

## CIGR NEWS

### 2004 CIGR International Conference "The Olympics of AgEng" 10 to 14 October 2004 in Beijing, China

#### CIGR Elections

In the CIGR General Assembly in Beijing on Tuesday, 12 October 2004, CIGR delegates will have an opportunity to elect new CIGR personnel.

With Prof. Luis Santos Pereira succeeding to Prof. Axel Munack as the President of CIGR on 1 January 2005, a new Incoming President must be elected in order to guarantee the succession.

The candidate for the Incoming Presidency 2005-2006 is Prof. Irenilza de Alencar Nääs. Having received her PhD in Agricultural Engineering at Michigan State University in 1980, she currently holds a professorship at the Agricultural Engineering College of the State University of Campinas, Brazil.

If she is elected in the General Assembly, she is prepared to act as Incoming President for the period of 1 January 2005 to 31 December 2006 and become the first female CIGR President as well as the first one from South America on 1 January 2007.

Prof. Irenilza de Alencar Nääs is a Board Member of CIGR-Section II Farm Buildings, Equipment, Structures & Environment. Having served two terms as president of the Brazilian Society of Agricultural Engineering (SBEA), she currently is the President of the Latin American and Caribbean Society of Agricultural Engineering (ALIA), and she represents ALIA on the CIGR Executive Board.

On December 31, 2005, Prof. Schulze Lammers' term as

the Secretary-General of CIGR will come to an end. Prof. Maekawa from Japan, elected Board Member of Technical Section II in 2002, has volunteered to take over the General Secretariat. If elected in the General Assembly in October, he will act as CIGR Secretary-General for the period of 1 January 2006 to 31 December 2009. The official transfer of the office will take place during the CIGR World Congress in Bonn in September 2006.

Prof. Takaaki Maekawa, who received his PhD in Agricultural Sciences at Hokkaido University in 1977, currently holds a professorship at the Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan. In 2000, he received an Outstanding Contribution Award for his work as Chairman of the Local Arrangement Committee for the Memorial CIGR World Congress in Tsukuba. A member of several Japanese and international academic societies, Prof. Maekawa has held high offices in the Japanese Society of Agricultural Structures (President, 1997-2001) and the Japanese Society of Agricultural Engineering (Chairman, 2000-2004).

Finally, although the composition of the seven Section Boards will only be voted over in 2006, some new members will be elected in Beijing in October. Volunteers wishing to participate in the technical work of the sections please contact the General Secretariat.

#### Conference Programme Update

Date	Morning	Afternoon	Evening
Saturday 09 October		<b>CIGR Presidium Meeting (14:00-19:00)</b>	
Sunday 10 October	Registration <b>CIGR Executive Board Meeting (8:30-12:30)</b>	Registration <b>CIGR Technical Board Meeting (14:00-17:00)</b>	Registration
Monday 11 October	Opening Ceremony Keynote Speeches	Visit to Second China Ag Trade Fair	Reception
Tuesday 12 October	Parallel Sessions	Parallel Sessions	
Wednesday 13 October	Parallel Sessions	Parallel Sessions	<b>CIGR General Assembly (17:30-19:00)</b>
Thursday 14 October	Parallel Sessions	Technical Tours	Banquet

## 1300 Abstracts Received

Since the April issue of the CIGR Newsletter, new information from the organisers of the CIGR International Conference in Beijing has reached the CIGR General Secretariat. The Organising Committee reports that as of 23 May, after an extended deadline for abstract submission, 1300 abstracts from 69 countries had been received, with 600 abstracts from overseas. The deadline for extended abstracts and full papers was 30 June 2004. The organisers are planning to publish collections of abstracts and a CD-ROM containing the full papers.

Based on the number of abstracts submitted by 23 May and on pre-registration information gathered by the organisers, it is estimated that there will be more than one thousand participants attending the conference, making "The Olympics of AgEng" the biggest agricultural engineering conference to date in China and even in Asia. As regards the number of participants, the conference can thus be expected to be on a par with the largest CIGR World Congresses.

## Second China Ag Trade Fair in Beijing

From 11 to 15 October, the 2<sup>nd</sup> China AgTrade Fair will be held in Beijing, sponsored by the Ministry of Agriculture of the PRC and co-sponsored by 8 other State Ministries and organizations with approval of The State Council of the PRC. This fair aims to present products in the fields of animal husbandry, modern agricultural machinery, fishery, etc. The biggest event of its kind in China in 2004, the fair will cover nearly all fields of the 2004 CIGR International Conference Beijing.

There will be an opportunity for participants in the CIGR Conference to attend the fair and visit product shows in the afternoon of 11 October 2004. During this period, which is reserved especially for international guests and for the participants of the CIGR Conference, the fair will also be part of technical tours of the CIGR conference. Please visit the website of <http://www.catf.agri.cn/> for more information about the fair.

## CIGR E-journal / Agricultural Engineering International: The CIGR Journal of Scientific Research and Development

### CIGR Ejournal in Cornell University DSpace Digital Repository

The entire five-volume set (1999-2003) of the CIGR Ejournal can now be accessed in the DSpace digital repository of Cornell University (USA). Allowing direct access to the articles of individual volumes and browsing by author, Dspace also makes it possible to search the full text of the CIGR Ejournal online. Thus, the addition of the Ejournal to the Cornell University Collection is a great step forward both usability and world-wide accessibility.

Add these URLs to your bookmarks:

Ejournal: <http://dspace.library.cornell.edu/handle/1813/117>

Vol. 1: <http://dspace.library.cornell.edu/handle/1813/118>

Vol. 2: <http://dspace.library.cornell.edu/handle/1813/119>

Vol. 3: <http://dspace.library.cornell.edu/handle/1813/120>

Vol. 4: <http://dspace.library.cornell.edu/handle/1813/121>

Vol. 5: <http://dspace.library.cornell.edu/handle/1813/122>

### Volume 6 (2004)

Since the April issue of the CIGR Newsletter seven new articles have been published in Volume 6 (2004) of the CIGR Ejournal. The titles are listed under "publications" in the last section of this newsletter. The full texts can be accessed at <http://cigr-ejournal.tamu.edu>.

## CIGR Newsletter to be Translated into Chinese

With the integration and combination of modern engineering science and technology, information technology, and agro-biology, modern agricultural engineering as an interdisciplinary engineering field is being used and developed extensively throughout the world. Most importantly, it helps developing countries promote agricultural and rural development and broaden the application of engineering science and technology in agricultural bio-systems and rural modernization.

The International Commission of Agricultural Engineering (CIGR) was founded as an international, non-governmental, and non-profit organization with the aim of providing a global stage for



Prof. Maohua Wang

the development of science and technology in agricultural engineering. Regional and national societies of agricultural engineering and public organizations have been established one after another since the beginning of last century, acting as bridges and links for friendship and information sharing among agricultural engineers over the world.

CIGR publishes a quarterly newsletter. This CIGR Newsletter, which is sent to all members, contains news of the science of agricultural engineering and of technology achievements, information about academic activities of CIGR sections and member associations, and announcements of seminars, symposia, and workshops in the field of agricultural engineering to be held in the world. It also highlights job opportunities and new publications in agricultural engineering.

China has solved the problem of feeding its 1.3 billion

people, and its agriculture and rural development are now at a new stage. 15 years ago, the Chinese Society of Agricultural Engineering (CSAE) and the Chinese Society for Agricultural Mechanization (CSAM) joined CIGR. On the eve of the 2004 CIGR International Conference on Agricultural Engineering to be held in Beijing in October, an agreement was signed by representatives of CSAE, CSAM and CIGR to translate the CIGR newsletter into Chinese and publish the first Chinese issue before the 2004 Beijing Conference. Henceforth, a Chinese version of the CIGR newsletter will be published in China and delivered about three weeks after the original English version. The Chinese version will also be made available as a pdf file on <http://www.cigr.org/>. The publication of the Chinese version of the CIGR news-

letter will contribute greatly to agricultural development in China and promote exchanges and cooperation between China and the rest of the world.

I am very pleased to announce the publication of the Chinese version of the CIGR Newsletter. Let us join hands to make new and greater contributions to the world's agricultural engineering science and technology and to sustainable rural development. The civilized progress of mankind, peace and the development of the whole world require our joint efforts and coordinated cooperation.

*Prof. Maohua Wang*  
*President of CSAE*

*Honorary President of CSAM*  
*Member of Chinese Academy of Engineering*

## NEWS FROM SECTIONS AND WORKING GROUPS

### Report on the 26<sup>th</sup> International Conference of CIGR Technical Section IV "Electricity and Energy in Agriculture" Budapest, Hungary, 17-22 May 2004.

