

International Commission of



Agricultural Engineering

# CIGR

Newsletter Quarterly

**Newsletter N° 74**  
**July 2006**

*Since 1930-2006*  
*76 Years of CIGR*

1. CIGR News ..... 2
2. News from National and Regional Societies ..... 6
3. News from Sections and Working Groups ..... 7
4. CIGR-Sponsored Activities ..... 9
5. Activities by CIGR Regional Societies ..... 10
6. CIGR Co-Sponsored Activities ..... 10
7. Other Activities ..... 13
8. Publications ..... 15
9. Miscellaneous ..... 16

*CIGR Website: <http://www.cigr.org/>*

# 1. CIGR NEWS

## To improve the worldwide role of CIGR and its member societies

CIGR is a quite unique scientific association because members are almost entirely not individuals but Regional and National Societies. Most of National Societies are members of Regional ones but some continue to be individually represented inside CIGR.

The role and organization of each Regional Society is different from another since these represent conditions specific to the respective regions. Relationships of these Regional Societies with CIGR seem to be also different, as well as the objectives of membership with CIGR and expectancies from this membership.



Prof. Luis Santos Pereira

The Presidium of CIGR is concerned with the service provided by CIGR to the Regional Societies and considers therefore the need to discuss with the Presidencies of those societies about ways to improve such services and, more specifically, the approaches required to improve their participation, the flux of information and the inter-exchanges among the Ag Eng societies. With this objective, the Presidium of CIGR hopes to have a fruitful discussion and to set a decision process at occasion of the next CIGR World Congress, Bonn, September 2006, where the Executive Board and the General Assembly will meet.

Aiming at starting a preparatory discussion, some suggestions and questions are addressed below.

1. Regional Societies are governed according to their own statutes and regulations and follow their own objectives and activities, however not opposing to statutes and regulations of CIGR.
2. All the Regional Ag Eng Societies, because they represent National Societies from their region and have similar objectives to those of CIGR but oriented for the specificities of the respective region, should be represented in the **Executive Board of CIGR** in addition to the General Assembly. In fact, the Executive Board is a main governing body in charge of defining the policies of CIGR (art. 9 of CIGR Statutes). and full voice shall be given to the Regional Societies. To ensure this right, a change in CIGR's statutes is required.
3. Any National Society should be allowed to be or remain individual member of CIGR in addition of membership in a Regional Society. This independent membership does not affect any rights or duties of the Regional Societies in agreement with the CIGR statutes (art. 3).
4. Relative to prosecution of the objectives of the Regional Societies, CIGR should support them in the promotion of Ag Eng science and technology, education and training, inter-regional collaboration, promotion of exchanges, as well as representing the profession of agricultural engineers on the world-wide level. To achieve these goals, CIGR acts as
  - a world-wide networking service organisation;
  - a world-wide representative Ag Eng Organisation, developing effective relations with other International Organisations and Societies ;
  - promoting the creation of new Regional and National Societies and supporting their development.
5. With these objectives, CIGR shall keep updated world-wide information on its own activities and those of the member societies, particularly the Regional Societies, through a Newsletter, a Website and other means to be created if required. In addition, CIGR promotes a scientific peer-reviewed electronic journal, Agricultural Engineering International, open to the individual members of all member societies and other Ag Eng professionals. However, achieving the aims of these information initiatives requires the involvement of CIGR bodies and the Regional Societies.
6. The **CIGR Newsletter**, published both in printed and electronic formats, has two sections on "News from National and Regional Societies" and "Activities by CIGR Regional Societies", which should be the visible face of those societies. They could be used not only to inform about the life of the societies – e.g. presidency, chairs, state and perspectives, membership – but to promote regional activities and those of member societies. To improve the relationships with Regional Societies it could be worthwhile that each Regional Society would create a mechanism for easy contact with the CIGR General Secretariat (GS), so to assure an appropriate flux of information.
7. The **CIGR Website** ([www.cigr.org](http://www.cigr.org)) has all the conditions to develop information on the Regional Societies and their activities:
  - The existing membership page could be improved to create either a link with the website of the member societies, which already exists for some of them, or to a specific page inside the CIGR website relative to each Regional or National Society. In this way, the Member Societies could include or link their own pages into the CIGR site.
  - Those Societies that would develop a specific page in the CIGR website require that appropriate connections with CIGR GS be established in order to have updated information relative to the current chairpersons and other chair members, the national member societies and respective chairs, all with the email address as a minimum. Particularly relevant would be the information on activities promoted at regional or national level. To make this approach operational, a contact person should be indicated to assure the relationships with the CIGR GS in charge of the website.
8. The **CIGR E-Journal** (<http://cigr-ejournal.tamu.edu/>) is regularly publishing papers from many countries. Some

Regional Societies have their own Journals and may publish in a language other than English, which is very positive. However, the CIGR E-Journal may play a role in disseminating research results out of the region. Measures to increase the number of high quality papers and the number of qualified reviewers are required and shall be discussed.

