

- Machinery and Design
- Appropriate Mechanization and Technologies in Agriculture

In addition to these sections, holding five sessions each, a fourth section for students and young researchers was formed for the first time.

The importance of the event was underlined by the presence of the Secretary-General of CIGR Prof. P. Schulze Lammers, the President of EurAgEng Prof. D. De Wrachien, and the chairmen of the national societies of agricultural engineers of Turkey, Romania and Serbia. The presence of representatives of companies active in agricultural



Prof. Nikolai Mihailov

engineering suggests that the findings of the papers will be utilized in practice. The fact that the conference was held simultaneously with the celebration of the 30th anniversary of the Faculty of Electrical and Electronic Engineering at the University of Rouse gave the whole event a festive

atmosphere and further stressed its importance.

During the conference a round-table meeting of representatives of CIGR, AESEE, ERA and EurAgEng was held. The participants agreed to strengthen their efforts to concentrate conferences in the region of South-Eastern Europe in order to attract larger international audiences from other countries, particularly from neighbouring and Western European countries. The participants decided to resume their round-table meetings in February 2005 at the 33rd International Symposium "Actual Tasks on Agricultural Engineering" in Opatija, Croatia. They expressed a shared interest in a harmonization of study programmes in AgEng and similar programmes across Europe. Based on a credit point transfer system, such harmonization will effectively stimulate student mobility. The Presidents of EurAgEng and AAESEE underlined the necessity of strengthening the cooperation between the two regional associations.

The Third Conference on EE&AE will be held in 2006.

Prof. Nikolai Mihailov

President Organizing Committee & President AAESEE

CIGR-SPONSORED ACTIVITIES

A chronological list of events in the field of agricultural engineering can also be found in our Events Calendar which can be consulted on CIGR's Website:

<http://www.cigr.org/>

2004 CIGR International Conference "The Olympics of AgEng"

This international CIGR conference will be held from **11 to 14 October 2004** in the International Meeting Centre of **Beijing, PR China**. With the sponsorship of CIGR, the Chinese Society for Agricultural Machinery (CSAM), the Chinese Society of Agricultural Engineering (CSAE), and co-sponsored, among others, by AAAE, EurAgEng, CSAE and AOC, the conference is organised by the Chinese Agricultural University (CAU), the Chinese Academy of Agricultural Mechanisation Sciences (CAAMS), and the Chinese Academy of Agricultural Engineering (CAAE). The conference language will be English.

Human beings are facing the new challenge of the growing of knowledge-based economy that affects our daily lives. Agricultural engineering knowledge and technologies have spread throughout the world with the development of information technology and multi-disciplinary activities.

As we move into the new millennium, advanced engineering technologies are being rapidly applied in agriculture, food and bio-systems. The need for increased cooperation and face-to-face exchanges among engineers, scientists, and commercial companies in the global village is evident. The 2004 CIGR International Conference aims to provide opportunities for researchers, scholars, managers and other professionals to exchange the latest information, and to provide a discussion forum on how to promote scientific and technological innovations on agricultural engineering into the new millennium.

The product shows, poster sessions and other academic activities of this conference will deal with subjects such as:

- Modern agricultural equipment and facilities (plant and animal production)
- Soil, water and environment
- Post harvest technology and biomass engineering
- Information technology for agriculture.

Agricultural engineers, institutions and companies are invited to participate in this congress and to submit a paper to the academic committee. Papers presented at the meeting will be available to the meeting participants on CD-ROM, and abstracts will be published officially for the participants.

Further information is available on the internet at <http://www.2004cigr.org/> or from the Conference Secretary Dr. Renjie Dong, PO Box 184#, China Agricultural University, No. 17 Qinghuadonglu Haidian district, Beijing 100083, PR CHINA. Email: 2004cigr@bjaeu.edu.cn or 2004info@bjaeu.edu.cn or info@2004cigr.org

1st CIGR Section VI International Conference on "Bioproducts Processing and Food Safety"

CIGR-Section VI deals with the engineering principles and technologies in post-harvest and processing of agro-food products. It is intended to follow the trends, promote the advancement and enhance the dissemination and the transfer of technology in post-harvest and processing at a global scale. Its missions are

- To bring together all those that are working in post-harvest and processing;

- To stimulate international experiences, exchange and co-operation, for the advancement of knowledge in this area, world-wide
- To stimulate participation in CIGR activities, especially Congresses
- To define the areas that are in need of research and /or of transfer of technology
- To advance in knowledge for the assurance of safety of all products for human consumption.