The main organizer of this conference was the Hungarian Electrotechnical Association, with the cooperation of the Hungarian Society for Agrarian Sciences and of the Scientific Society of Energy Economics.

The main topics of the conference were:

- The economic possibilities of using regenerative energy sources in the agriculture of developed and developing countries
- The possibilities of agricultural farms becoming producers rather than consumers of energy by using regenerative energy sources
- Other current questions relating to the applications of electrical energy in agriculture

32 papers dealing with these subjects were sent to the Organizing Committee, and out of these 24 were presented during the conference.

The Opening Session was chaired by Prof. Dr. Zoltán Sibalszky (Hungary), Honorary Vice-President of CIGR, who emphasised that this year is the 40<sup>th</sup> anniversary of the foundation of CIGR Technical Section IV. Prof. Dr. Axel Munack (Germany), President of CIGR, held the Opening Speech in which he talked about the history and the present tasks of CIGR. Prof. Abdullah Kamaruddin (Indonesia), chair of Section IV, also welcomed the participants. Mr. István Bakács (Hungary), President of the Hungarian Society for Energy Economics, and Prof. Dr. Pál Tardy (Hungary), Vice President of the Federation of Technical and Scientific Societies (MTESZ), spoke in the name of the scientific associations organising the conference.

The 56 participants came from 12 countries, with ten additionally announced participants and authors of accepted papers from five other countries unfortunately unable to attend. These cancellations gave the participants an opportunity of extended discussions during the sessions, in which most of the participants took a very active part.

The one-day study tour of the conference visited a wind-generator park, a small plant with biogas heating and several touristic sites. It ended in a village wine cellar with

dinner and gipsy music. After the conference a group of participants took part in a two-day study tour to North-Eastern Hungary where they visited the largest biogas plant of the world, a biomass heating plant and a biodiesel plant as well as several touristic sites such as the famous "Puszta" Hortobágy.

The conference documentation—a volume of abstracts and a CD-ROM with the full texts of the papers—can be ordered from the Organizing Committee for 30 €: Elitexpo Ltd. H, Belgrad rakpart 22, H-1056 Budapest, Hungary. E-mail: [eeexpo@axelero.hu](mailto:eeexpo@axelero.hu), phone: +36 1 318 3710.



*Prof. Zoltán Sibalszky*

*Prof. Dr. Zoltán Sibalszky*  
*Honorary Vice-President of CIGR*

### Report on the CIGR International Symposium "New Trends in Farm Buildings" Évora, Portugal, 2-6 May 2004

This CIGR Section II symposium was a great success for everyone involved. It was attended by 100 specialists from four continents and 21 countries. Of the abstracts submitted, 36 were accepted for oral presentation and 52 for poster presentation. It was an honour to welcome, among others, the Minister of Agriculture, Rural Development and Fisheries, and the Rector of Évora University at the opening session.

The symposium deepened the participants' knowledge in many specialized matters, but at the same time it was clear that we must try to keep an integrated perspective on larger areas. As our understanding of animal requirements and welfare, of the effects of the environment on animals, plants, and communities grows, the engineering and designing of animal houses, greenhouses and related equipment becomes more interesting, complex and challenging.

*I. Farm Buildings Design and Rural Landscape*



*Prof. Jorge Ferro Meneses*

## NEWS FROM REGIONAL AND NATIONAL SOCIETIES

### Cooperation between IUSS and EurAgEng

The International Union of Soil Sciences (IUSS) was launched in 1924 under the logo of ISSS (International Society of Soil Science) with the main objectives of:

- Fostering all branches of soil sciences and their applications
- Linking and giving support to soil scientists in the pursuit of their activities.

In 1998, the ISSS was restructured into the IUSS following its admission as a Union member of the International Council for Science (ICSU) in 1993.

EurAgEng has embarked upon a programme of establishing links with like-minded organisations, and the following agreement has been reached with IUSS:

The International Union of Soil Sciences (IUSS) and the European Society of Agricultural Engineers (EurAgEng) are both international associations with the common aims of

- Setting up and improving networking systems to promote the role of Soil Conservation and Land Use, Planning and Management for Rural Development and Environment Protection at both European and world-wide levels
- Seeking cooperation from other regional and world-wide organisations whose interests impinge on similar issues.



Prof. Daniele De Wrachien

In this endeavour IUSS and EurAgEng have reached agreement on close cooperation and mutual assistance for the transfer of knowledge at international level. The Secretary General of IUSS Prof. Stephen Nortcliff and the President of EurAgEng Prof. Daniele De Wrachien, have signed, in Reading (UK) in March 2004, a Memorandum of Understanding which provides for the following:

- Nomination of representatives and deputy representatives to each other's relevant decision-making bodies as observers
- Publication of each other's announcements in their own media on a reciprocal basis, free of charge
- Cooperation in the planning and implementation of enterprises of common interest such as research projects, guidelines, workshop, conferences, training courses, etc.

*Prof. Stephen Nortcliff, Secretary General IUSS*  
*Prof. Daniele De Wrachien, President EurAgEng*

### Report on the 4<sup>th</sup> International Workshop on Research on Irrigation and Drainage Skopje, Macedonia, 24-25 March 2004

Agriculture will have to meet the future challenges to food security posed by increasing production while conserving natural resources. In the past, the increased demand for food was satisfied by the expansion of agricultural land. Today, the availability of new land for cultivation and of additional water resources is limited. This means that the

traditional methods of increasing production are facing a new challenge: reconciling agricultural development with the conservation of natural resources. Moreover, in the past irrigation and drainage schemes were designed on the assumption that the current climatic conditions would not change in the future. This will not be so in the years to come, due to global warming and the greenhouse effect. Therefore, engineers and decision-makers need to systematically review the planning principles, design criteria, operating rules, contingency plans and management policies for new infrastructures.

These themes were discussed during the International Workshop in Skopje on 24-25 March 2004. The event was organized, as part of the celebrations of the World Water Day, by the Macedonian National ICID Committee and with the patronage and scientific support of CIGR and EurAgEng.

The workshop focused on the following subjects:

- Water resources: availability, planning and infrastructures for multipurpose use and management
- Irrigation and drainage systems: design, construction, operation, modernisation and rehabilitation
- Catchment and river hydrology: forecasting, erosion and pollution control
- Wastewater: treatment, management and environmental impacts.

The event was attended by more than 100 participants from 22 countries. 51 papers were presented in oral presentations or as posters in the two official languages English and Macedonian. Workshop Proceedings are now available from the Macedonian National ICID Committee in Skopje. For further information please contact: Prof. Dr. Zvonimir Vukelic, Chairman of the Scientific and Organizing Committee ([vukelic@gf.ukim.edu.mk](mailto:vukelic@gf.ukim.edu.mk)).

*Prof. Zvonimir Vukelic, Convenor of the Workshop*  
*Prof. Daniele De Wrachien, President of EurAgEng*

### Report on the Second International Conference on Energy Efficiency and Agricultural Engineering

**Rousse, Bulgaria, 3-4 June 2004**

The Second International Conference on Energy Efficiency and Agricultural Engineering (EE&AE) was organized by the Bulgarian National Society of Agricultural Engineers "Engineering and Research for Agriculture" (ERA), the International Commission of Agricultural Engineering (CIGR), the European Society of Agricultural Engineers (EurAgEng), the Association of Agricultural Engineering in Southeastern Europe (AAESEE), the Union of Scientists – Rousse, the Federation of the Scientific Technical Unions – Rousse and "Angel Kunchev" University of Rousse.

The conference was attended by representatives of 21 European, Asian and African countries. With 120 papers to be presented, the conference was subdivided into the following three sections:

- Renewable Energy and Advanced Technologies

- 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 30<sup>th</sup> 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 33<sup>rd</sup> 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:

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### 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](mailto:2004cigr@bjaeu.edu.cn) or [2004info@bjaeu.edu.cn](mailto:2004info@bjaeu.edu.cn) or [info@2004cigr.org](mailto: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;

- 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.

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

*Prof. Nikolai Mihailov*

*President Organizing Committee & President AAESEE*

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- 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](mailto: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](mailto: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 7<sup>th</sup> 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 7<sup>th</sup> 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](mailto:Ciicta@public.bta.net.cn)

### **V<sup>th</sup> 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 V<sup>th</sup> 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](http://www.cvr.etsia.upm.es/cigr_concrete_symposium.htm)  
E-mail: [secretariat@cvr.etsia.upm.es](mailto: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](mailto:info@AgEng2004.be) The conference website at <http://www.AgEng2004.be/> contains extensive information as well as online registration facilities etc.

### 12<sup>th</sup> 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 12<sup>th</sup> 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,

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Misr (Egypt), Tel (202) 4024190/4024132; Fax (202) 4011710.

