced cell separation.

Ragni Ofstad, Matforsk, Norway, presented a problem of fracture during cooling of a full-fat food dressing in plastic bottles. Using factorial design and multivariate statistical analysis in combination with microstructural studies revealed that protein concentration, pH and heat treatment affected the formation of fractures and provided a satisfactory solution to the problem.

P.J. Fryer, University of Birmingham, UK. presented a co-operative project between three universities linking flavour, processing and equipment design (going backward from the consumer's mouth), with the objective of making possible food production with small batch sizes, responding rapidly to retail requirements, and having customisation as late as possible in the production cycle.

FOOD FRESHNESS

C.M.Williams, University of Reading, UK, discussed diet and health in relation to functional foods, starting out by presenting Finland as the good example of what can be achieved by dieting measures in cardiovascular disease prevention. Two developments were expected to have great impact in the future role of diet in chronic decease prevention:

- Greater understanding of the genetic basis for inter-individual variability in responsiveness to diet
- Use of functional foods a targeted and more individualised approach to dietary change.

In her PhD work at the Swedish University of Agricultural Sciences, L. Strålsjö optimised a modified RPBA method of analysing folates in berries, which method was used to study folate content of strawberries and rosebuds as a function of cultivar, ripeness, storage and processing. Results showed that fresh, frozen and processed berry products are rich folate sources and could offer an alternative to folate supplements and fortification.

... COMPUTER TECHNOLOGY AND OUR QUANTITATIVE UNDERSTANDING OF FOOD PROCESSES HAVE ADVANCED TO THE POINT WHERE MODELLING CAN BE A USEFUL DESIGN TOOL FOR PROCESS AND EQUIPMENT DEVELOPMENT AS WELL AS FOR PRODUCT DEVELOPMENT ...

In their paper on plant cell walls as a barrier to the accessibility of organic nutrients, E.Tydeman and co-workers, Institute of Food Research, Norwich, UK, showed that the cell wall could encapsulate intracellular components during digestion and act as a physical barrier to the release of carotene.

Magni Martens, KVL, Denmark, discussed the use of sensory methods together with methods such as multivariate statistical strategies, nutritional, chemical, physical and neurophysiological methods in the development of healthy foods. A set of recommendations was given for the development of healthy foods, involving the use of or development of novel or new methods.

Lena Dimberg and co-workers at the Swedish University of Agricultural Sciences had studied the changes in avenanthramide concentration in steeped oat grains, avenanthramide being a phenolic compound with antioxidant properties of potential future interest for the food industry both as a food stabiliser and to enhance the nutritional value of foods.

FOOD PROCESSING

Ashim K. Datta, Cornell University, USA, delivered an analysis of the present state of computer modelling as a tool in product, process and equipment design, its current limitations and the prospect of computer engineering for the future.

According to Datta, computer technology and our quantitative understanding of food processes have advanced to the point where modelling can be a useful design tool for process and equipment development as well as for product development. Present limitations lie in the problem formulation and in the lack of material prop-

erty data and specialised software for sensitivity/uncertainty analysis.

Marilyn Rayner, Lund University, related work on the transfer of surfactants to an expanding oil-water interface during membrane emulsification. In this kind of emulsification, a microporous membrane is operated in cross flow, the continuous phase being pumped along the membrane and sweeping away dispersed phase droplets forming from pore openings in the membrane. The main advantages of membrane emulsification are the possibility of producing droplets of defined and uniform size, low shear stress and the potential for lower energy consumption and simple design.

Lars Hamberg, SIK, presented work on the shaping and functionality of shape for food microstructure. Shape influences the microstructure functionality, thus microstructure shape optimisation is an interesting tool in the development of new functional materials.

By combining deforming flow (such as in a 4-Roll Mill) and a simultaneous temperature triggered gel formation of a biopolymer to fix the achieved deformation, shaped microstructures or particles could be formed of a wide range of reproducible shapes.

P. de Jong, NIZO food research, the Netherlands, discussed a new process control system for the food industry, called PREMIC, based on predictive mechanistic (kinetic) models for food quality and operating costs, which is being developed in co-operation with Honeywell. The fundamentals of this system were described and some applications presented.

PHD TRAINING OF FOOD SCIENTISTS OF TOMORROW

Margareta Nyman, Lund University, presented the organisation and objectives of the Lift Graduate School for industry oriented PhD education. The goal of this school is to prepare the students for a career in food related industry, important parts being industry related courses and a mentor program.

F. Voragen, Wageningen University, discussed expertise centres as a way of multi-disciplinary collaboration between reserach groups, based on the positive experience from such cooperation in the Netherlands. Eight centres are currently in operation, the food related research being carried out by PhD students and post-docs.

F.Pepping and F.J.Kok of the Graduate School VLAG related 10 years experience with PhD education in food science & nutrition in the Netherlands, while F.M.Dong, University of Illinois presented PhD education in the United States and its current and future needs.