In order to better fulfil its missions, CIGR Section VI is organizing the 1st Technical Symposium of CIGR Section VI on food and bioproduct processing and food safety in **Beijing, P.R. China from 11 to 14 October 2004**, as part of the 2004 CIGR International Conference. This symposium will feature a series of presentations and discussion in plenary, scientific and poster sessions, and informal gatherings to highlight most recent developments in food and bioproducts processing and food safety. Selected papers presented at this symposium will be published in a special issue of *Journal of Food Engineering*, an international leading and SCI cited academic journal published by Elsevier. The full Proceedings of the Symposium will be published in CD-ROM and provided to all participants at the registration desk during the Symposium.

The symposium is jointly organised by National University of Ireland, Dublin, CIGR Section VI (Postharvest Technology and Process Engineering) and China National Packaging & Food Machinery Corporation (CPFMC) and sponsored by the International Association for Engineering and Food (IAEF), the Institute of Food Technologists (IFT) and the Chinese Academy of Agricultural Mechanization (CAAMS).

The topics to be covered include

- Physical properties
- Sensors and sensing technology
- Process modelling, simulation and control
- Thermal processing, chilling and freezing
- Dehydration processes
- Separation processes
- Preservation and storage
- Packaging
- Emerging processing technologies
- Product quality and safety
- Biotechnology
- Waste treatment and management
- Processing equipment

For further information, please consult the symposium web page at <http://www.2004cigr.org/en/processing> or contact Assoc. Prof. Lanfang Zhang, PO. Box 8, Chinese Academy of Agricultural Mechanization Sciences (CAAMS), No.1 Beishatan, Deshengmen Wai, Beijing 100083, P.R. China. Tel: 010-64882509, 010-64849687, 010-64882523; Fax: 010-64883508, 010-64849687; Email: info@2004cigr.org

1st CIGR Section VII Technical Symposium on "Information Technology for Agriculture"

A further Technical Symposium to be held as part of the 2004 CIGR International Conference in Beijing from **11 to 14 October 2004** will be organized by CIGR Section VII. Session III of the CIGR 2004 Conference will present

papers reporting on progress in the development and applications of IT in food and agriculture productions, natural resources and environmental management, and rural development. In addition to the plenary session of the entire conference, Session III activities consist of two and a half days of invited speeches, oral and poster presentations, technical exhibition, and selective technical tours in Beijing. The goal of session III is to provide a forum for interaction, discussion, and information exchange among scientists and engineers from developed and developing countries on the role of ICT in agricultural modernization and sustainability.

Main Topics:

- Strategic issues related to the research, use, deployment, and adoption of IT in agriculture
- Information technology in agriculture, food production, resource and environmental management
- Spatial information technology (GPS, GIS, RS) for agriculture; precision agriculture and precision livestock farming
- Advanced sensing technology, instrumentation, robotics and automation systems for agriculture
- Biosensors & bioinformatics
- Information technology for food quality, safety, and traceability
- Machine vision and spectroscopy
- Modeling and simulation of agricultural & biosystems
- Expert systems, decision-support systems, and applied software development for agriculture
- Communications, networking, and wireless technologies
- Web-based technology and information services for agriculture

Dates and Deadlines:

Detailed Programme available on the Internet: 15 Aug 2004
The conference language will be English. A full version of the technical papers accepted by the conference on CD-ROM and a bound volume of full abstracts will be available to the participants on registration desk before the conference.

For further information, look up <http://www.2004cigr.org> or <http://pa.cau.edu.cn/conferences/cigr.htm> or contact the Session III secretariat: 2004CIGR_IT@cau.edu.cn

CIGR Section I International Conference Envirowater 2004: "Land and Water Management: Decision Tools and Practice"

The 2004 CIGR International Conference, which will be held in the **Beijing** International Meeting Center, **P. R. China**, from **11-14 October 2004**, is a forum on agricultural engineering in the new millennium. As a main part of the 2004 CIGR International Conference, the 7th Inter-Regional Conference on Environment and Water, entitled "Land and Water Management: Decision Tools and Practice" will be held on the same occasion in association with CIGR-Section I: Land and Water Engineering.

The conference is organised by the China Agricultural University (CAU) and the National Center of Efficient Irrigation Engineering and Technology Research (NCEI) of the P. R. China. The Organizing Committee is chaired by the Incoming President of CIGR, Prof. Luis Santos Pereira

from the University of Lisbon, Portugal.