The conference will consist of research papers, articles, and general lectures, posters, and workshops. In addition to field demos and trips, there will be a display of modern agricultural machinery, equipment, and technologies. The conference fees are 500 EP (Egyptian Pounds) for organizations, including up to 6 participants, 100 EP for individuals supported by organizations. Special rates apply for MSAE members unsupported by organizations. If contacted in time, the organisers can offer boarding and lodging facilities at reduced rates in some Alexandria hotels or at university hostels.

Deadlines:

Abstract submission mid-August 2004

Full manuscripts mid-September 2004

For further information please contact Dr. Ezzat A. Abd El Ghaffar, Prof. and Head of the Agricultural Engineering Department; College of Agriculture, Alexandria University, El Shatby, Alexandria, Misr (Egypt) or: Dr. Nabil El Awady, President, MSAE; Sc. Chair of the Conference: <http://www.geocities.com/awady37/Clipboard.html>, email: [awady37@yahoo.com](mailto:awady37@yahoo.com).

## VI Latin American Congress of Agricultural Engineering

Organised by the Latin American and Caribbean Association of Agricultural Engineers (ALIA) and the Costa Rican Association of Agricultural Engineers (ACIA), this event will take place from **22 to 24 November 2004** in **San José, Costa Rica**. It is the sixth in a series of congresses initiated in 1994 by ALIA and held at intervals of two years.

The purpose of the event is to bring together professionals in agricultural engineering and related fields and to gauge the potential of agricultural engineering to contribute to the growth and development of Latin America and to improve production systems and the quality of life of those who depend on agriculture.

The subjects to be discussed include:

- Agricultural mechanization
- Soil and water
- Food engineering and postharvest processing
- Constructions, environment & use of energy in agriculture
- Biological engineering systems
- Computer science and automation in agriculture
- Teaching and research in agricultural engineering

Important dates and deadlines:

Notification of acceptance 31 July 2004

Complete work due 31 August 2004

Information about registration fees is not yet available. For further information, please contact the Costa Rican Association of Agricultural Engineers (ACIA), P.O. Box 2346-1000, San José, Costa Rica. Tel.: 506 253 5428, Fax: 506 224 9598. E-mail: [congresoalia@costarricense.cr](mailto:congresoalia@costarricense.cr). <http://www.cfia.co.cr/congresoalia>

## XXXI CIOSTA - CIGR V Congress "Increasing Work Efficiency in Agriculture, Horticulture and Forestry"

This congress, sponsored by CIGR, CIOSTA, EurAgEng and VDI-MEG, will be held from **September 19-21, 2005** at the **University of Hohenheim, Germany**. The congress language will be English. The scientific programme will include plenary sessions, parallel oral sessions and poster sessions on the following topics:

- Methods and modelling
- Process engineering and controlling
- Calculation and planning
- Farm management
- Ergonomics and work place design
- Work safety, prevention and risk analysis

On the basis of the submitted abstract, the scientific committee will decide whether the contribution is accepted as oral presentation or poster. Oral presentations will be limited to 20 minutes each, plus 10 minutes of discussion. The oral presentations will be supplemented by an exhibition of posters. Both will be published in the proceedings of the congress. Abstracts (2 pages / 400 words max. including graphs and figures) assigned to one of the above topics must state in a comprehensible way the scope, methods and results of the proposed presentation as well as the title of the presentation, the authors' names and full work addresses including e-mail, an indication whether oral or poster presentation is preferred. Please mail abstracts to [ciosta@uni-hohenheim.de](mailto:ciosta@uni-hohenheim.de)

Dates and deadlines:

Abstracts: January 10, 2005

Notification of acceptance: mid-March, 2005

Submission of camera-ready manuscripts: July 1, 2005

The congress fee will be around 320 Euro (provisional estimate), privileges are intended. A technical tour will be organised on demand.

For further information please look up <http://www.uni-hohenheim.de/ciosta-cigr> and contact the co-ordinator: Dr. Monika Krause E-mail: [ciosta@uni-hohenheim.de](mailto:ciosta@uni-hohenheim.de) Tel. +49 711 459 3231 (Tuesdays only), Fax: +49 711 459 4307

## CIGR CO-SPONSORED ACTIVITIES

### AFITA/WCCA2004:

#### **4<sup>th</sup> International Conference of the Asian Federation of Information technology & 2<sup>nd</sup> World Congress on Computers in Agriculture and Natural Resources**

4<sup>th</sup> AFITA conference and the WCCA2004 congress will be held as a joint congress from **9 to 12 August 2004** in **Bangkok, Thailand**.

The Organizing Committee of the Joint AFITA/WCCA Congress is pleased to invite all professionals involved in agricultural information technology to participate in the Joint Congress of AFITA and WCCA. The program will consist of pre-conference workshops, plenary sessions, concurrent topical sessions and poster presentations.

Subjects include but are not limited to:

- Rural development and poverty reduction/knowledge based society and its strategies & policy
- Adoption and extension
- Agricultural risk management and farm management, IPM
- Decision support system and modeling
- E-AgBusiness and production chain management
- Information resource and databases
- Grid and web services
- Field Data acquisition and recording
- GIS, Remote sensing and precision agriculture
- Food safety, food security, trace ability and quality management
- Education and distance learning
- Digital library/Knowledge representation and library science
- Water management
- Multilingual services
- Aquatic resource management
- Bioinformation
- BOF's

Registration fees are 150 US\$. For further information, consult the conference website at <http://www.afitaandwcca2004.net/> or contact the Secretariat Office, National Electronics and Computer Technology Center, 112 Thailand Science Park, Phahon Yothin Rd., Klong 1, Klong Luang, Pathumthani Province 12120, Thailand. Tel: +66 2 564 6900 ext. 2238, Fax: +66 2 564 6772. E-mail Ms. Chantita Setalaphruk in the Secretariat: [chantita@hydro.hpcc.nectec.or.th](mailto:chantita@hydro.hpcc.nectec.or.th)

#### **Interregional Conference "Food Production and Water: Social and Economic Issues of Irrigation and Drainage"**

This conference, co-sponsored by CIGR Technical Section I, will be held together with the 55<sup>th</sup> International Executive Council Meeting of the International Commission on Irrigation and Drainage - ICID in **Moscow, Russia**, from **1 to 8 September 2004**.

During the Conference, papers will be presented and discussed with regard for two Questions and one Special Session. Contributions will be presented under several sub-questions for each main theme. The topics for the Conference events are:

- Role of irrigation and drainage in the strategy of development and maintenance of sustainable agrolandscapes
- Present environmental and economic issues of irrigation and drainage development
- Special session Scientific and research problems of irrigation and drainage development in the XXI century

The working languages at the Interregional Conference and meetings of the ICID and its working bodies will be English and Russian, including the provision of synchronous translation. Synchronous translation in three languages, i.e. English, French and Russian, will be provided during the official opening and closing of conference and during the session of the International Executive Council of the ICID. The registration fees are 650 US\$ for participants from ICID member countries and 750 US\$ for non-members. Visas to enter Russia are required for the citizens of the majority of countries, except a number of CIS countries.

For further information contact: Dr. M.G. Chelov, Secretary General, Russian National Committee on Irrigation and Drainage, C/o Ministry of Agriculture and Food of the Russian Federation, 1/11, Orlikov per., Moscow 107139, Russia. Fax: (7095) 207-8522, E-mail: [bubera@wm.westcall.com](mailto:bubera@wm.westcall.com). For further information look up the web page at: <http://www.vniigim.ru/conf/55/prospect.pdf>

#### **International Conference "Environmentally Friendly Spray Application Techniques"**

This conference will be held from **4 to 6 October 2004** in **Warsaw, Poland**, as a scheduled activity of the Research Centre of Excellence in Sustainable Pomology – PomoCentre, a 5<sup>th</sup> EC Framework Programme project (project no QLAM-2001-00402). The conference is intended to present ideas and results of research and identify relevant scientific problems, necessary research and development, standardization requirements and efficient systems for technology transfer to sustainable food production.

Topics:

- Novel spray application technology
- Performance of sprayers
- Testing and adjustment of sprayers
- Filling and cleaning of sprayers
- Nozzles, atomisation, adjuvants, spray quality
- Precision spraying, target detection, selective application
- Spray drift, buffer zones
- Dose rates determination (spacious crops)
- Non-chemical plant protection techniques
- Decision support systems in plant protection
- Risk assessment and management in plant protection
- Environmental and health consequences of plant protection
- Methodology of research on spray application

**Important Dates and Deadlines:**

Submission of full papers: 7 October 2004

The conference will be held in English. The conference fees are € 200/220 (before/after 1 August 2004).