9. The CIGR is organised in **Technical Sections**, presently seven, representing the main fields of science and technology relative to Agricultural Engineering. In addition, several Working Groups are active or to be initiated at the Bonn Congress. The Technical Sections are the essential working bodies of CIGR and it is aimed that the respective Boards have a balanced geographical world-wide representativeness. Therefore, it is highly desirable that mechanisms be developed by the Regional Societies in order to propose to the Section chairs appropriate members from their regions, including as representing their Regional Societies. This could stimulate inter-regional exchanges, development of specific areas of interest, as well as holding scientific and technical meetings in the respective regions.
10. The collaboration of Regional Societies in CIGR **international congresses and conferences** is a key issue. A few ideas may be considered:

- In addition to CIGR, such meetings should be sponsored by the Regional Society relative to the country where they take place and be co-sponsored by other Regional Societies having interest in the activity, however in agreement with the CIGR and the organizing National Society (sponsoring obliges the sponsoring society to make appropriate diffusion of the event but does not allow to recover fees).

- In case of congresses, the Regional Societies should be able to organize/sponsor specific sessions with themes that are both of wide interest and particularly related with the problems faced in the region.

The considerations above need to be discussed. Comments and suggestions to both the President and the Secretary General are welcome prior to the Bonn Congress in order to provide for a fruitful discussion at the Executive Board Meeting, scheduled for September 2, 2006 in view of developing the cooperation among CIGR member societies. Decisions that will not require changing the statutes may be enforced from there on, while changes in statutes may be then foreseen and prepared.

*Prof. Luis Santos Pereira  
CIGR President 2005-2006*

## Opening Memorial Ceremony and Memorial Symposium of the CIGR General Secretariat in Tsukuba

On March 27, 2006, Opening Memorial Ceremony and Memorial Symposium of the CIGR General Secretariat in Tsukuba was held at University of Tsukuba, Japan. There were 70 participants in the symposium. The secretariat opening memorial ceremony was held in the morning. President of Science Council of Japan, Dr. Kiyoshi Kurokawa, welcomed the moving of the CIGR secretariat to Japan and presented the congratulatory address. Moreover, there were congratulatory addresses by President of CIGR, Luis Santos Pereira, Vice President of JAICAE, Taichi Maki, Coordinator of the e-journal, Bill Stout and CIGR former Secretary General, Peter Schulze Lammers. Then Present of CIGR, Prof. Luis Santos Pereira, and Prof. Osamu Kitani who is CIGR honorary president gave memorial lectures. The participants earnestly listened to the lecture. After the luncheon party, 13 young researchers presented the research papers. The discussions were actively done, and the participants were enjoying the symposium. On behalf of Prof. Irenilza Naas who is the incoming CIGR President was not able to participate by her convenience, so new CIGR Secretary General Dr. Takaaki Maekawa gave a closing



Dr. Kiyoshi Kurokawa

address.

These presented memorial lectures will be put on the CIGR website (<http://www.cigr.org/>).

### Presidium Meeting

On March 28, 2006, the Presidium Meeting was held in University of Tsukuba, Graduate School of Life and Environmental Sciences. The presidium decided the activities of CIGR, recommended Candidate of Awards of CIGR, and discussed the next leaders, auditors and the CIGR events (Congress and Conference etc.) of the next term.



at Rolan Restaurant in Tsukuba after Presidium Meeting

## OBITUARY

### Michel CARLIER 1919 – 2006

#### Honorary Secretary-General and Honorary President of CIGR

CIGR has been informed of the death of Michel Carlier, Honorary President of CIGR. Michel Carlier passed away on 8 February 2006 at the respectable age of 87 years. During his life he played an important role in CIGR being its Secretary-General for 33 years.

Michel Carlier was born in Paris on 18 November 1919 and completed his higher education during World War II. He entered the Institut National Agronomique in Paris (INA) and obtained his engineering degree at the Ecole Nationale du Génie Rural (ENGR, i.e. National School of Agricultural Engineering) in 1942. Soon afterwards he became 'Ingénieur Adjoint du Génie Rural' (i.e. assistant-agricultural) engineer first in Nancy and later in Saint-Quentin. He returned to Paris in 1943 to take up a position at the Ministry of Agriculture.

In the same year his dream of teaching became reality when he became 'Chef de Travaux Pratiques de Mécanique Appliquée et d'Aménagement Agricole des Eaux' (Work leader Applied Mechanics and Agricultural Water Management) at the INA and Deputy-Director at the 'Ecole Nationale du Génie Rural'. He was lecturing the subjects Hydraulic Machines at ENGR and Topography at the INA. Between 1952 and 1957 he became director of the 'Ecole d'Application des Ingénieurs des Travaux Ruraux' (i.e. school of applications of rural constructions) at that time located in the avenue du Maine, 19 in Paris where he became Professor of Fluid Mechanics.

In 1956 he successfully completed the exams for Titular Professor at the Chair of Applied Mechanics and Agricultural Water Management at the INA in Paris. At the same time he was Professor at the ENGR (i.e. national school of agricultural engineering) and later at the ENGREF (i.e. national school of agricultural engineering, water and fisheries) lecturing General Hydraulics and Hydraulic Machines until 1967. Much later, in 1974, he became Professor of Applied Hydraulics (Third Cycle) at the Ecole Polytechnique Fédérale de Lausanne, Switzerland.