Proceedings from the conference are available either as a 115 page SIK Document (nr 162) or in pdf-format on the SIK home page: www.sik.se/upload/catalogue/ ❑

NEWS FROM POLAND

By Prof. Dr. hab. Franciszek Kluza
Correspondent

As events important for food science and technology, two conferences held in Poland lately should be mentioned. The conference on 'Advanced Analysis - Exploring Biological Systems in Food' was organized by the Division of Food Science of Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences PAN, within the grant of the EU Centre of Excellence 'CENEXFOOD', financed by the European Union. It was held in Olsztyn, on Sept. 3-7. 2003 under the auspices of the: European Union, INCO Confirming the International Role of Community Research Horizontal Programme, CENEXFOOD-EU Centre of Excellence for Knowledge Transfer, Research and Education in Food and Health for Central and Eastern Europe, Food Chemistry Division and Analytical Chemistry Division of the Federation of European Chemical Society, International Union of Food Science and Technology (IUFoST), Commission of Miniaturized Analytical Systems Committee of Analytical Chemistry, Polish Academy of Sciences and the Polish Chemical Society.

The Conference focused on modern analytical methods, their possibilities and limitations; processes of molecular recognition and transport in biological and synthetic membranes; molecular structure of biopolymers and their application on the physico-chemical properties of food products, with the following aims: the exchange of scientific information, the creation of new approaches to the problem connected with food sciences and the creation of interdisciplinary collaborations.

The conference was attended by 130 participants, of whom 106 presented their works as a lecture, oral communication or poster. The methods for food quality analysis were the leading subjects of the conference. The discussion showed both the possibilities for new analytical methods application as well as the limitations in solutions for problems concerning food quality. The most vital issues proved to be those connected with limitations of every detection method, its specificity and what is most important, the possibility of their application in the practical analysis in laboratories for food quality control. A considerable part of time was devoted to the necessity of developing new control systems for food quality with modern analytical

(continued on page 10)

2004

FEBRUARY 6-7 2nd Workshop in ECOD-BIO - Bioscience Communications in Agriculture & Food, Ghent, Belgium, Contact: VIB, Jonas De Backer, Rijvisschestraat 120, 9052 Zwijnaarde, Fax: +32 9 244 6610, E-mail: jonas.debacker@vib.be

FEBRUARY 11-14 First International Conference on Folates – Analysis, Bioavailability and Health, Warsaw, Poland. Organised by Institute of Food Research, EFFoST, Elsevier Science and Warsaw Agricultural University. Contact: Dawn Wright, EUROFOODFOLATE Conference Secretariat, Institute of Food Research, Norwich Research Park, Colney, Norwich, NR4 7UA, Norfolk, UK, Tel: +44 (0) 1603 255394, Fax: +44 (0) 1603 255168, E-mail: dawn.wright@bbsrc.ac.uk

MARCH 2-5 IDF/FAO/OIE Symposium on Dairy Hygiene and Safety. 'A Farm to Table Approach for Emerging and Developed Dairy Countries', Cape Town, South Africa. Contact: Caroline Brooks, IDF Events Manager, International Dairy Federation, Diamant Building, 80, Boulevard Auguste Reyers, 1030 Brussels, Belgium, Tel: +32 2 706 86 45, E-mail: Cbrooks@fil-idf.org, Website: www.fil-idf.org/ubisi2004

MARCH 7-11 **ICEF9 International Congress on Engineering and Food, Le Corum, Montpellier, France Contact: Ensia, ICEF9, 1 Avenue des Olympiades, 91744 MASSY Cedex, France, Tel: +33 1 69 93 50 65, Fax: +33 1 69 93 51 85, E-mail: icef9@umr-genial.org**

MARCH 21-25 International Dairy Federation Symposium on Cheese: Ripening, Characterization and Technology, Prague, Czech Republic. Contact: Vladimir Filip, Institute of Chemical Technology, Prague, Technicka 3, CZ 166 28, Prague 6, Czech Republic, Tel: + 4202 2435 3268, Fax: + 4202 2435 3285, E-mail: Vladimir.Filip@vscht.cz

MARCH 23-25 **Food Ingredients Asia – China 2004 and IUFoST Symposium 'Food Ingredients: Product Development – From Concept to Commercialisation' Shanghai Everbright & Exhibition Centre, Shanghai, China. Contact: Editha Derksen or Martijn van Dijk Expoconsult BV trading as CMP Information, PO Box 200, 3600 AE Maarssen, The Netherlands, Tel: +31-346-559-444, Fax: +31-346-573-811, E-mail: Mvandijk@CMPInformation.com, website: www.fi-events.com**

MARCH 29-30 'Euro Food's Water, 3rd International Workshop on Water in Food, Water and Food Structure, Water Determination in Food, Water Activity in Food', Lausanne/Switzerland. Contact: Dr. Christoph Reh, Nestle Research Center, Nestec Ltd., Vers-chez-les-Blanc, CH-1000 Lausanne 26, Switzerland, Tel: +41 21 7858990, E-mail: christoph.reh@rdls.nestle.com, Website: http://www.sar.admin.ch/scripts/get.pl?fam+aktuell/euro_food_d.html+0+40+al

MARCH 29-31 First World Congress on Organic Food: Meeting the Challenges of Safety and Quality for Fruits, Vegetable and Grains, Michigan State University, Michigan, USA. Contact: Allison Medlin, National Food Safety and Toxicology Center, Attn: 1st World Congress on Organic Food, 165 Food Safety and Toxicology Building, Michigan State University, East Lansing, Michigan, USA, MI 48824-1302, Fax: + 1 517 432 2310, Website: www.foodsafe.msu.edu/Organics/index/html