The conference is sponsored by CIGR-Section I, and, among others, the Chinese Society of Agricultural Engineering (CSAE), the International Commission on Irrigation and Drainage (ICID), and the Food and Agriculture Organization (FAO).

Rapid population growth and the continuous development of economic activities produce an increased demand for water. Many countries especially China are therefore facing greater and severe shortages both in water and land resources, as well as soil erosion and land desertification. Various environmental and ecological issues have been highlighted in recent decades. To improve land and water planning and management, policies, measures and practices must be identified which provide for the sustainable use of water and land resources and appropriately control the environmental risks associated with those uses. Scientists, engineers and managers from many countries have produced a variety of modern technologies and decision tools and practices that may contribute to the improvement of land and water management. These technologies include information systems, remote sensing, geo-referencing, knowledge based systems and a variety of models and decision support systems. As one of the largest developing countries, and with the largest population in the world, China has also made great progress and gained enormous experience in land and water management which can be mobilised for coping with its recent economic and social growth. However, because each country has its own characteristics and approaches, there is a strong need for cooperation and to share experiences among engineers, scientists, managers, and other decision and policy makers. This need is made even more evident by the challenges posed by globalization.

The 7th Inter-Regional Conference on Environment and Water aims at promoting exchanges and collaboration on land and water management and offers opportunities for researchers, scholars, managers and other professionals to share the latest information and findings, thus providing a discussion forum on environment and water issues approached from the global perspective. The topics of the conference include all scientific issues and technologies for improving strategies for the use and management of land and water in order to achieve improved productivity, sustainable development in using natural resources, environment conservation and enhancement, and the minimization of risks to people and their society:

I. Water Saving and Water Productivity

- Models, data, and model validation and calibration
- Modeling irrigation systems
- Information tools for irrigation scheduling and delivery scheduling

II: Land Use Planning and Management

- RS, GPS, and monitoring
- Information systems and GIS tools
- DSS for land use planning

III. Soil Erosion and Conservation

- Models and data gathering

- Planning for extreme events
- Maintenance and modernization of soil conservation structures

IV. Water Conservation and Soil Management

- Soil physical properties and data bases
- Soil tillage and land forming
- Water harvesting

V. Salinity, Water Treatment and Reuse, and Contamination Control

- Monitoring to avoid land degradation and water contamination
- Modeling salinity and contamination dynamics
- Tools and practices for reuse of drainage and waste water

The conference language will be English.

Full versions of the technical papers accepted for the conference will be available to the participants both on CD-ROM and in officially published proceedings.

For further information visit the conference website at <http://www.2004cigr.org/envirowater2004> or contact the Conference Secretariat: Chinese-Israeli International Center for Training in Agriculture (CICTA); P. O. Box 151, China Agricultural University (CAU), East Campus; Qinghua Donglu 17, Beijing 100083, P. R. China. Tel: + 86 10 62337154 or 62337148, Fax: +86 10 62337138 E-mail: Ciicta@public.bta.net.cn

Vth International CIGR Symposium on “Concrete for a Sustainable Agriculture: Agro-, Aqua- and Community Applications”

Under the auspices of CIGR-Section II, the Polytechnical University of Madrid (UPM), the Spanish Institute of Cement and Its Applications (IECA), and the Institute for the Promotion of Certified Reinforcement (IPAC) have the honour to invite you to participate in the Vth International Symposium “Concrete for a Sustainable Agriculture”, which will be held from **5 to 8 June 2005 in San Lorenzo de El Escorial, Spain.**

The following themes will be dealt with:

- Innovative concrete structures and infrastructures in agriculture, horticulture and livestock farming
- Durability and quality aspects on concrete in agriculture
- Concrete in relation to general animal welfare and energy savings
- Concrete for water management and environmental protection
- Use of precast concrete elements in livestock and rural buildings
- Other relevant topics

For further information please contact the Secretariat or the Committee Co-Chairs, Miguel A. Garcimartin & Elvira Sanchez Espinosa at: Departamento de Construcción y Vías Rurales, E.T.S. Ingenieros Agrónomos, Ciudad Universitaria, 28040 Madrid. Tel.: +34 913 365 762 & +34 913 365 420, Fax: +34 913 365 766.

http://www.cvr.etsia.upm.es/cigr_concrete_symposium.htm
E-mail: secretariat@cvr.etsia.upm.es

ACTIVITIES BY CIGR REGIONAL SOCIETIES

AgEng 2004: "Engineering the Future"

This conference will be held from **12 to 16 September 2004**, at the city campus of the Katholieke Universiteit **Leuven, Belgium** (University of Leuven). The conference addresses engineering issues related to the future of agriculture, the environment, biological systems and related industries in order to serve society and all people. Engineering and technology will be dealt with not just as a driving force but also as a catalyst that enables change.