He continued his career at the GREF (agricultural engineering, water and fisheries) and was nominated in 1965 Chef du Service Régional d'Aménagement des Eaux (SREA) d'Ile de France, centraliser of the Bassin Seine-Normandie and simultaneously Chef du SREA Champagne-Ardenne until 1979 when he was promoted to 'Ingénieur Général' of the GREF. He later integrated the General Council of GREF in the 5<sup>th</sup> and 6<sup>th</sup> Section. He continued this task until his retirement in 1986.

During that period he took up a number of other responsibilities. In 1958 he was elected Secretary General of CIGR. He was also member of the administrative council of the Technical Committee of the 'Société Hydrotechnique de

France'. In 1979 he was elected President of the French Committee of the Great Barrages.

In 1968 he was elected titular member of the Agricultural Academy of France and he 1987 he became President of this Academy.

Mr. Carlier began his mandate as Secretary General of CIGR in 1957 and ended it at December 31, 1989 when he resigned at the age of 70.

Being a Frenchman the General Secretariat of CIGR was transferred from Belgium to Paris. During his leadership CIGR was transformed from a pan-European association into a worldwide organisation grouping a variety of countries from all continents. At the start of his mandate CIGR Congresses were officially held in three languages viz. English, French and German as usual in those times in Europe. At the end and under pressure of risen translation costs and the growing impact of English he reduced the number of languages to two: English and French. He was a friendly and global thinking gentleman who commanded admiration and respect for him and his CIGR.

Throughout the years and under his leadership CIGR continued to grow and the number of Technical Sections increased from 3 to 5 with a Section devoted to Rural Electricity and other Energy Sources as Section 4 and the incorporation of the existing CIOSTA (Commission Internationale pour l'Organisation du Travail en Agriculture i.e. International Commission for the Organisation of Labour in Agriculture) as Section 5: Management, Ergonomics and Systems Engineering..

Secretary General Michel Carlier led the Commission for 33 years under a number of CIGR Presidents viz. Armand Blanc, Eladio Aranda Heredia, Pierre Regamy, Karel Petit, Fiepko Coolman, T.W. Edminster and Laszlo Lehoczky. He organised the following CIGR-Congresses: Brussels (BE, 1958), Lausanne (CH, 1964), Baden-Baden (DE, 1969), Flevohof (NL, 1974), East-Lansing (US, 1979), Budapest (HU, 1984) and Dublin (IE, 1989).

As a token of his enormous efforts and merits for CIGR he was nominated Honorary President of CIGR in 1990. For his professional merits he was awarded Honorary Engineer of the French Ministry of Agriculture, Chevalier de la Légion d'Honneur, Officier de l'Ordre National du Mérite and Officier de l'Ordre National de Léopold (Belgium).

On behalf of CIGR we offer the family our feelings of deep respect and participation in their mourning. We will miss a fine colleague.

Jan Daelemans, Honorary Secretary General  
(With thanks to Mr. Jean Dunglas for the description of the professional career of Michel Carlier)

## World Congress Bonn 2006

### “AGRICULTURAL ENGINEERING FOR A BETTER WORLD”

CIGR, EurAgEng, VDI-MEG and FAO are delighted to invite you to their joint World Congress, which will be held

from **3 to 7 September 2006 in Bonn, Germany**. The World Congress will combine the “XVI CIGR World Congress”

with "AgEng2006" and the "64<sup>th</sup> VDI-MEG International Conference Agricultural Engineering". As part of the congress, FAO will hold a workshop on "Agricultural Engineering Contributions to Solve Future Agricultural Problems" covering two half days. Moreover, a preconference on "Automation Technology for Off-road Equipment" will be held immediately before the World Congress.

The scientific sessions, posters, Technical Section meetings, and Special Interest Group meetings of the World Congress will deal with the latest developments in agricultural engineering. Thus, the XVI CIGR World Congress will provide an excellent opportunity for agricultural engineering scientists and representatives of manufacturers of agricultural machinery to discuss current developments from many different points of view and to promote new ways of employing recent advancements in agricultural engineering in the service of the global agricultural situation.

Combining a world-wide, a European, and a German point of view, the XVI CIGR World Congress will enable delegates to establish new contacts, to intensify international co-operation, and to transfer their skills and experience to new areas of activity.

Meetings will be held mainly in the main building of Bonn University, the former residence of the archbishops and electors of Cologne, and at the "International Congress Centre - Bundeshaus Bonn", which incorporates the former parliament building of the Federal Republic of Germany.

The following topics and sub-topics will be discussed:

I. Land & Water Use and Environment

II. Power and Machinery

• Tractors

- Tillage & seeding
- Fertilising & plant protection
- Harvesting
- Automation technology
- III. Information Systems and Precision Farming
- IV. Livestock Technology
  - Structures
  - Environment
  - Precision livestock farming
- V. Processing & Post Harvest Technology and Logistics
- VI. Energy and Non-Food Production Technology
- VII. Systems Engineering and Management
  - Emerging industrial products
  - Marketing
  - Service systems
  - Traceability
  - Work safety and ergonomics
- Farm management, calculation and planning
- VIII. Fruit & Vegetable Cultivation Systems
  - Protected cultivation
  - Greenhouses
  - Equipment for tree crops
- IX. Global Issues
  - Meeting needs of global markets for equipment
  - Technologies to enable agri-food exports

For additional information please look up <http://www.2006cigr.org/> or contact: VDI-MEG, Graf-Recke-Strasse 84, 40239 Düsseldorf, Germany. Phone: +49 211 6214266 Fax: +49 211 6214177  
E-mail: info@2006cigr.org