For further information, please contact convenor Grzegorz Doruchowski (gdoru@insad.pl) or secretary Konopacki (pkonopac@insad.pl): Research Institute of Pomology and Floriculture, Pomologiczna 18, 96-100 Skierniewice, POLAND. Phone: +48 46 833 20 21 Fax: +48 46 833 32 28. The website <http://www.pomocentre.insad.pl/> offers further information as well as online registration features.

### **International Conference on Postharvest Technology & Quality Management in Arid Tropics**

This conference will be held at Sultan Qaboos University, **Sultanate of Oman**, from **24 to 26 January 2005**. The first International Conference on postharvest technology in the region, it will provide an international forum to discuss the latest technological developments and scientific innovations for reducing losses, maintaining product quality and adding value to food and agribusiness supply chains, and enhancing the competitiveness of agricultural and seafood products in the Gulf Region and Oman in particular.

The major themes of the conference include:

- Pre-harvest factors affecting postharvest quality and losses
- Postharvest handling systems and ergonomics
- Optimal refrigerated and controlled atmosphere storage systems
- Drying and packaging technology
- Postharvest treatments to maintain quality
- Focus on seafood postharvest
- Quality and supply chain innovation
- Food traceability and safety management
- Postharvest economics, market access & other emerging issues
- Education and training in postharvest technology & quality management

**Important Deadlines:**

Submission of full paper: 30 August 2004

For further information, contact: Assoc. Prof. Linus U. Opara & Assoc Prof. Shyam S. Sablani, Department of Bioresource and Agricultural Engineering, College of Agricultural and Marine Sciences, Sultan Qaboos University, P.O. Box 34, Al-Khod, Sultanate of Oman. Fax: +968

513 418 Tel: +968 515 238. Email: [linus@squ.edu.om](mailto:linus@squ.edu.om) and [shyam@squ.edu.om](mailto:shyam@squ.edu.om).

### **33<sup>rd</sup> International Symposium "Actual Tasks on Agricultural Engineering"**

Co-sponsored, among others, by CIGR, this symposium will be held from **21 to 25 February 2005** in **Opatija, Croatia**. "Actual Tasks on Agricultural Engineering" have been held for 32 years now, gaining in international standing in recent years thanks to the co-sponsoring by CIGR, EurAgEng, and AESEE. The official languages of the symposium will be English and Croatian.

The aim of the Symposium is to present the latest scientific results on all aspects of research, design and development work in the various disciplines of agricultural engineering. Papers dealing with the following topics, or with other aspects of agricultural engineering, are invited:

- Farm mechanisation
- Power and machinery
- Ergonomics
- Energy in agriculture
- Soil and water
- Pre-harvest technology
- Crop harvesting
- Post-harvest technology
- Livestock buildings and equipment

Author instructions are available at the web address given below, and they can be sent by fax or e-mail upon request. Abstracts in English and not exceeding 500 words should be submitted by 15 September 2004. The proceedings are indexed and abstracted in leading international databases. The registration fee of 100 € (minus 20 % for CIGR, EurAgEng, and AAAE members) covers proceedings and farewell banquet.

**Key dates**

Submission of abstracts	15 September 2004
Notification of paper acceptance	1 October 2004
Submission of full papers	1 December 2004
Registration deadline	15 December 2004

For further information, look up <http://www.agr.hr/aed> and contact the Symposium Secretariat: Faculty of Agriculture Agricultural Engineering Department, Svetosimunska 25, HR-10000 Zagreb, Croatia. Tel.: +385 1 2393819 Fax: +385 1 2315300 E-mail: [skosutic@agr.hr](mailto:skosutic@agr.hr)

## **OTHER ACTIVITIES**

### **7<sup>th</sup> International Conference on Precision Agriculture**

The 7<sup>th</sup> International Conference on Precision Agriculture and Other Precision Resources Management will be held from **25-28 July 2004** at the Hyatt Regency in downtown **Minneapolis, MN, USA**. It provides a forum for presentations on the current status of precision agriculture research and applications worldwide. There will be oral and poster presentations and exhibits, as well as opportunities for

discussion and exchange of information in various aspects of precision agriculture.

Conference themes include:

- Crop quality
- Natural resource variability
- Geostatistics/sampling
- Precision management
- Engineering technology
- Remote sensing

**Important Dates and Deadlines:**

Submission of full papers: 7 October 2004

The conference will be held in English. The conference fees are € 200/220 (before/after 1 August 2004).

For further information, please contact convenor Grzegorz Doruchowski (gdoru@insad.pl) or secretary Konopacki (pkonopac@insad.pl): Research Institute of Pomology and Floriculture, Pomologiczna 18, 96-100 Skierniewice, POLAND. Phone: +48 46 833 20 21 Fax: +48 46 833 32 28. The website <http://www.pomocentre.insad.pl/> offers further information as well as online registration features.

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For further information, look up <http://www.agr.hr/ae> and contact the Symposium Secretariat: Faculty of Agriculture Agricultural Engineering Department, Svetosimunska 25, HR-10000 Zagreb, Croatia. Tel.: +385 1 2393819 Fax: +385 1 2315300 E-mail: [skosutic@agr.hr](mailto:skosutic@agr.hr)

## **OTHER ACTIVITIES**

### **7<sup>th</sup> International Conference on Precision Agriculture**

The 7<sup>th</sup> International Conference on Precision Agriculture and Other Precision Resources Management will be held from **25-28 July 2004** at the Hyatt Regency in downtown **Minneapolis, MN, USA**. It provides a forum for presentations on the current status of precision agriculture research and applications worldwide. There will be oral and poster presentations and exhibits, as well as opportunities for

discussion and exchange of information in various aspects of precision agriculture.

Conference themes include:

- Crop quality
- Natural resource variability
- Geostatistics/sampling
- Precision management
- Engineering technology
- Remote sensing

- Information management
- Modelling
- New applications around the world
- Profitability
- Environment
- Education/Outreach

Further information is available at <http://www.precision.agri.umn.edu/Conference/>.

For questions regarding registration, billing and entry and visa requirements, contact [contactus@cce.umn.edu](mailto:contactus@cce.umn.edu), for questions concerning hotel reservations contact the Hyatt Regency directly: Tel: +1 612 370 1234, Fax: +1 612 370 1463. For questions regarding call for papers, abstract submission, speakers, etc., contact [paconf@soils.umn.edu](mailto:paconf@soils.umn.edu).

### International Symposium on Food Production and Environmental Conservation in the Face of Global Environmental Deterioration

Organised by the Society of Agricultural Meteorology of Japan and sponsored by JAICAE, this FPEC symposium will be held from September 7 to 11 September 2004 at the Fukuoka International Congress Center, Hakata-ku, **Fukuoka, Japan**.

With a world population of more than 6.1 billion in 2002, the demands on the global environment, the atmospheric and aquatic environments are very important subjects for the 21st Century. The deterioration of these environments will create a food problem and has already begun to cause international disputes in some parts of the world.

This symposium will evaluate the meteorological environments ranging from the global atmospheric environment to microclimates, and discuss ways to improve and conserve atmospheric environments. To find possibilities to solve the food problem, discussion will focus on individual and/or general environmental problems with the participation of researchers, professors and administrators from around the world.

The symposium is the successor of the symposium on "Food Production and Environmental Improvement under Global Climate Change" held at Ube, Yamaguchi, in 1996. Reflection on the developments that have occurred since should bear significantly on future developments. It is hoped that the future prospect of food production and environmental conservation will be improved by the process of discussion and that the development of research and investigations will be improved.

The main areas of focus for the symposium are global environmental deterioration, aquatic resources deficit, food production problem, climatic or meteorological improvement and environmental conservation:

- Climatic change or climatic variation and abnormal climate or unusual weather
- Global problems of global warming, acid rain, ozone hole, biodiversity etc.
- From aquatic resources to deforestation or desertification and soil or land degradation
- From air pollution or environmental contamination to aeolian dust or yellow sand
- Environmental problems from local climate to micrometeorology

- Micrometeorological evaluation of momentum, heat, gas and vapor fluxes
- From meteorological environmental modification to microclimatic improvement and bio-environmental control
- From desert greening or revegetation to road and roof greenings
- From biometeorology to bio-ecological meteorology
- From controlled ecological life support systems to agricultural high technology
- Evaluation and utilization of meteorological resources (natural, solar, wind energy etc.)
- Mechanism of various agrometeorological disasters and their countermeasure
- Predictions of growth and development of crops, crop production and food production
- Relation between global environment problems and agriculture
- Crop growth environment and agrometeorological environment and food problems

The registration fee is 45,000 yen, 25,000 yen for students. Registration fees include: Attendance at all Sessions of the Symposium, Participation in Mixer and Symposium Banquet, a copy of the Symposium Proceedings. Sightseeing not included.