New technologies are required to enable agriculture to meet future challenges. Changes in food production and food supply must be carefully prepared both to meet the expectations of consumers and to lead to a profitable and sustainable agriculture. Increased demands of consumers for safe food produced with techniques that are acceptable for the environment will lead to the development of advanced engineering as part of a new agriculture. This includes new technologies that are emerging for post-harvest treatments of food. All these technologies involve or incorporate engineering principles based on biological systems.

The conference will deal with the following topics:

I. Basic Natural Resource Engineering

- Soil properties and tillage practices
- Soil erosion: processes & control
- Land resources & landscape: planning & management
- Flow, transport processes and crop water requirements
- Irrigation & drainage
- Hydrology & water resources: management & pollution control
- Renewable energy sources & energy systems
- Technology for soil & water engineering
- Wastewater purification & recycling

II. Primary Production Technology for Food & Fibers

- Precision agriculture
 - Sensors & actuation
 - Combines & Harvesting machines
 - Forest & nature engineering
- #### III. Integrated Management Systems for Animals
- Livestock technology
 - Animal welfare
 - Process control & environment control for animal structures
 - Modelling in precision livestock
 - Aquaculture
 - Laboratory animals
 - Agricultural structures & design
 - Particulate Matter emissions from animal production
 - Manure handling

IV. Engineering Technologies for the Future

- Technology for organic farming
- Technological aspects of food safety & traceability
- Farming in a multi-functional environment
- Agricultural engineering in transitional & developing countries
- Agricultural engineering curricula
- Information Technology

V. Sustainability in Food Production

- Social aspects of food production
- Sustainable systems for food production
- Economical aspects of sustainable food production
- Education on sustainable food production

The registration fees (+ 21% VAT charged to participants whose company/organisation is located in Belgium and to those within the European Union who do not have a VAT number) 440 € for EurAgEng & CIGR members/speakers and 290 € for students, participants from developing countries, and one-day attendance. A book of abstracts, the CD-ROM proceedings, sandwich lunches, coffee breaks, and the welcome reception are included in the registration fees.

Deadlines:

Full papers:

1 August 2004

The collected extended abstracts will be available to participants at the conference. Submission of conference papers to the Biosystems Engineering Journal (the scientific journal of EurAgEng) is encouraged.

For further information, contact: AgEng 2004 c/o Technologisch Instituut; Luc Baele; Desguinlei 214; BE-2018 Antwerpen, Belgium. Tel.: +32 3 2600861 Fax: +32 3 2160689; e-mail: info@AgEng2004.be The conference website at <http://www.AgEng2004.be/> contains extensive information as well as online registration facilities etc.

12th Annual Conference of the MSAE, Egypt

The Misr Society of Agricultural Engineering (MSAE), in cooperation with the Agricultural Engineering Dept. of Alexandria University will organise the 12th MSAE Conference on **4 and 5 October 2004** in **Alexandria, Egypt**.

Under the theme "New Technologies in Agricultural Engineering Related to Research, Application and Training", the conference will deal with the following topics:

- Rural planning, buildings, and environment in agricultural communities
- Mechanization appropriate for agricultural enterprises; manufacturing, importing, and marketing agricultural equipment and tractors
- Traditional and renewable energies
- Process engineering and handling of agricultural materials
- Engineering in agricultural irrigation and drainage
- Economic and social impacts and the role of small and large agricultural projects in development and environmental conservation
- Development of educational and training programs; innovation in agricultural engineering.
- Biological engineering and technology

Abstracts (in Arabic or English) not exceeding one A4 page, font size 12-14, line spacing 1.5, 3 cm margins on all sides, are to be submitted in three hard copies along with a in WinWord file on 3.5" floppy or CD-ROM. Please send all manuscripts and documentation to: Dr. Abd El Kadir A. El Nakib, Prof. and Head of the Agricultural Engineering Department, and Gen. Sec. of the Conf., College of Agriculture, Al Azhar University, Madinet Nasr, Cairo, 11884,