### World Congress Bonn 2006 (Saturday, 2<sup>nd</sup> - Saturday, 9<sup>th</sup> Sept. 2006)

Date	Morning	Afternoon	Evening	
Saturday 2 <sup>nd</sup> Sept.	CIGR Presidium Meeting (9:00-13:00)	CIGR Executive Board Meeting (14:00-18:00)		
Sunday 3 <sup>rd</sup> Sept.		Registration (13:00-18:00)	Section Board Meeting I-VII (19:00-21:00)	
		New Working Group I, II, III (15:00-18:00)		
Monday 4 <sup>th</sup> Sep.	Welcome addresses (9:00-11:30)	Parallel Sessions (13:00-16:50)	Poster Session (16:50-18:40)	Reception (19:00-21:00)
Tuesday 5 <sup>th</sup> Sep.	Parallel Sessions (8:30-16:10)		Awarding Ceremony (17:00-18:40)	Dinner Excursion (19:00-22:00)
	FAO Workshop (13:30-16:10)			
Wednesday 6 <sup>th</sup> Sep.	Parallel Sessions (8:30-12:10)	Closing of the Congress (13:00-15:00)	CIGR General Assembly (15:30-17:30)	CIGR Presidium (17:30-19:00)
	FAO Workshop (8:30-12:10)			
Thursday 7 <sup>th</sup> Sep.	1-day Tour ( 2 courses ) 7:30 start		Tour ends at 9p.m.	
	2-day Tour 7:30 start			
	3-day Tour 7:30 start			
Friday 8 <sup>th</sup> Sep.	2-day Tour		Tour ends at 8p.m.	
	3-day Tour			
Saturday 9 <sup>th</sup> Sep.	3-day Tour		Tour ends at 6p.m.	



## 2. NEWS FROM NATIONAL AND REGIONAL SOCIETIES

### Contributions from regional and national members

Regional and national member associations of CIGR are invited to intensify their use of the CIGR Newsletter and the CIGR web page [www.cigr.org](http://www.cigr.org) in making their news available to an international audience. Announcements of forthcoming events as well as conference reports and organisational announcements etc. are welcome to be submitted to the CIGR General Secretariat for publication in the CIGR Newsletter. Likewise, the CIGR web page at <http://www.cigr.org/> is a good place for hyperlinks to websites dealing with agricultural engineering. The regional and national member societies of CIGR are invited to suggest suitable websites to the CIGR General Secretariat and to include hyperlinks to [cigr.org](http://www.cigr.org) in their own websites.

### International Forum on Food Security under Water Scarcity in the Middle East: Problems and Solutions

Agriculture will have to meet the future challenges posed by food security by increasing production while conserving natural resources. In the past, the increased demand for food has been satisfied by the expansion of agricultural land. Today, the availability of new land for cultivation and additional water resources are limited. This means that the traditional methods for increasing production are facing a new challenge: reconciling agricultural development and the conservation of natural resources.

To solve the above problems massive investments have been made over the last few decades by governments and individuals and a concerted effort by the international community. The challenge was to provide enough food for an ever-growing population, while increasing domestic and industrial water demands. Different scenarios have been developed to explore a number of issues, such as the expansion of irrigated agriculture, massive increases in food production from rainfed lands, water productivity trends and public acceptance of genetically modified crops.

In this context, the whole Middle East environment, including the Jordan catchment basin, is facing severe water scarcity. No other region of the world embraces such a large area, with so many people striving for economic growth on the basis of so little water. Most countries of the region are facing enormous difficulties in achieving food security under the existing water shortage.

To deal with these problems and search for suitable solutions an International Forum took place in Como, Italy on 24-27 November 2004. The Event was organized by the Landau Network – Centro Volta (LNCV), a non-profit, non-governmental organization, in partnership with CIHEAM-MAIB, and with the patronage and scientific support of other regional and world-wide frameworks among which is worth mentioning FAO, CIGR, ICID, UN, EurAgEng, and ICARDA.

The Forum was attended by more than 100 participants from 12 countries. It consisted in an Opening Session, six Topic Sessions and a Closing Round Table. The objective of the Forum was to debate the above problems with the local authorities in charge of water management in the Middle East, in general, and the Jordan Valley in particular, and to agree upon the necessary measures to be taken and the most suitable ways for the implementation of the needed actions.

The Event focused on the following subjects:

- Historical and political aspects
- Water resources planning and management
- Food security under water scarcity conditions
- Use of non-conventional water resources
- Use of high-performance distributions systems
- Socio-economic aspects.

At the Opening Session the convenor, R. Monti highlighted the scope, the goals and the aims of the Forum; M. Bazza and J.M. Faurès stressed the role of FAO in the sustainable development of the Middle East; A. Hamdy focused his lecture on a new water management approach suitable to “improve the overall productivity of water use rather than seeking endless sources of new supply”; D. De Wrachien gave an overview of the current and future climate trends in the Mediterranean environment; F.G. Renaud analysed the relationships between natural resources, economic development and food security, while J.P. Wilson investigated the major factors that could jeopardize food security in the region. In the Topic sessions 46 papers were presented in oral presentation or as poster. At the Closing Round Table it was agreed that the most important factor to be considered in managing water resources is the unique feature of the water system, which goes beyond the borders of the concerned countries. As a unique system, the pertinent management policies must be unique as well as the criteria, practices and methods chosen for the whole territory. All this in order to ensure an efficient management of the available resources and prevent conflicts among different users.