APRIL 28-30 **Centro Nacional de Ciencia y Tecnología de Alimentos (CITA) III National Congress of Food Science and Technology 'Innovative technologies in a world without borders', San José, Cost Rica. Contact: Universidad de Costa Rica, Ciudad Universitaria Rodrigo Facio, P.O. Box 2060 San José, Costa Rica, Tel: + 506 207-3431 / 207-3506 / 207-4212, Fax: + 506 253-3762, E-mail: cong2004@cita.ucr.ac.cr, Website: www.cita.ucr.ac.cr**

MAY 25-27 **Food Ingredients Central & Eastern Europe and IUFoST Symposium 'Food Ingredients - Production and Perception - Challenges of entering the Expanded European Market Place', Berlin, Germany. Contact: Editha Derksen or Martijn van Dijk, Expoconsult BV trading as CMP Information, PO Box 200, 3600 AE Maarssen, The Netherlands, Tel: +31 346 559 444, Fax: +31 346 573 811, E-mail: Mvandijk@CMPInformation.com, website: www.fi-events.com**

JUNE 18-25 XXVI International Rapid Methods and Automation in Microbiology, Kansas State University, Manhattan Kansas, USA. For scientific contents contact: Daniel Y.C. Fung, Tel: +1 785 532 5654, Fax: +1 785 532 5681, E-mail: dfung@oznet.ksu.edu. For registration information contact: Debbie Hagenmaier, Tel: In the USA 1 800 432 8222. Tel: Outside of the USA +1 785 532 5575, Fax: +1 785 532 5637, E-mail: debbieh@ksu.edu, Web: www.dce.ksu.edu/dce/cl/microbiology

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SEPTEMBER 11-15 International Symposium on Oriental Monascus, University of Technology, Hangzhou, China. Contact: Zhou Liping, Department of Biotechnology, Tel: ++86 571 88320571 / ++86 571 88320451, Fax: ++86 571 88491541 / ++86 571 88320272, E-Mail: njyjs@zjut.edu.cn / wb99@mail.hz.zj.cn, Website: www.zjut-zlp.zj001.net

SEPTEMBER 12-15 **XV International Symposium on Problems of Listeriosis, Uppsala. Sweden. Contact: Prof. Wilhelm Tham, Swedish University of Agricultural Sciences, PO Box 7009, SE-750 07 Uppsala, Sweden, Tel: + 46 18 67 23 94, Fax: + 46 18 67 33 34, E-mail: wilhelm.tham@lmhyg.slu.se Website: www-conference.slu.se/isopol/**

SEPTEMBER 25-30 **9th ISOPOW Meeting, Mar del Plata, Argentina. Contact: Dr. Pilar Buera, Departamento de Industrias, Facutad de Ciencias Exactas y Naturales, 1428 Buenos Aires, Argentina, Fax: + 54 11 4576 3366, E-mail: pilar@di.fcen.uba.ar, Website: www.isopow9.com.ar**

OCTOBER 12-16 **XIII Latin American and Caribbean (ALACCTA) Seminar 'Foods and Health', Montevideo, Uruguay. Contact: Lucia Pereira, Eventos y Congresos ELIS, Tacuarembo 1442-710, Tel: + 598 2 4001284 / 4025504, E-mail: Eventos@adinet.com.uy or ictadac@adinet.com.uy, Website: www.multitel.com.uy**

2006

SEPTEMBER 17-21 **IUFoST 13th World Congress of Food Science and Technology, Cité des Congrès, Nantes, France. Contact: INRA, BP 71 627, 44 316 Nantes cedex 3, France, Tel: +33 6 40 67 51 45, Fax: +33 6 40 67 50 06, E-mail: iufost@nantes.inra.fr**

IUFoST/ICMSF INTERNATIONAL FOOD MICROBIOLOGY CONFERENCE

Beijing – October 2004

Dr. Martin Cole, Chairman of the International Commission for the Microbiological Specification for Foods, recently announced that the 2004 meeting of the ICMSF will be held in China next October. Dr. Cole indicated that a select number of prominent Chinese food microbiologists would receive special invitations to the ten days of Commission discussions, and that he was hopeful that a sub-commission of ICMSF would eventually be established in China.

In a joint statement, Dr. Cole & IUFoST President Alan Mortimer announced that a two-day International Food Microbiology Conference would be held in Beijing in conjunction with the Commission's visit, probably on October 19th and 20th. Most of the speakers at the Conference would be either visiting ICMSF members or senior Chinese microbiologists attending the Commission sessions.

IUFoST AT FI FOOD INGREDIENTS EXHIBITIONS IN 2004

Under an arrangement with CMP Information*, IUFoST will organise scientific seminars of 1-2 days duration at three of CMP's largest events during 2004.

Fi ASIA-CHINA 2004

23-25 March 2004, Shanghai, China.

"Food Ingredients: Product Development-From Concept to Commercialisation"

Fi CENTRAL AND EASTERN EUROPE 2004

25-27 May 2004, Berlin, Germany.

"Food Ingredients: Production and Perception-Challenges of entering the Expanded European Market Place."

Fi ASIA 2004

15-17 September 2004, Bangkok, Thailand.

Title to be announced.

** CMP, a division of United Business Media, London, UK, is a major sponsor of IUFoST*

(continued from page 7)

instruments such as biosensors, chemical and biomimetic sensors and 'bioassays'.

The need for the formation of an analytical laboratory network, using standardized analytical methods so that the uniform system for food quality evaluation in United Europe could be provided, was shown. One of the conclusions of the group was to make a conference the forum for a debate on broadly comprehended problems of food quality assessment. Mrs J. Vennekens-Capkova, a visitor to the conference and a representative of the European Commission, emphasized that the problems illuminated by the organizers agree entirely with the preferred subjects of the Sixth Framework European Outline Program.