Deadlines:

Full papers: 8 September 2004

For further information and a downloadable registration form and registration instructions, please check <http://www.agr.yamaguchi-u.ac.jp/users/fpec/>.

All correspondence should be addressed to Prof. Seiji HAYAKAWA, Secretary-General of FPEC, Department of Biological and Environmental Sciences, Faculty of Agriculture, Yamaguchi University, 1677-1 Yoshida, Yamaguchi 753-8515, JAPAN Phone: +81 83 933 5861 Fax: +81 83 933 5820. E-mail: [fpec@agr.yamaguchi-u.ac.jp](mailto:fpec@agr.yamaguchi-u.ac.jp)

### ISMAB 2004

The 2<sup>nd</sup> International Symposium on Machinery and Mechatronics for Agriculture and Biosystems Engineering will be held from **8-10 September 2004** at Kobe University, **Kobe City, Japan**. Organised by the Japanese Society of Agricultural Machinery and co-sponsored by the Korean Society of Agricultural Machinery and the Chinese Institute of Agricultural Machinery, it will provide an opportunity for the exchange of ideas and research results and for transmitting scientific information from East Asia.

This conference will deal with the following topics:

- Bio-systems engineering
- Bio-mechatronics
- Biological engineering
- Power and machinery
- Post harvest technology
- Food and processing engineering
- Precision agriculture
- Automation in agro-industry
- Robotics in agriculture
- Agricultural informatics
- Information communication systems
- Bioinformatics
- Environmental technology

- Alternative energy
- Nano technology

Further information is available on the conference website <http://eloon.ans.kobe-u.ac.jp/JSAM/english/ismab.html> or from Prof. Horio, Hisashi; Dept. of Agricultural and Environmental Engineering, Faculty of Agriculture, Kobe University, 657-8501 Nada-ku, Kobe, Japan. Tel/Fax: +81 78 803 5916 E-mail: [ismab@eng.ans.kobe-u.ac.jp](mailto:ismab@eng.ans.kobe-u.ac.jp)

### Biennial Conference of SEAg

The Society for Engineering in Agriculture will be holding their biennial conference from **14 to 16 September 2004** in western **New South Wales, Australia**, starting at **Dubbo**. The three-day conference will have a primary focus on

- Irrigation
- Precision agriculture (PA)

The first day of the conference will be held at the unique CSU campus in Dubbo, where papers and posters will be presented in traditional format. The keynote speaker is Jolyon Burnett, CEO of the Irrigation Association of Australia. He will pose the question: Why are there so few agricultural engineers when the need for their skills has possibly never been greater?

On days 2 and 3 of the conference, two coaches with projection facilities will head to Bourke, which is 350 kilometres to the north-west of Dubbo, and back. Digital presentations on irrigation will run in one coach, with ones on the PA theme in the other. The presentations on the buses will cover subjects related to the tour visits en route, but sourced from different geographical areas, Australian or overseas.

Registration fees are \$ 500. Delegates will need to arrange their own accommodation in Dubbo.

Important Dates:

Full text papers 30 July 2004  
Posters 14 September 2004

To register your interest in presenting, or to seek further information, email Helen Fairweather at [helen.fairweather@agric.nsw.gov.au](mailto:helen.fairweather@agric.nsw.gov.au) or contact the Society for Engineering in Agriculture, NSW Agriculture, PO Box 865 DUBBO NSW 2830. The call for papers with a registration form is available online at <http://www.agric.nsw.gov.au/reader/17603>

### 2<sup>nd</sup> WASAE International Conference: "Hunger without Frontiers"

This conference, organised by WASAE (West Africa Society of Agricultural Engineering) and GSAE (Ghana Society of Agricultural Engineering), will be held from **20 to 24 September 2004** at the Kwame Nkrumah University of Science and Technology, **Kumasi, Ghana**. The official Language of this conference, which is intended to serve as a forum for experts to deliberate on the issues and provide recommendations for research, development and policy directions, will be English.

Several state-of-the-art papers are expected to be presented to gain a broad up-to-date understanding of the field. Papers are expected in the following areas:

- Food Security, Hunger and Malnutrition in West Africa.
- HIV/AIDS and its impact on agricultural production

- Power and machinery engineering
- Soil and water engineering
- Post-harvest engineering and biotechnology
- Conservation agriculture interventions
- Agro-energy sources and management
- Rural transport and IMTs
- Environmental conservation
- Gender, policy, training, extension etc.

The registration fee is US\$ 200. Registered members of GSAE and local participants will pay a discounted rate of €250,000. The registration fee for the conference will include the cost of proceedings, refreshments, lunch, banquets and a technical and cultural tours.

For further information, please look up <http://www.wasae.org/conference.htm> or contact: Emmanuel Y.H. Bobobee, Conference Secretary, Agricultural Engineering Department, KNUST, Kumasi, Ghana. Tel: +233 51 60242, Fax: +233 51 60137. Email: [ebobobee@yahoo.com](mailto:ebobobee@yahoo.com) or [wasae2004@yahoo.co.uk](mailto:wasae2004@yahoo.co.uk).

### International Scientific Conference on "Forest Engineering: New Techniques, Technologies and the Environment"

The main purpose of this conference, which will be held from **5 to 10 October 2004** in **Lviv, Ukraine**, is to provide a forum for the presentation of the latest achievements in applied research and current developments in the field of forest engineering. It will also foster an exchange of accumulated knowledge and technology transfer of practical experience in the field in the use of environmentally sound techniques of sustainable forest utilisation. The Conference is dedicated to the 130<sup>th</sup> anniversary of forestry education in Ukraine.

The subjects of discussion will be:

- Technical equipment and technological processes: forest harvesting, timber transportation, forest roads, site preparation and regeneration, ergonomics, environmental protection and ecological safety.
- The use of computer technologies in forest engineering: organizational and technical planning of forest operations, transport and handling of primary forest products, computer-assisted design and planning of forest harvesting units, landings and roads, the use of GIS and hand-held technology such as GPS in sustainable forest management and harvesting systems.

The working languages of the conference are Ukrainian and English. The registration fees (incl. transportation from airport, conference materials, publication of conference proceedings, welcoming ceremonies, field trips, farewell banquet, lunches and meals during the Conference) will be 100-200 €, depending on the level of participation.

Important Dates:

Final announcement 14 September 2004  
For detailed information, please contact the Conference Organizing Committee: Ukrainian State University of Forestry and Wood Technology, 105 General Chuprynka St., 79057 Lviv, Ukraine. Email: [styran@forest.lviv.ua](mailto:styran@forest.lviv.ua) Tel.: + 380 322 390 669. Fax: +380 322 378 905. <http://ifec.lvivport.com/>



### Third World Congress of Professionals in Agronomy / First Panamerican Congress of Agronomists

This congress will be held from **6 to 9 October 2004** at the Convention Centre in **Fortaleza City**, state of Ceará, **Brazil**.

The main subjects are:

- Higher education in agronomy
- Professional practice
- Research and technology transfer
- Current and future technical matters
- Sustainable rural development
- International business and cooperation

More information: <http://www.cmpa.org.br/eng/default.htm>

### 62<sup>nd</sup> VDI-MEG International Conference Agricultural Engineering

This conference, organised by VDI-MEG in co-operation with EurAgEng, will be held on **7 and 8 October 2004** at the Technical University **Dresden, Germany**.

Main Topics of the Conference

- Tractors: concepts, interfaces to implements, tyres, chassis, use and economics
- Powertrain: new concepts, simulation, electrical powertrain, hybrid powertrain
- Automation technology: electronics, sensor technology, actuator, mechatronics
- Fertilizing and plant protection: integrated and ecological
- Farm-audit: technique, information management, outdoor operation, indoor operation
- Precision farming: environment protection, product quality, consumer protection
- Root crop: cultivation, harvest, post harvest
- Industrial product development
- Young engineers for Europe: forage harvesting, tillage, modelling and simulation

Papers for presentations are expected from the industry, from universities and research institutes and from practical farming.

The conference languages will be German and English (no simultaneous translation provided). Authors get a reduction of 50% on the regular conference fee.

Important Deadlines:

Camera-Copy of short version: 2 August 2004

The final program with registration form will be available approx. 10 weeks prior to the conference. For further information, contact: VDI Verein Deutscher Ingenieure, Max-Eyth-Gesellschaft Agrartechnik im VDI, Postfach 10 11 39, D-40002 Düsseldorf, Germany. Tel: +49 211 62 14 522, Fax: +49 211 62 14 163 E-Mail: [meg@vdi.de](mailto:meg@vdi.de) <http://www.vdi.de/tagung-landtechnik>

### Conference on Automation Technology for Off-road Equipment ATOE 2004

The Conference on Automation Technology for Off-road Equipment will be held from **7- 8 October 2004** at Kyoto University in **Kyoto City, Japan**, just before the 2004 CIGR International Conference in Beijing, China. The

purpose of the conference is to promote the advancement of automation of off-road equipment in the 21st Century through scientific exchange and industrial participation. There will be two keynote lectures, a special lecture and oral presentations. In addition, the conference provides opportunities for discussion and exchange of information on various aspects of automation technology.