The Forum brought together all the stakeholders of the Jordan Valley (Palestine, Jordan, Lebanon, Syria and Israel) and allowed the experts to work in a very friendly atmosphere, and to establish solidarity principles at a regional level feasible to both preserve the water resources and avoid conflicts among the Jordan Valley countries.

The Proceedings have been published by CIHEAM-MAIB in the Number 65 of the **OPTIONS méditerranéennes Series A: Mediterranean Seminars** (Eds: A. Hamdy & R. Monti).

Daniele De Wrachien  
EurAgEng Past President

Rossella Monti  
Director Water and Energy Security Program

### 3. NEWS FROM SECTIONS AND WORKING GROUPS

#### Report on the 2<sup>nd</sup> International Symposium of CIGR Section VI on Future of Food Engineering, Warsaw, Poland, 26-28 April 2006

Following the successful 1<sup>st</sup> International Symposium on Bioproducts Processing and Food Safety held in October 2004 in Beijing, the 2<sup>nd</sup> International Symposium of CIGR Section VI was held in Warsaw, Poland on 26-28 April 2006.

The symposium was jointly organised by the Polish Association of Food Engineering and Machinery, Polish CIGR National Committee, Warsaw Agricultural University, Agricultural University of Lublin and CIGR Section VI, and sponsored by Polish Ministry of National Education and Sport, Polish National Committee for Scientific



Prof. Da-Wen Sun

Research, Polish Ministry of Agriculture and Rural Development, Polish Ministry of Economic Affairs and Labour, International Association for Engineering and Food (IAEF), European Federation of Food Science and Technology (EFFoST), Institute of Food Technologists (IFT), Asian Association for Agricultural Engineering (AAAE) and International Society of Food Engineering.

The main theme of this 2<sup>nd</sup> International Symposium of CIGR Section VI was on Future of Food Engineering. Food Engineering is a multidisciplinary field of applied science based on the application of engineering knowledge on development and design of the processes and equipment for conversion of raw agricultural materials and ingredients into safe, convenient and nutritious consumer food products. However, the topics under study are continuously undergoing changes to meet the diverse consumer demands. Therefore what will be the future of food engineering?

One of the challenges for the research in food engineering is the development of products and processes by employing modern tools and knowledge, such as biotechnology, genetic engineering and computational materials science, in particular by better understanding of the relationship between molecular structure and functional properties of biological materials.

Food safety and security will be an even more critical issue as consumers demand fresher foods and manufacturers transport the foods over longer distances. Furthermore, new packaging materials and techniques will be developed to give more protection to foods. In addition, there is a significant interest in identifying preservation technologies that can improve food security and defence to meet the growing demand for convenient, fresh and healthy foods.

Food product customization, or personalization, will be a key food processing development facing us. Converting existing manufacturing and supply chain processes that were designed for high-volume outputs to short runs for highly customized

products is particularly challenging. The changeover technologies will become increasingly important with more custom products being developed to satisfy that demand.

Automation has repeatedly appeared to be among the top of agenda in food engineering. In order to accommodate increasing levels of flexible manufacturing, automation will be the focal point for assembly operations where components are constantly changing. Development of advanced monitoring and control systems will further facilitate automation and flexible manufacturing.

Energy saving and minimisation of environmental problems will continue to be an important food engineering issue. No efforts should be spared in waste management, efficient utilisation of energy and reduction of effluents and emissions which deteriorate the environment.

The future of food engineering also relies on the nurturing and mentoring of the young researchers. Therefore, it is the responsibility of our senior colleagues to provide the opportunity for the young to share the vision of the future and to get them involved in the international research community, so that they are more aware of the trends and developments in food engineering. In return, they will become the driving forces for the future of food engineering.

In total, this conference has received 260 abstracts from 31 countries. After peer-review and revision, 155 full papers have been accepted for presentation at the conference, which have been arranged in 14 oral sessions or as posters. The conference attracted as many as 181 participants, among them 73 were from outside Poland.

The symposium was opened by Professor Da-Wen Sun, Chair of CIGR Section VI and Chairman of the Conference, in the morning of 26 April 2006 in the warm atmosphere with a short Chopin's piano music. After the opening ceremony, the following keynote speeches were delivered: Professor Brian McKenna: "New Development in Functional Foods"; Professor Arthur A. Teixeira: "Food Engineering in Advanced Life Support for Long-term Space Mission to Mars" and Professor Da-Wen Sun: "Application of Computer Vision for Food Quality Evaluation". Papers were then orally presented in three parallel sessions in the afternoon of 26 April, and in four parallel sessions in the morning of 27 April. All these oral sessions were well attended by the participants. Poster papers were displayed during the whole period of the conference. In the afternoon of 27 April, all the participants enjoyed an excellent guided tour to the Old Town Square in Warsaw and the vivid performance from "Scholares Minores pro Musica Anitqua". The conference was concluded with two more keynote speeches given by Professor Lidia Zander and Professor Zygmunt Zander on "Food Engineering at Polish Universities", and by Professor Józef Grochowicz and Dr hab. Rafał Nadulski on "Small-Scale Technologies and Minimally Processed Food - the Overview of Accessible Technical Equipment and the Conditions of Implementation

on the Example of Poland” in the morning of 28 April. The full papers presented at the conference were published in the conference proceedings in CD-ROM and abstracts were also available in the printed Book of Abstracts. Currently a special issue of Journal of Food Engineering containing about 20 papers presented at this conference is being prepared. A local independent panel consisting of four people has been assembled to select the papers. Each panel member recommended a list of about 25-30 papers, and only those commonly recommended by the panel will be invited to submit a revised paper for reviewing and for possible

publication.