During the conference, Prof. W.E.L. Spiess, Past President of the International Union of Food Science and Technology recognised Prof. Z. Sikorski for his recent fellowship in the International Academy of Food Science and Technology (IAFoST). For proceedings and further information, please contact Prof. J. Radecki, email: radecki@pan.olsztyn.pl

' Quality of Polish food shortly before Poland's integration with the European Union' was the subject of the XXXIVth International Scientific Conference of the Food Science Committee Polish Academy of Sciences PAN held in the University of Agriculture in Wroclaw on Sept. 10-11. 2003.

Over 300 scientific workers from universities and institutes all over Poland and from abroad participated in the Conference, which dealt with the problems of food science and technology, especially with food quality. During the first plenary session chaired by Prof. Z. Sikorski, the three following lectures were delivered: 'Harmonization of the Polish and world food law, The almanach of achievements' (Prof. S.Tyszkiewicz, IPMIT Warsaw),'The impact of microbiology and biotechnology on food Safety' (Prof. P. Raspor, University of Ljubljana, General Secretary of FEMS), 'Consumer and food quality in 2003; new trends on the background of changes at the European food market' (Prof. N. Barylko-Pikielna, Warsaw).

Further debates continued in five subject sections: The food of plant origin (133works), The food of animal origin (40 works), Biotechnology in food production (77 works), Quality of food and nutrition (32 works) and Food examination methods (19 works). In the second plenary session, two lectures were delivered: 'GMO - regulation by law and biosafety' (Prof. T.Twardowski, PAN in Poznan) and 'Plant nutriagents - the present state and perspectives' (Prof. J.Oszmian´ski, Wroclaw).

For the proceedings and further information, please contact Prof. Z.Gil, email: zgil@ozi.ar.wroc.pl ❑

17TH SAAFoST INTERNATIONAL CONGRESS AND EXHIBITION

Dr. Aubrey Parsons
Correspondent

The 17th SAAFoST International Congress and Exhibition was held in Pretoria at the CSIR Conference Centre from 1st-4th September 2003.

The conference theme was 'Food Innovation: More Science, Better Technology' and we had a record number of delegates. I believe that this increased number was due to the excellent programme and, needless to say, also the list of authorative invited guest speakers including IUFoST President Alan Mortimer, IUFoST President-elect David Lineback, IUFoST Governing Council member Gustavo Barbosa-Canovas and Mark McClellan, IFT President.

There were also other company sponsored overseas presenters and in total we had 114 lectures, which included a well attended and interesting flavour workshop as well as a nutrition seminar.

The overall objectives of this congress were as follows:

- To address and demonstrate the role that food science and technology can play in the economic development of South African countries with an emphasis on the value of science in and on innovation.
- To acquaint food scientists and technologists with the latest international developments and trends in their fields and stress the value of these in food innovations and applications.
- To provide a platform for the presentation of original research work in food science and technology.
- To provide a forum for networking among delegates and visitors and to promote contact and discussion between academia, industry and non-governmental organisations and agencies.
- To facilitate international communication and understanding.
- To affirm the SAAFoST biennial congress as the premier food science event on the African continent and to develop it into the primary and most accessible forum for food scientists in Africa to meet those from the science rich and developed countries of the world.
- To advance food professionalism throughout the food industry and promote the provision and availability of safe and wholesome food.
- To promote, among students, a career in food science, stress its value to society, showcase career

opportunities and responsibilities, demonstrate the value of a science congress as a professional forum of knowledge and communication and to strongly encourage and promote student attendance and participation.

The thrust of a few of the many important presentations is included below:

A food supply that is safe, plentiful and honestly represented has been a basic goal of humanity since the dawn of civilisation. In order for any nation to participate in international food trade, it is required that participating countries agree to standards practices that are involved in growing, processing, handling and transporting food within the particular nation and across its borders.

In 1995, a joint FAO/WHO Expert Consultation concluded that while the ability to conduct microbiological risk assessments was highly desirable, a lack of techniques and data hampered the realisation of this goal.

A FOOD SUPPLY THAT IS SAFE, PLENTIFUL AND HONESTLY REPRESENTED HAS BEEN A BASIC GOAL OF HUMANITY SINCE THE DAWN OF CIVILISATION.

While the new millennium will undoubtedly see the emergence of new food safety challenges, our ability to internationally mobilise a dynamic community of food safety makes us better prepared than ever to realise the age-old goal of a safe, secure and plentiful food supply.

Risk analysis is now recognised as the basis for setting national and international standards.

Food Science and Technology has much to offer to the world but its influence is restricted by political, economic, social and geographic influences. It is over a decade since the FAO/WHO conference declared that "access to nutritionally adequate and safe food is a right of each individual", and it is a concern to us all that in a world where there is (theoretically) adequate availability of food for almost everyone, almost a billion people suffer from undernourishment while almost 60% of the population of numerous developed countries are either overweight or obese.

Hidden allergens are allergens (food items/substances) that are present in products, without the consumer being aware. Ingesting only minute quantities of allergens, including hidden allergens, can result in anaphylaxis or death in highly allergic individuals. It is therefore of utmost importance that food manufactures are aware of ways that allergens can contaminate food to ensure product credibility and consumer satisfaction. Apart from the six major allergens (soy, milk, wheat, fish, peanut, egg) commonly recognised here, exporters know very little about allergens that are important in other countries.