Conference themes include:

- Sensors: Navigation and control sensors, sensor fusion, sensors for safety/obstacle detection, machine function sensing
- Controls: Steering control, vehicle control, control strategies for off-road operation
- Vehicle modeling: Vehicle kinematic and dynamic modeling, implement modeling
- Telematics in Vehicle Automation: Wireless networking in off-road applications
- Software Support for Vehicle Automation: Production planning, scheduling and control, Job-site management, mission planning
- Information Technology: Cooperative robots and multi-agent systems, prognostics, intelligent systems
- Hardware for vehicle Automation: Computer hardware, user interfaces, haptic devices, controller-area networks
- Applications: Automation of Off-road equipment, industrial products and applications

Further information is available at <http://www.asae.org/meetings/atoe04/index.html> or from Prof. Mikio Umeda, Lab. Field Robotics, Graduate School of Agriculture, Kyoto University, JAPAN, Phone:+81 75 753 6166 Fax:+81 75 753 6167 E-mail: [umeda@elam.kais.kyoto-u.ac.jp](mailto:umeda@elam.kais.kyoto-u.ac.jp) or [iida@elam.kais.kyoto-u.ac.jp](mailto:iida@elam.kais.kyoto-u.ac.jp)

### 2<sup>nd</sup> Central European Meeting and 5<sup>th</sup> Croatian Congress of Food Technologists, Biotechnologists and Nutritionists

The objective of this congress, which will be held from **17 to 20 October 2004** in **Opatija, Croatia**, is to provide a multidisciplinary forum in the fields of food science and technology, human nutrition and biotechnological applications in food production.

- Food products and technologies
- Advances in food engineering
- Food packaging
- Food safety and quality
- Food microbiology
- Biotechnology and bioengineering
- Food, nutrition and health
- Food and consumers
- Water and waste water

The official language of the congress will be English. All sessions will be conducted in English and all presentation papers will be printed in English. Registration fees are € 400 and € 120 for certified students. Members of CIGR, EurAgEng and PBN are entitled to € 50 reduction in fees.

Dates and deadlines:

Paper submission 30 November 2004

For further information, please contact the Congress Secretariat: Food Technologists, Biotechnologists and Nutrition-

ists Society; P.O. Box 625; HR-10000 Zagreb; Croatia.  
 Fax: + 385 (0) 1 48 26251 E-mail: pbncongress@pbf.hr  
<http://www.pbf.hr/pbncongress>

### **6<sup>th</sup> International Symposium on Plant Responses to Air Pollution and Global Changes: from Molecular Biology to Plant Production and Ecosystem**

The 6<sup>th</sup> APGC Symposium will be held from **19 to 22 October 2004** at the International Congress Center Epocal Tsukuba, **Tsukuba, Ibaraki, Japan**.

#### **I. Impacts of Air Pollution and Global Change**

- Molecular biology
- Plant metabolism
- Ecophysiological effects
- Plant production effects
- FACE: Free Air CO<sub>2</sub> Enrichment
- Controlled-environment research
- Natural CO<sub>2</sub>-springs
- Terrestrial ecological effects and forest decline
- Eco-modelling and prediction of global change
- Ultraviolet-B radiation

#### **II. Monitoring and Remediation**

- Greenhouse gases and other trace gases
- Flux measurement
- Phytomonitoring
- Phytoremediation
- CELSS
- Nondestructive instrumentation and image sensing
- Remote sensing and GIS

#### **III. Current Asian Environmental Problems**

- Air pollution and acid rain
- Global changeOther global environmental problemsDeadlines and Dates:

Advance registration deadline: 31 July 2004  
 Further information is available on the internet at <http://apgc2004.en.a.u-tokyo.ac.jp/> or from professor Kenji Omasa, Chairman of the International Organizing Committee, [aura@mail.ecc.u-tokyo.ac.jp](mailto:aura@mail.ecc.u-tokyo.ac.jp)

### **CONAT 2004 International Automotive Congress**

This congress dealing with "Automotive and Future Technologies" will be held in **Brasov, Romania** from **20 to 22 October 2004**. CONAT International Congresses are a chain of scientific congresses initiated by Transilvania University in 1965. They intend to facilitate a profitable exchange of information among specialists in automotive engineering and a discussion of new challenges facing the automotive industry.

The themes of the congress are:

- Innovative technologies for automotives
- Automotive and environment
- Advanced transport systems
- Automotive systems
- Manufacturing and logistics
- Engineering training

For further information look up <http://conat.unitbv.ro/>

or contact the organising committee: Automotive Dpt, SAE Brasov Group, Transilvania University of Brasov Bd. Eroilor 29, RO-500036 Brasov, Romania. Tel. +40268413000 int. 173 Fax: +40268474761 E-mail: [conat2004@unitbv.ro](mailto:conat2004@unitbv.ro)

### **Agroenviron 2004: "The Role of Multi-Purpose Agriculture in Sustaining Global Environment"**

Organised by the University of **Udine, Italy**, the fourth international symposium of the Agroenviron series will be held from **20 to 24 October 2004**. The organisers of this event hope that the series will continue in the future and provide an instrument for involving more and more scientists, engineers, planners, institutions, and countries in agro-environmental issues for sustaining the environment of this globe. The symposium will give scientists an insight into today's burning issues related to agriculture, and it should help to choose the right directions for the future in sustainable agriculture in this millennium.

The topics proposed for presentations in Udine include:

- Land, water, and air pollution in agricultural areas
- Precision agriculture and yield forecasting
- Landscape ecology
- Forestry and range land management
- Climate changes and global agricultural environment
- Biotechnology and agricultural biodiversity
- Desertification and land degradation control
- Agricultural waste reuse and field management
- Wetland and coastal ecology in humid environment
- RS/GIS techniques in agricultureCurrent advances in restoration of rural areas for sustainability

For further information, contact Prof. Dr. Giuseppe ZERBI, Symposium Secretary General, University of Udine, Udine/ITALY; E-mail: [zerbi@dpvta.uniud.it](mailto:zerbi@dpvta.uniud.it)

### **Second World Engineers' Convention 2004**

The Second World Engineers' Convention will be held in **Shanghai, China, 2 to 6 November 2004**, under the auspices of the World Federation of Engineering Organizations (WFEO). The theme of WEC2004 is "Engineers Shape the Sustainable Future".

The program includes a plenary session and seven parallel sessions on:

- Network engineering and information society
- Biological engineering & healthcare
- Transportation and sustainable mega-cities
- Environment protection and disaster mitigation
- Agricultural engineering and food security
- Resources and energy
- Ecological material and green manufacturing

For more information, please contact Tel. +86 10 621 73499, Fax: +86 10 62180142, Email: [wec2004sec@sino-meetings.com](mailto:wec2004sec@sino-meetings.com) or consult the web page at [www.wec2004.org](http://www.wec2004.org)

### 2004 Annual Scientific Conference and General Meeting of TSAE

The 2004 Annual Scientific Conference and General Meeting of the Tanzania Society of Agricultural Engineers (TSAE) will be held at the TANESCO Training Institute, **Morogoro, Tanzania** from **22 to 24 November 2004**. The TSAE 2004 Annual General Meeting (AGM) will be held at the end of the Scientific Conference on 24 November 2004.

The main theme of "The Role of Engineering and Technology in Poverty Reduction" will be subdivided into 13 sub-themes:

- Appropriate technology adaptation, adoption and use for poverty reduction
- Role of information and communications technologies in poverty reduction
- Water supply and sanitation
- Food production and processing
- Housing
- Energy
- Transportation
- Income generation
- Employment creation / entrepreneurship
- Education and training
- Environmental issues
- Gender issues in poverty reduction
- HIV/AIDS

Full papers for accepted abstracts should be received by 15 August 2004.

For further information contact: The Secretary, Tanzania Society of Agricultural Engineers (TSAE), P.O. Box 3003, CHUO KIKUU, MOROGORO. TANZANIA.

Tel: +255 23 2604216; +255 23 2603511-4 Ext. 4433;

Fax: +255 23 2603718. E-mail: [tsae@suanet.ac.tz](mailto:tsae@suanet.ac.tz) URL: <http://eng.suanet.ac.tz/>

### ICFPTE '04

The second International Conference on Innovations in Food Processing Technology and Engineering will be held from **11 to 13 January 2005** at the Asian Institute of Technology in **Bangkok, Thailand**.