The 3<sup>rd</sup> International Symposium of CIGR Section VI will be held in September/October 2007 in Naples, Italy. Further details on the 3<sup>rd</sup> Symposium can be obtained by contacting Paolo Menesatti at pmene@email.it.

*Professor Da-Wen Sun, National University of Ireland,  
Dublin  
Chair of CIGR Section VI; Chairman of the Conference  
Editor, Journal of Food Engineering*

## Activities of CIGR Section IV RURAL ELECTRICITY AND OTHER ENERGY SOURCES

### 1. Conference, Congress and Symposium

During 2006-2006 there have been several congresses and conferences related to section IV activity namely on renewable energy sources. The following are the organizers of these congresses, symposia and conferences:

- 1) International Engineering conferences, in Bangkok, Thailand, from 6 to 9 December 2005 by AIT and AAEE
- 2) 14th European Biomass Conferences and Exhibition, in Paris, France from 17 to 12 October 2005 by ETA
- 3) 97th International Congress on Mechanization and Energy in Agriculture and 27th International Conference of CIGR Section IV: The Efficient Use of Energy and Renewable Energy Sources, from 26-29 September 2005, in Izmir, by Department of Agricultural Machinery, Ege University, Turkey.
- 4) International Seminar on “Biogas Technology for Poverty Reduction and Sustainable Development” in Beijing, China, from 18 to 20 October 2005
- 5) Annual Scientific Conference and General Meeting of TSAE in Morogoro, Tanzania, from 21 to 23 November 2005 by Tanzania Society of Agricultural Engineers..
- 6) 34th International symposium on “Actual Tasks on Agricultural Engineering”, by the Department of Agricultural Engineering, Faculty of Agriculture, in Opatija, Croatia from 21 to 24 February 2006.
- 7) International Conferences on “Advances in Agricultural Technology and their Economic and Ecological Impacts” in Tel Aviv, Israel from 8 to 10 May 2006, by the Institute of Agricultural Engineering, Israel
- 8) V CIACH: the Agricultural Engineering Specialization in a Globalization World, from 10 to 12 May 2006, by the University of Concepcion, Chile.
- 9) 3rd ISMAB, the 3rd International Symposium on Machinery and Mechnronics and Biosystems Engineering, in Seoul, Korea from 23 to 25 November 2006 by Sungkyunkwan University, Suwon, Korea,
- 10) World Congress Bonn 2006. “Agricultural Engineering for a Better World”, from 3 to 7 September 2006 in Bonn, Germany, by CIGR.

2. **Future International Conference** During the Board



Prof. Kamaruddin A.

Meeting conducted in Izmir, Turkey, it was agreed upon to plan future International Conferences by CIGR Section IV as follows:

- 2006- 28<sup>th</sup> conference will be in Bonn Electricity and renewable energy sources general electricity problems in agriculture. Main theme: Efficient use of electricity and Renewable energy sources.
- 2007- 29<sup>th</sup> conference will be in Poland. "Rational Use of Energy in Agriculture and Renewable Energy Sources"
- 2008- in Brazil ( there is a proposal from Australia at a latter date that the Conference can be conducted in Perth, Western Australia. Final decision and approval should be made during the Bonn Board Meeting).
- 2009- 30<sup>th</sup> conference will be in Hungary

### 3. E-Journal.

During 2005 – 2006 there were several manuscripts forwarded to the Section IV:

- 1) EE 05 001.
- 2) EE 05 002 .Testing of PEM fuel cell system
- 3) EE 05 003. Energy potential of agricultural wastes uses as local fuel materials in Nigeria
- 4) EE05 005. Parametric studies on bio-diesel
- 5) EE 05 006. Thermochemical conversion of municipal wastes
- 6) EE 05 007. Biogas production from municipal solid
- 7) EE05 008. Energy assessment of different weed management practices for rice-wheat cropping system in India
- 8) EE05 009
- 9) EE05 010 batch- and semi-continuous biogas production from different grass species
- 10) EE 05 011 Seasonal Pattern of Biomethanation of Grass from Landscape Maintenance
- 11) EE 06 001. Energy Consumption Pattern of Selected Mechanized Farms in Southwestern Nigeria

### 4. CIGR SECTION IV – Board Meeting in IZMIR 2005

The Technical Board Meeting of CIGR Section IV “*Rural Electrification and Other Energy Sources*” was realized in two sessions. First session was started at 11:30 a.m. and concluded at 12:00 and Second session was started at 4:00 p.m. and concluded at 5:30 p.m. on 27.09.2005 Izmir, Ege University Faculty of Agriculture Department of Agricultural



Machinery. The Meeting was attended by Prof.Dr.Kamaruddin Abdullah (Current Chair), Prof.Dr. R.Cengiz Akdeniz (Executive Secretary), Prof.Dr.Mikio Umeda, Prof.Dr. Janusz Piechocki, Prof.Dr.Milan Martinov, Prof.Dr. Laurentiu Fara, Prof. Dr. Nikolay Mihalov, Prof. Dr.