Many factors play a role in the epidemiology of new or nearly new recognised biological or chemical food borne problems. Problems of and implications for developing countries relate to food production, the food industry, consumer and governments. We must identify a global information system to be implemented and co-ordinated in respect to emerging food borne problems.

Measures that will encourage and assist all countries in designing and implementing efficient national food control systems need to be qualified/quantified, co-ordinated and intensified.

Flavours are widely used in food and beverage industries worldwide and many users rely heavily on them for providing the vital element of a finished product. To assist primarily those who use flavours in production and product development, we discussed different types of raw materials that may be employed by the flavourist including essential oils, natural and synthetic aroma chemicals, fruit juice components, tinctures and extracts and other naturally occurring components that make up flavours for different applications.

Honey bush tea, a traditional South African herbal beverage prepared from Cyclopia species endemic to the Cape fynbos region, is a relatively new entrant on the global herbal tea market. The absence of caffeine and low tannin content contributes to the increasing popularity of the herbal tea. As a first attempt in understanding more about the health potential of the tea, characterisation of its phenolic composition played an essential role. This was followed up with studies on its antioxidant and antimutagenic activities. Acrylamide is considered as "probably carcinogenic to humans" and is a neurotoxicant, but previously had not been reported in foods. A wide range of amounts (less than 30 ppb to approximately 3 500 ppb) has been reported in different foods.

Before an objective assessment can be made of potential health problem(s), it became clear that considerable additional information and investigations are required. These include determination of the amounts and extent of acrylamide in food products, the mechanism(s) by which it is formed, bioavailability, exposure, and toxicological and metabolic implications. Studies are in progress around the world in these areas.

The processing of foods by Ultra-High Pressure (UHP) offers significant advantages that include minimum changes in the quality of the food, reduced energy utilisation and the development of new food products. UHP

modifies plant food quality and functionality, affects biosynthetic activities of plant tissues, selectively inactivates enzymes and inactivates key micro-organisms to maximise food safety in process fruits and vegetable.

The UHP processing of orange juice, guacamole, jams and jellies are some examples of the success of this technology at the industrial level. In the search for best quality and novel products, processors are turning to new methods to ensure safe food.

Gains in quality are generally achieved by reducing heat exposure and process time. Occasionally multiple methods are used in what is called hurtle technology to achieve a summed process that is superior to any one technology used to achieve the same process.

At the same time, it is apparent that consumers all around the world are becoming more knowledgeable about food product, regulatory agencies more stringent and the food industry more liable. There, in order to come up with better quality food products, we need to make every effort to understand principles.

'What's the difference between a fat and an oil, and which one should we be eating?' The current 'fat chaos' is causing enormous confusion and concern in the minds of cosumers – bad vs. good fats, animal vs. vegetable, unsaturated, hydrogenated & frois, omega 3 & 6, phytostearals & antioxidants, low fat vs. Dr. Atkins Diet and not excluding the 'new diet', which based on your blood group will inform one what you can and cannot eat.

Plant materials provide rich source of natural antioxidants. These include tocopherols (vitamin E), ascorbic acid (vitamin C), carotenoids, phenolic compounds and their derivatives. Herbs, spices and their extracts as well as tea extracts have been shown to possess antioxidative components, e.g. rosmanols and catechins. Tocopherol mixtures from soybean, palm and olives oil distillates are commercialised. There are several other protective components namely, resveratrol, flavinoids and isolflavones, which are known to have antioxidant properties.'

We also exhibited 82 Poster presentations which were exceptionally well done and proudly discussed by the respective Authors and Researchers.

In conclusion, a personal word of thanks to all our overseas visitors who gave and shared with us a wealth of knowledge, wisdom and huge amounts of enthusiasm that has definitely rubbed off onto South African food scientists and technologists. This bodes well for our future and the global food industry. In finality, thanks to the local team of dedicated volunteers who continue to amaze SAAFoST.

References: Dr. D. Lineback, Mr. A. Mortimer, Prof. L. Anebich, Dr. T. van de Venter, Dr. R. Joubert, Dr. P. Ashhurst, Dr. G. Barbosa-Canovas, Dr. H. Steinmann, Dr. R. Buchanan, Dr. M. McClellan, Mr. D. Simoni, Mr. S. Kochhar ❑

NEWS FROM TURKEY

By Prof. Dr. Semih Otles
Correspondent

The First Regional Meeting of the Asian Pacific Organization for Cancer Prevention (APOCP'03) with the theme 'New Strategies for Cancer Control' was held on October 14-16, 2003 in Izmir, Turkey. The regional meeting was organised by Ege University and APOCP with honorary president Donald Maxwell Parkin (WHO/IARC).

The scope of APOCP'03 was wide-ranging, including descriptive, analytical and molecular epidemiology, experimental and clinical histopathology/biology of preneoplasias and early neoplasias, assessment of risk and beneficial factors, experimental and clinical trials of primary preventive measures/agents, screening, medical & functional foods and their cancer preventive effects, diet and exercise, agricultural chemicals, and all aspects of cancer prevention.

The regional meeting brought together professionals from all the areas of cancer and medical & functional foods. The technical program included 14 sessions, 6 special lectures, 13 keynote talks, 19 oral presentations and many posters.