The technical programme will include plenary and keynote lectures, parallel lectures and poster sessions. Original contributions, case histories of industrial operations, state-of-the-art papers, and commercial information on the following subjects are invited:

- Food processing technology
- Physical properties of foods
- Thermal processing and preservation
- Non-thermal processing
- Food safety
- Food packaging
- Nutraceutical and functional foods
- Postharvest preservation and processing
- Novel technologies in food handling, processing and transport
- Information technology applications in food industry
- Automation in food industry
- Food processing wastes

Abstracts, not exceeding 300-400 words, should clearly state objectives, brief methodology and conclusions. The last date for the submission of abstracts is July 31, 2004. However, abstracts received after the deadline will not be included in the proceedings but still be considered for presentation.

Deadlines:

Abstracts: 31 July 2004

Registration fees are US\$ 300/350 (before/after 30 August 2004), US\$ 100 for students. Fees include the cost of conference materials (proceedings etc.), working lunches, coffee/tea and banquet.

For further information please contact: Ms. Tasana Sa-id, FEBT, SERD, Asian Institute of Technology, PO Box 4 Klong Luang, Pathumthani 12120, Thailand. Phone: + 66 2 524 5488, Fax: 66 2 524 6200, email: [phfpe@ait.ac.th](mailto:phfpe@ait.ac.th), <http://www.serd.ait.ac.th/icfppte>

### 7<sup>th</sup> International Conference on "Construction, Technology and Environment in Livestock Farming"

The Max Eyth Society for Agricultural Engineering in the VDI (VDI-MEG), the Committee for Technology and Structures in Agriculture (KTBL) and the Federal Agricultural Research Centre (FAL) invite you to participate in this conference, which will be held on **2 and 3 March 2005** at the FAL in **Braunschweig, Germany**.

The main aim of this biannual conference is to present and to discuss the latest developments in farm buildings, animal housing and animal production as well as new solutions for environmental engineering concerning emissions and process technology.

The Institute for Production Engineering and Building Research of the FAL invites scientists and experts in agricultural engineering and manufacturers to give oral, poster or video presentations in one of the three sessions of the conference. Presentations should deal with innovative developments or solutions in connection with husbandry systems for dairy cows, cattle, pigs poultry and horses, specifically:

- Farm building, building systems, constructions, building material, building costs
- Husbandry systems, animal welfare
- Milking systems
- Feeding
- Management and labour
- Quality assurance and documentation of production
- Environmental impact, emissions, immissions, air quality
- Computer based systems
- Sustainable production systems
- Waste based products, renewable energy

A volume of the papers will be distributed to the participants of the Conference. The organizers are working to keep the price to a reasonable level of around 140 €. The final programme and further information will be available from November 2004.

Dates and deadlines:

Acceptance notification: 31 August 2004

Full texts: 30 November 2004

For further information, please mail to: Prof. Dr. F.-J. Bockisch, Institute of Production Engineering and Building

Research, Federal Agricultural Research Centre (FAL), Bundesallee 50, D-38116 Braunschweig, Germany.  
Tel. +49 531 596 4402 / 4406 Fax: +49 531 596 4499;  
E-mail: BTU-Tagung-2005@fal.de; <http://www.bb.fal.de>

### 5<sup>th</sup> ECPA and 2<sup>nd</sup> ECPLF

The 5<sup>th</sup> European Conference on Precision Agriculture and the 2<sup>nd</sup> European Conference on Precision Livestock farming will be held as parallel conferences from **9 to 12 June 2005** in **Uppsala, Sweden**. They will deal with the following main themes:

- Feed quality management
  - On-farm analysis technology
  - Robotics, autonomous vehicles and controlled traffic
  - Environmental effects of precision agriculture and precision livestock farming
  - Precision horticulture and viticulture
  - Automation in livestock farming
  - Implementation, education and training
- Contributions of abstracts dealing with these themes and

other precision agriculture and precision livestock farming themes are welcome. Abstracts can be submitted until 20 September 2004. The abstracts must be written in English, not exceeding 600 words. They will be independently refereed by the editors and appointed reviewers. Authors of accepted abstracts will be invited to write a paper intended for publication in the conference proceedings by 15 October 2004. Abstracts can be submitted online between 15 June and 20 September 2004.

Important dates:

Abstract Submission: 20 September 2004

Acceptance Notification: 15 October 2004

Submission of papers: 15 December 2004

More information and updates on the conferences can be found at <http://www-conference.slu.se/ecpa/index.htm> or <http://www-conference.slu.se/ecplf/index.htm>

Contact the conference secretariat by fax under +46 18 67 35 30 or by e-mail at [ecpa@slu.se](mailto:ecpa@slu.se) or [ecplf@slu.se](mailto:ecplf@slu.se)

## PUBLICATIONS

**CIGR Electronic Journal: <http://cigr-ejournal.tamu.edu/>**

### CIGR Electronic Journal: ISSN 1682-1130

Since the last list published here, several new articles have been published in Volume VI (2004) of the *CIGR E-Journal / Agricultural Engineering International: The CIGR Journal of Scientific Research and Development*, ISSN 1682-1130

#### Peer Reviewed Technical Articles:

7.) A. van Wagenberg, B. Bjerg and G. Bot. Measurement and Simulation of Climatic Conditions in the Animal Occupied Zone in a Door Ventilated Room for Piglets. Manuscript BC 03 020. Vol. VI. April 2004.

8.) P. Picuno and C. Sica. Mechanical and Spectroradiometrical Characteristics of Agricultural Plastic Films. Manuscript BC 04 001. Vol. VI. April 2004.

9.) R. Medjo Eko. Use of Isotropic Stress State Framework to Evaluate the Effect of Suction on Some Mechanical Parameters of Sainte-Rosalie Clay Submitted to Confined Compression. Manuscript LW 02 002. Vol. VI. April 2004.

10.) J. Khazaei and D. Mann. Effects of Temperature and Loading Characteristics on Mechanical and Stress-Relaxation Properties of Sea Buckthorn Berries. Part 1. Compression Tests. Manuscript FP 03 011. Vol. VI. April 2004.

11.) J. Khazaei and D. Mann. Effects of Temperature and Loading Characteristics on Mechanical and Stress-Relaxation Properties of Sea Buckthorn Berries. Part 2. Puncture Tests. Manuscript FP 03 010. Vol. VI. April 2004.

12.) K. Rosentrater. Laboratory Analysis of an Electrostatic Dust Collection System. Manuscript BC 03 008. Vol. VI. April 2004.

#### Invited Overview Articles:

1.) H. Harms. Possibilities to Reduce Manufacturing and

Management Costs of Tractors and Agricultural Equipment. Club of Bologna. Vol. VI. April 2004.

**The articles of the CIGR Electronic Journal are available free of charge on the internet at <http://cigr-ejournal.tamu.edu/>**

### Precision Livestock Farming

Contains peer-reviewed papers that were presented at the 1st European Conference on Precision Livestock Farming, 15 to 19 June 2003, Berlin. Edited by Sidney Cox. Wageningen, NL 2003. 184 pp. ISBN 9076998221. Price: (paperback) € 40.

More information: [sales@WageningenAcademic.com](mailto:sales@WageningenAcademic.com) or [www.WageningenAcademic.com/ECPLF](http://www.WageningenAcademic.com/ECPLF)

### Proceedings of the 3<sup>rd</sup> Asia-Pacific Drying Conference (ADC'03)

The official proceedings of ADC'03, held at the Asian Institute of Technology, Bangkok, Thailand from 1 to 3 September 2003, are a compilation of 65 papers in book (725 pages) and CD-ROM formats (not available separately), incl. subject and author indexes. Abstracts can be accessed at [www.serd.ait.ac.th/adc.htm](http://www.serd.ait.ac.th/adc.htm). To order the publication, send a bank draft worth US\$36 (plus postage) payable to the 'Asian Institute of Technology'. Contact: Miss Tasana Sa-id; Food Engineering and Bioprocess Technology; School of Environment, Resources and Development; Asian Institute of Technology, PO Box 4, Khlong Luang; Pathumthani 12120 Thailand. Phone: +66 2 5245488, Fax: +66 2 5246200 Email: [tasana@ait.ac.th](mailto:tasana@ait.ac.th) or [phfpe@ait.ac.th](mailto:phfpe@ait.ac.th)

Research, Federal Agricultural Research Centre (FAL), Bundesallee 50, D-38116 Braunschweig, Germany.  
Tel. +49 531 596 4402 / 4406 Fax: +49 531 596 4499;  
E-mail: BTU-Tagung-2005@fal.de; <http://www.bb.fal.de>

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  - Implementation, education and training
- Contributions of abstracts dealing with these themes and

other precision agriculture and precision livestock farming themes are welcome. Abstracts can be submitted until 20 September 2004. The abstracts must be written in English, not exceeding 600 words. They will be independently refereed by the editors and appointed reviewers. Authors of accepted abstracts will be invited to write a paper intended for publication in the conference proceedings by 15 October 2004. Abstracts can be submitted online between 15 June and 20 September 2004.