Luis Santos Perira and Prof.Dr. Zoltan Sibalszky.

Prof. Dr. Kamaruddin Abdullah  
Chair of CIGR Section IV.

## 4. CIGR –SPONSORED ACTIVITIES

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

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

### 1<sup>st</sup> International Conference on Monitoring, Prevention and Mitigation of Dense and Debris Flows

Debris and hyper-concentrated flows are amongst the most frequent and destructive of all water-related processes. They mainly affect mountain areas in a wide range of morpho-climatic environments and in recent years have attracted more and more attention from the scientific and professional communities and concern from the public awareness, due to the increasing frequency with which they occur and the death toll claim. Higher population pressures on natural resources in hazard-prone areas and development of activities that have the potential to increase the magnitude of hazard call for improvements in the criteria used to identify debris flow risk areas and to design prevention and mitigation measures. There is need to take into account risks emanating from these events into the development process, in general, and land and water resources management in particular. This concept leads to a new integrated risk management approach which comprises the systematic process, administrative decisions, organisation, operational skills and abilities to implement policies, strategies and coping capacities of the society and communities to lessen the impact of natural hazards and related environmental disasters.

On these themes an International Conference took place in Rhodes, Greece, on 7-9 June 2006. The Event was organized by the Wessex Institute of Technology, UK, in cooperation with the Alma Mater Studiorum - University of Bologna, Italy and the Technological Education Institute of Kavala, Greece and was sponsored by CIGR and EurAgEng.

The objective of the Meeting was to bring together engineers, scientists and managers from laboratories, industries, governments and academia to interchange knowledge and expertise in the field of dense and hyper-concentrated flows. The Conference was attended by participants from 17 countries. It consisted of an Opening Session, five Topic Sessions: Debris-flow modelling; Debris-flow phenomenology; Debris-flow mobilisation; Debris-flow disaster mitigation; Case studies, and two Special Sessions:

- Debris and hyper-concentrated flows (organized by D. De Wrachien);
- Debris-flow and landslide phenomena after extreme events (organized by D. Emmanouloudis).

At the Opening Session the Convenor, Prof. C. Brebbia highlighted the scope, the goals and the aims of the Conference, Prof. D. De Wrachien stressed the role of the agricultural engineers in the design of prevention and mitigation measures suitable to lessen the impact of natural hazards and extreme hydro-geological events, while Prof. D. Emmanouloudis brought the greetings and best wishes for success of the Technological Educational Institute of Kavala.

The Event provided a multi-lateral forum for cooperation, information exchange and dialogue between the scientific and professional communities and underlined that the ideal sequence that should be pursued in the approach to the difficult problem of the management and hazard mitigation of dense and debris flows could be outlined as follows:

- first, a systematic collection of field data should be carried out in order to provide a large base of reliable data that could allow a better knowledge of the existing risk trends and a deeper understanding of the mechanics of the phenomena, along with their general behaviour and effects;
- secondly, effective mathematical models, which strongly depend on data and measurements collected and performed in the field for their calibration and design, should be constantly developed, updated when needed, tested and applied;
- hazard mapping techniques and identification of possible scenarios, which need reliable models to be effective and sound, should then be set up;
- on the basis of the knowledge achieved in the previous steps, the best mitigation solutions should be identified, designed and built up;
- finally a program of systematic observations on the sites, where risk has been mitigated, should be planned and carried out to detect any shortcoming and test the efficiency of the investigations

The Proceedings of the Conference have been published by : WIT Press, Ashurst Lodge, Ashurst, Southampton, SO40 7AA, UK

For more information see the Websites:  
[www.wessex.ac.uk/conferences/2006/debris06/index.html](http://www.wessex.ac.uk/conferences/2006/debris06/index.html)  
[www.witpress.com](http://www.witpress.com)

Daniele De Wrachien  
EurAgEng Past Presiden

## 5. ACTIVITIES BY CIGR REGIONAL SOCIETIES

### The following ASABE conferences presently have a Call for Papers available

#### 1. See ASABE website

(<http://www.asabe.org/meetings/index.htm>) and are accepting, electronic submissions:

#### 1-1. International Conference on Crop Harvesting and Processing

(ICCHP) February 11-14, 2007 in Louisville, Kentucky. Abstract submission deadline: July 21, 2006

#### 1-2. Fourth Conference on Watershed Management to Meet Water Quality

Standards and TMDLs (Total Maximum Daily Load) Issues: Solutions and Watershed Management and TMDLs March 11-13, 2007 in San Antonio, Texas. Abstract submission deadline: August 18, 2006

#### 1-3. International Symposium on Air Quality and Waste Management for Agriculture

September 15-19, 2007 in Broomfield, Colorado. Abstract submission deadline: August 18, 2006

#### 1-4. Eighth National Symposium on Individual and Small Community Sewage Systems

October 20-24, 2007 in Warwick, Rhode Island. Abstract submission deadline: November 15, 2006

#### 2. MEETINGS & CONFERENCES REMAINING FOR 2006:

#### 2-1. 2006 ASABE Annual International Meeting Preliminary Program to be held in Portland,

Oregon at the Oregon Convention Center on July 9-12, 2006. Early bird registration deadline is May 12, 2006. Visit the ASABE website <http://www.asabe.org/meetings/AIM2006/index.htm> for complete program information.