Some of interesting presentations were: "Practical prevention program for cancer in Asian Pacific countries" (K.Tajima, Japan); "Cancer control in Turkey" (M.Tuncer, Turkey); "Cancer registration in cancer control" (M.Parkin, France); "Cancer control in Korea" (Y.Ahn, Korea); "Schistosomiasis-associated bladder cancer" (E.Salim, Japan); "Pesticide usage with examples from Turkey and possible risks of cancer" (N.Delen, Turkey); "Pointers to prevention-epidemiological overview of cancer in Asia" (M.Moore, Japan); "Cancer and its prevention by some horticultural and field crops in Turkey" (S.Otles, Turkey).

During the social events and banquets in historical places the participants at APOCP'03 Regional Meeting were shown Turkish culture, music, dance and enjoyed exotic and delicious Turkish meals at the closing party.

For the further information, please contact, Prof.G.Aydemir, tel: +90 2323882851, fax:+90 2323427975. ❑

ADDITIONAL CAREER OPPORTUNITIES FOR FOOD TECHNOLOGISTS IN KENYA

By Shadrack Oiye and
Anne Wangalachi
KUFoST Correspondents

INTRODUCTION

It has been suggested in the past that the term 'Food Technologists' be used to describe those with Bachelor Science (BSc) degrees and the term 'Food Scientists' be reserved primarily for those with Master of Science (MSc) or Doctorate of Philosophy (PhD) as well as research competence[1]. This report will reflect on the changing employment opportunities for food technologists in Kenya.

Kenya is an agricultural economy and thus many of its industries are agro-based. Agro-food processing has been found and consequently is perceived as a driving force for any growing and dynamic agricultural economy. This has justified the training of food technologists in the middle level colleges and the universities. The annual total output of graduates from the universities by 1998 was approximately 75-90[2].This figure is currently higher by ten times as opposed to the industry requirement, which is shrinking. That is, there are many food technologists for limited job opportunities (traditional food technology jobs). This is because the Kenyan economy is not improving at a significant rate and incentives for investments though increasing, are still deficient. Reports of closures and relocation of manufacturing firms to other countries as well as staff retrenchments are common; food and related industries have not been left out either. Kenya has recently become more of a trading rather than a manufacturing country, as many international companies prefer to relocate their manufacturing bases to other countries leaving Kenya purely a marketing base. With trade agreements such as COMESA, this initiative is proving to be justifiable and very feasible.

THE KENYAN INDUSTRIAL SCENE IS RAPIDLY CHANGING AND THIS HAS A DIRECT IMPACT ON ... THE ROLES OF FOOD TECHNOLOGISTS

The traditional roles of food technologists in food based industries in Kenya such as quality assurance, product and process development and improvement, online supervision and so on, are therefore at stake. This should not discourage, but prompt, food technologists to exercise their full potential by exploring other opportunities. After completion of his undergraduate studies, one of the authors, who is now completing his Masters program in Applied Nutrition, worked in an engineering establishment as a technical representative and later in a hygiene and sanitation company as a marketing executive. Below are several areas that are emerging to offer additional career opportunities for the food technologists in Kenya.

SALES AND MARKETING

Suppliers of food industries are increasingly interested in employing marketing and sales executives who have and can communicate relevant technical details. These industries include the food ingredient, food equipment, food laboratory and hygiene and sanitation products suppliers. This phenomenon is becoming more common due to increasing competition and in response to mounting customer demand for technical details. A similar situation is observed in the pharmaceutical industry where medical and veterinary doctors, pharmacists and biochemists have been deployed to market pharmaceutical products. Companies producing foods have also been reported to include food technologists in their sales and marketing teams. Currently, we also have a few food technologists working in sales and marketing positions in pharmaceutical companies, motor industry, engineering, hotel and other non-food set-ups. The rapid proliferation of food technologists in the area of sales and marketing may have apparently been promoted by the higher pay packages offered. Some educators in food technology may have long foreseen the development of this scenario, and some universities include marketing in food technology training.

TECHNICAL SERVICE PROVISION

Engineering and packaging design for the food industry are becoming crucial. In this light, several engineering and packaging industries have employed food technologists in their technical teams and with encouraging results, others are expected to follow suit. In engineering, for instance, the fabricated food processing equipment needs to be hygienic and the design should provide for this. Further, food processing has specific parameter specifications, which should be considered at equipment design stage. The choice of packaging material and the design vis-a-vis the food to be packaged and its properties is in the domain of food technology. This has justified the hiring of the services of food technologists in such establishments.

NUTRITION

Nutrition and food security programs require both a multi-disciplinary and multi-sectoral approach. One of the indispensable disciplines is food technology. Post-harvest

processing and enterprise development (income generation) are key areas requiring the services of a food technologist. To ensure food and nutrition security throughout all seasons, excess produce needs to be preserved. Value added food products also form a source of income for agro-based community enterprises. Acquisition and use of post-harvest processing knowledge by farmers can improve their food, income and nutrition security[3]. The non-governmental organizations (NGOs), public and private institutions executing nutrition and food security programs, depending on their nature, have increasingly needed the services of food technologists. Many, including the food technologist themselves, did not envisage that food technologists were needed and could work directly with the communities in general, including smallholder farmers. With the rapidly changing feeding habits where processed convenient foods are in high demand, food technologists have become relevant in training on value-adding activities. Many NGOs do support such initiatives in the effort of poverty alleviation through job creation and income generation. Food relief organizations also require food technologists to ensure that the food intended for distribution to the vulnerable (during emergencies) is safe for consumption.