Important dates:

Abstract Submission: 20 September 2004

Acceptance Notification: 15 October 2004

Submission of papers: 15 December 2004

More information and updates on the conferences can be found at <http://www-conference.slu.se/ecpa/index.htm> or <http://www-conference.slu.se/ecplf/index.htm>

Contact the conference secretariat by fax under +46 18 67 35 30 or by e-mail at [ecpa@slu.se](mailto:ecpa@slu.se) or [ecplf@slu.se](mailto:ecplf@slu.se)

## PUBLICATIONS

**CIGR Electronic Journal: <http://cigr-ejournal.tamu.edu/>**

### CIGR Electronic Journal: ISSN 1682-1130

Since the last list published here, several new articles have been published in Volume VI (2004) of the *CIGR E-Journal / Agricultural Engineering International: The CIGR Journal of Scientific Research and Development*, ISSN 1682-1130

#### Peer Reviewed Technical Articles:

7.) A. van Wagenberg, B. Bjerg and G. Bot. Measurement and Simulation of Climatic Conditions in the Animal Occupied Zone in a Door Ventilated Room for Piglets. Manuscript BC 03 020. Vol. VI. April 2004.

8.) P. Picuno and C. Sica. Mechanical and Spectroradiometrical Characteristics of Agricultural Plastic Films. Manuscript BC 04 001. Vol. VI. April 2004.

9.) R. Medjo Eko. Use of Isotropic Stress State Framework to Evaluate the Effect of Suction on Some Mechanical Parameters of Sainte-Rosalie Clay Submitted to Confined Compression. Manuscript LW 02 002. Vol. VI. April 2004.

10.) J. Khazaei and D. Mann. Effects of Temperature and Loading Characteristics on Mechanical and Stress-Relaxation Properties of Sea Buckthorn Berries. Part 1. Compression Tests. Manuscript FP 03 011. Vol. VI. April 2004.

11.) J. Khazaei and D. Mann. Effects of Temperature and Loading Characteristics on Mechanical and Stress-Relaxation Properties of Sea Buckthorn Berries. Part 2. Puncture Tests. Manuscript FP 03 010. Vol. VI. April 2004.

12.) K. Rosentrater. Laboratory Analysis of an Electrostatic Dust Collection System. Manuscript BC 03 008. Vol. VI. April 2004.

#### Invited Overview Articles:

1.) H. Harms. Possibilities to Reduce Manufacturing and

Management Costs of Tractors and Agricultural Equipment. Club of Bologna. Vol. VI. April 2004.

**The articles of the CIGR Electronic Journal are available free of charge on the internet at <http://cigr-ejournal.tamu.edu/>**

### Precision Livestock Farming

Contains peer-reviewed papers that were presented at the 1st European Conference on Precision Livestock Farming, 15 to 19 June 2003, Berlin. Edited by Sidney Cox. Wageningen, NL 2003. 184 pp. ISBN 9076998221. Price: (paperback) € 40.

More information: [sales@WageningenAcademic.com](mailto:sales@WageningenAcademic.com) or [www.WageningenAcademic.com/ECPLF](http://www.WageningenAcademic.com/ECPLF)

### Proceedings of the 3<sup>rd</sup> Asia-Pacific Drying Conference (ADC'03)

The official proceedings of ADC'03, held at the Asian Institute of Technology, Bangkok, Thailand from 1 to 3 September 2003, are a compilation of 65 papers in book (725 pages) and CD-ROM formats (not available separately), incl. subject and author indexes. Abstracts can be accessed at [www.serd.ait.ac.th/adc.htm](http://www.serd.ait.ac.th/adc.htm). To order the publication, send a bank draft worth US\$36 (plus postage) payable to the 'Asian Institute of Technology'. Contact: Miss Tasana Sa-id; Food Engineering and Bioprocess Technology; School of Environment, Resources and Development; Asian Institute of Technology, PO Box 4, Khlong Luang; Pathumthani 12120 Thailand. Phone: +66 2 5245488, Fax: +66 2 5246200 Email: [tasana@ait.ac.th](mailto:tasana@ait.ac.th) or [phfpe@ait.ac.th](mailto:phfpe@ait.ac.th)

## CIGR Handbook of Agricultural Engineering

Edited by CIGR and published by ASAE. Five volumes, 2,400 pages, 110 authors. The books are available in CD-ROM and individual hardcover book format. Further information: ASAE; Dept. 1661, 2950 Niles Road, St. Joseph, MI 49085-9659; USA, Tel: 616-428-6324; Fax: 616-429-3852 E-mail: martin@asae.org

## 4<sup>th</sup> Report from Section II Working Group 13

Pedersen, S. & and Sällvik, K. *Climatisation of Animal Houses – Heat and Moisture Production at Animal and House Levels: 4<sup>th</sup> Report from Section II Working Group 13*, 2002. Published by Research Centre Bygholm, Danish Institute of Agricultural Sciences, P.O Box 536, DK-8700 Horsens, Denmark. ISBN 87-88976-60-2 Available for download at <http://www.agrsci.dk/jbt/spe/CIGRreport>

## Proceedings of the 32<sup>nd</sup> International Symposium on Agricultural Engineering

*Actual Tasks on Agricultural Engineering: Proceedings of the 32nd International Symposium on Agricultural Engineering in Opatija, Croatia, 23 to 27 February 2004*. Ed. Silvio Košutić. Faculty of Agriculture: Zagreb, 2003. ISSN 1333-2651 The Proceedings contain more than 40 contributions on ca. 430 pages. For availability information, contact the editor: Silvio Košutić, Faculty of Agriculture, Agricultural Engineering Department, Svetosimunska 25, 10000 Zagreb, Croatia. Tel.: 00385 1 2393819; Fax: 00385 1 2315300 or 00385 1 2393724; E-mail: s.kosutic@agr.hr

## Environmental Pollution and Agriculture

Arvind Kumar (ed.), *Environmental Pollution and Agriculture*. New Delhi: A.P.H. Publishing, 2002. This 531-page collection of 65 research articles is available for US\$ 99.70 from K.K. Agencies/Online Store of Indian publications, H-12 Bali Nagar, New Delhi-110015, INDIA. URL: [www.kkagencies.com](http://www.kkagencies.com); Tel.: +91 (0)11 5465925, Fax: +91 (0)11 5173055

## Coping with Water Scarcity

Ian Cordery; Iacovos Iacovides; Luis Santos Pereira. *Coping with Water Scarcity*. IHP-VI Technical Documents in Hydrology No. 58. 272 pages, incl. bibliography. UNESCO: Paris, 2002. (IHP-VI Document code: SC.2002/WS/49, UNESCO document Catalogue Number:127846.) This publication is available free of charge in pdf format for at <http://unesdoc.unesco.org/images/0012/001278/127846e.pdf>

## Agricultural Drainage Water Management in Arid and Semi-arid Areas

Tanji, Kenneth K, and Kielen, Neeltje C.: *Agricultural Drainage Water Management in Arid and Semi-arid Areas* (FAO Irrigation and Drainage Paper 61) FAO: Rome, 2002. ISBN 92-5-104839-8. 189 pp. Incl. CD-ROM.

## Precision Agriculture

This substantial paperback, edited by John Stafford and Armin Werner, contains peer-reviewed papers presented at the 4<sup>th</sup> European Conference on Precision Agriculture, 15 to 19 June 2003, Berlin. Wageningen, NL 2003. 784pp., ISBN 9076998213. Price: (paperback) € 95. More information: [sales@WageningenAcademic.com](mailto:sales@WageningenAcademic.com) or [www.WageningenAcademic.com/ECPA](http://www.WageningenAcademic.com/ECPA)

## Recommandations internationales pour le logement des bovins viande: Synthèse des connaissances de la Commission Internationale du Génie Rural

This publication, the French version of the “CIGR Design Recommendations for Beef Cattle Housing” by CIGR WG 14, which appeared in September 2002, can now be ordered from: Technipel, 149 rue de Bercy, F75595 PARIS CEDEX 12. The price per unit is 18 € plus postage. <http://www.inst-elevage.asso.fr/> E-mail: [technipel@inst-elevage.asso.fr](mailto:technipel@inst-elevage.asso.fr)

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**Deadline for CIGR Newsletter N° 68 is 1 September 2004**

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