SMALL AND MICRO- SCALE ENTERPRISES

With sufficient capital, a sizeable number of food technologists in Kenya have ventured into micro, small-scale and medium food-based enterprises with success stories reported in fruit juice production, horticultural export, dairy production, and bakeries among other enterprises. The failure of some of these enterprises to remain operational has not only been due to cash flow but mainly marketing and management problems. It is for this reason that some universities include the food industry management and/or enterprise development components in their curricula, thus enabling their graduates to competently advise on these matters.

OTHER AREAS

Other areas are also viable. Agricultural and related research institutions also employ food technologists as research assistants or even as researchers. Food-based and related consultancy firms also offer limited opportunities for food technologists. Other non-food establishments are also increasingly recruiting food technologists as management trainees to earmark them for management positions. The minimum admission requirements for a degree-based food technology course in Kenya is comparable to those for admission to other courses perceived to be most competitive such as pharmacy and medicine. Further, general science and basics in other subjects such as economics taught in food technology programs have made the technologists uniquely marketable in diverse areas.

CONCLUSION

In conclusion, the Kenyan industrial scene is rapidly changing and this has a direct impact on career opportunities: thus acting as a stimulus for modifying or expanding the roles of food technologists.

It is against this backdrop that teaching institutions should review their existing curricula. The world is fast becoming a global village. Ideally, a food technologist trained in Kenya should be able to work anywhere in the world. In revising the curricula, consultations should be held with specialists from other regions of the continent and even the globe. Emphasis should be laid on development of additional skills such as: problem analysis and solving; interpersonal skills; communication skills; teamwork; self-learning capacity; creativity and enthusiasm[4].

The graduates should also become aware of their increasingly changing roles in the society. While maintaining their traditional roles, they should assume the fresh ones, being brought forth by the changing job market. The government should also initiate programs to support university graduates who choose to venture into private entrepreneurship by providing financial assistance and special training, for instance. KUFoST [Kenya Union of Food Science and Technology] intends to influence policy makers in this respect and champion other initiatives that would enhance the survival of food technologists in the unpredictable career environment in Kenya.

References: 1. Potter, N. N. and Hotchkiss J.H. 1996. Food Science. CBS Publishers and distributors. First Indian Edition. pp1; 2. Wongo, L.E. 1998. Career opportunities for food technologists. J.food. Technol Afri: Vol 3 No 3: 114-116; 3. Otieno W.A. and Oiye S.O. 2001. Demystifying food technology to African farmers. Food Security Program Newsletter, World Vision. Vol. 6 No 2:8-10; 4. Dumoulin E. 2001. Education in Food Science and Technology at the Beginning of the 21st Century. Newsline. No. 50. ❑

ADHERING BODY PROFILE: THE SOUTH AFRICAN ASSOCIATION FOR FOOD SCIENCE AND TECHNOLOGY (SAAFoST)

SAAFoST is a National Association, which is concerned with the advancement of knowledge of Food Science and Technology. This it does through encouraging scientific research, organising meetings, seminars, workshops and congresses, publishing papers and

assisting in educational activities. Currently SAAFoST has about 1400 members throughout Southern Africa - the Cape, KwaZulu-Natal and Northern branches attend to the regional affairs of the Association.

HISTORY OF THE ASSOCIATION

Professors G.M. Dreosti and C.J.B. Smit and Messrs. L. Ginsburg, G.G. Knock, R.M. Lewis and J.C. Schoonens identified the need for an association in 1960. The initial circular to 150 firms in the South African food industry brought overwhelmingly positive response. On 7 March 1961, forty-six people at a general meeting held at the University of Cape Town elected the above-mentioned gentlemen, together with Dr. L. Garfinkel and Prof. R.I. Nel to a working group to draft a Constitution.

At the first Annual General Meeting, Prof. Dreosti was elected President and Prof. Nel and Mr. Knock as Vice-Presidents. Membership at that time was 95. The Association grew rapidly with the formation the Northern Branch in 1962, at the instigation of Mr. J.P. de Wit, and the Natal (now KwauZul - Natal) Branch on 5 February 1973, after thorough research by Prof. H.J.H. de Muelenaere. The association now has a current membership of over 1300.

The association acquired international status in 1970 when it became a founder member of the International Union of Food Science and Technology (IUFoST), and in the same year it held its first three-day congress.

The current President of SAAFoST is Mr. Nigel Sunley. Past Presidents have included Dr. Peter van Twisk, Mr. Peter Bush and Dr. Aubrey Parsons.

WHAT DOES SAAFoST DO?

- Eight study grants and eight academic achievement awards are granted each year to Food Science and Food Technology students via their universities and technikons, respectively.
  A post-graduate scholarship is awarded annually.
- An International Congress is organised every second year.
- An award is made for the best local scientific paper presented at the Congress.
- An award is made for the best local poster presented at the Congress.
- Student Chapters at the various universities and technikons are under the supervision of the SAAFoST Branch Committees and financial assistance is made available.
- Workshops or mini-symposia addressing relevant issues are often held between congresses.
- Regular lecture meetings during which prominent local and overseas experts address members on subjects of interest are organised by Branch Committees.
- Information arising from congresses, workshops etc. is often printed and bound and much of this material is housed in the State Library where it is available to members and the public.
- As a representative on the Food Legislation Advisory Group (FLAG), SAAFoST contributes towards the formulation and revision of food regulations as published by the Department of Health.
- Two Meritorious Awards for Journalism are made available for presentation every year - one for the press and the other for radio and television. The awards are made to authors or presenters of objective and scientifically correct articles in the local press or media that contribute towards sound consumer knowledge of controversial and complex food issues.
- SAAFoST was very instrumental in forming the Food Advisory Consumer Service (FACS) which was launched in January 1995 primarily for the consumer who wants to be informed about food issues such as health, nutrition, safety, preservatives, colours, additives, chemicals, irradiation, processing, labelling etc.
- The Association responds to and challenges misleading articles, advertisements and claims concerning food processing and the food industry.

WHAT BENEFITS ARE THERE FOR SAAFoST MEMBERS?

- Each member receives a membership certificate, a member's handbook and a copy of the SAAFoST constitution and rules.
- Each member receives a regular monthly copy of the official SAAFoST Journal,
  S A Food & Beverage Manufacturing Review.
- Members are kept up to date with the numerous SAAFoST activities and receive regular invitations to lectures organised by their branches.
- Members regularly receive an information brochure comprising articles of interest called SAAFoST Snippets.

Through membership of SAAFoST, individuals and companies are able to contribute towards, and gainfully participate in, a host of educational and promotional activities aimed at continuously elevating the standards of quality and professionalism in the food industry.

Institution membership by companies is strongly encouraged because it contributes greatly towards the student study grants, scholarships and awards offered each year by the Association.

CLASSES OF MEMBERSHIP

SAAFoST has the following categories of membership:

- An Honorary Life Member shall be a person who has rendered outstanding service in the advancement of the objects of the Association and is elected by the members at a Biennial General Meeting
- A Professional Member shall be a person who qualifies for registration as a natural scientist or science technologist in terms of the Natural Scientific Professions Act 1993 (Act No. 106 of 1993), or who has applied to, and been accepted by, Council as a Professional Member
- A Member shall be a person who does not qualify for Professional Membership, but who is, or has been, actively engaged, or is interested, in any activity related to food science and technology
- An Institution Member shall be a company, research institution or other body engaged directly, or indirectly, in food science or technology. An Institution Member shall designate one representative, preferably from its senior scientific or technical personnel, to represent the institution in the Association.
- A Student Member shall be a person who is following a course of technical, practical or scientific training, as approved by the Executive Committee on the Council.
- Honorary Life Members and Professional Members shall be Corporate Members, and Institution Members. Members and Student Members shall be non-Corporate Members.

ERNEST NEWBERRY MEMORIAL

This was instituted to honour the memory of the late Ernest Newberry, who was an active and dedicated member of both the Cape and Northern Branches for 25 years, served five terms as Chairman of the Executive committee of the council, was Chairman of the Organising Committee for the first Biennial Congress in Cape Town in 1970, and was elected an honorary Life Member in 1989. A prominent and distinguished scientist delivers the Lecture, the first scientific paper at a biennial congress. The following scientists have delivered the Ernest Newberry Memorial Lecture:

1997 - Prof. Fergus Clydesdale – University of Massachusetts
1999 - Prof. Trevor Britz – University of Stellenbosch
2001 - Prof. Walter Spiess – Federal Research Centre for Nutrition, Karlsruhe, President IUFoST
2003 - Dr. M. McLellan, President IFT

SAAFoST STUDENT CHAPTERS

Student Chapters have been established at several Technikons and Universities with food technology and food science departments. These SAAFoST Student Chapters are run by the students at the various institutions under the guidance of mentors (staff members) and under the auspices of the local SAAFoST Branch Committee on which the Student chapters are represented. The Student Chapters organise lectures and other appropriate activities in line with the overall objectives of SAAFoST.

FOOD REVIEW

The official journal of the South African Association for Food Science and Technology is "Food Review". This journal is published every month and is circulated to employees in the food and beverage industries. All members of SAAFoST receive the journal as part of their membership fees. The cost of the journal to non-members is R218.00 per annum. News of Branch activities and summaries of talks presented at the Branches are regular features of the journal.

SAAFoST WEB PAGE

The SAAFoST website address is http://www.saafost.org.za/ ❑

ISFE BALLOT RESULTS

IUFoST delegates voted overwhelmingly in favour of approving the By-Laws for the IUFoST disciplinary grouping, the International Society of Food Engineering (ISFE).

Endorsement of IUFoST Standing Committees 2003-2006

Membership in the IUFoST Standing Committees, 2003-2006, was endorsed by IUFoST delegates as follows:

Audit Committee	Constitution Advisory Committee	Nominations Advisory Committee
Chair: R. Yada (Canada)	Chair: G. Kennedy (Australia)	Chair: D. Lineback (USA)
R. Ratcliffe (UK)	M. Buchanan (USA)	D. Rodriguez-Amaya (Brazil)
C-H Lee (Korea)	W. Rothon (UK)	W. Zhao (Singapore)
P. Raspor (Slovenia)	P. van Twisk (S. Africa)	P. Cheung (Hong Kong)
F. Viques-Rodriguez (Costa Rica)	A. Chan (Hong Kong)	G. Campbell-Platt (UK)

Project on Adequate Food Availability for the Hungry World

A joint IUFoST/FAO press release will be issued shortly, indicating the launch of this major joint project. IUFoST Adhering Bodies should look out for the announcement and the database templates that will accompany the joint release.