#### 2-2. World Congress of Computers in Agriculture to be

#### held in Orlando,

Florida at the Grosvenor Resort on July 24-26, 2006. Early bird registration deadline is June 1, 2006. Visit the website for complete program information: <http://www.wcca2006.org/index.htm>

#### 2-3. New Visa Invitation Letter System

If you plan to attend the Annual International Meeting or one of our many specialty conferences in the United States, you will want to visit

<http://www.asabe.org/meetings/index.html>

[www.asabe.org/meetings/index.html](http://www.asabe.org/meetings/index.html)

To acquire your visa invitation letters. ASABE's new system is quick, easy, and has no fees. Type in the required information and print your letter instantly. This new system enables you to schedule your meeting with the U.S. Consulate or U.S. Embassy quicker, earlier, and easier. Remember to apply early for your visa! It is recommended that you initiate the visa application process at least four to six months prior to the opening date of any ASABE conference or meeting.

#### 2-4. Now Available for International Conference Registrants All prepaid international conference registrants will be posted by ASABE to an intranet site for the U.S. State Department.

The site will list the ASABE conference and all prepaid international registrants. Every embassy and consulate in the world will have access for verification of attendance.

Sharon McKnight  
Meetings & Conferences  
American Society of Agricultural and Biological Engineers  
2950 Niles Road  
St. Joseph, MI 49085  
Phone: 269-429-0300  
Fax: 269-429-3852

## 6. CIGR CO-SPONSORED ACTIVITIES

### Report on the 34<sup>th</sup> International Symposium Actual Tasks on Agricultural Engineering 21 – 24 February 2006, Opatija, Croatia

The 34<sup>th</sup> International Symposium **Actual Tasks on Agricultural Engineering** was held on 21-24 February 2006 in Grand hotel "Adriatic" Opatija, Republic of Croatia. The principle Organiser, Agricultural Engineering Department, Faculty of Agriculture, University of Zagreb was supported by the following frameworks: Department of Agricultural Engineering, Faculty of Agriculture, University J.J. Strossmayer, Osijek, Department of Bio-systems Engineering, Faculty of Agriculture, University of Maribor (Slovenia), Agricultural Institute of Slovenia, Hungarian Institute of Agricultural Engineering Gödöllő and Croatian Agricultural Engineering Society. Co-sponsors of the Symposium were CIGR, EurAgEng, AAEE and Association of Agricultural Engineers of South Eastern Europe (AAESEE).

The Symposium was attended by 119 participants from 15 countries. It consisted of an Opening Session and six Topic Sessions covering all the broad subject-areas that fall under the scope of Agricultural Engineering. The importance of the Event was underlined by the presence of the former Secretary-General of CIGR Prof. P. Schulze Lammers, the immediate Past President of EurAgEng Prof. Daniele De Wrachien, the President of Club of Bologna Prof. Ettore Gasparetto, the President of AAEESEE Prof. Nikolay Mihailov and the representatives of the National Societies of Agricultural Engineers of Bosnia and Herzegovina Prof. S. Skaljić, Romania Prof. V. Ros, Serbia and Montenegro Prof. M. Martinov and Prof. M. Djević and Croatia Prof. Silvio Kosutić.

At the Opening Session acknowledgments were bestowed upon the members of the Scientific Committee Prof. Robert Zimmer and Prof. Daniele De Wrachien for their long-standing endeavour to enhance the level and widen the reach of the Symposia. The Convenor, Prof. Silvio Kosutić

brought the greetings of both the Croatian Society of Agricultural Engineering and the Faculty of Agriculture of the State University of Zagreb. Prof. Daniele De Wrachien stressed the long tradition of the Symposia and their future role as one of the main gathering Events for agricultural engineers in South-Eastern Europe, and pointed out the



dimension of the tasks and challenges that agricultural engineering education in European universities will have to face and cope with in the third millennium. Prof. Nikolay Mihailov brought the greetings of AAEESEE, while Mr. Jozse Dular the President of the Slovenian Agricultural Engineering Society closed up the Session bringing the greetings of the Slovenian Society. Next, a number of lectures were held among which is worth mentioning „**Agricultural Engineering Curricula: Past, Present and Future**” presented by Prof. Luigi Febo.

In the Topic Sessions, each starting with a review report, 64 papers were discussed, in oral presentation. At the Closing Session the Convenor emphasised the role of EurAgEng in the ecologically sustainable development of agriculture within the East-European countries in the eve of their joining to European Union.

During the Symposium round-table Meetings of representatives of CIGR, AAEESEE, ERA and EurAgEng were held, focusing on the main achievements and trends of the DAAD Project “**A Network of Advanced Education in Agricultural Engineering for South-Eastern Europe**”. The participants agreed that there is a real need for improving and restructuring education and training in the field of Agricultural Engineering based on a hybrid system of Engineering and Bio-system. Moreover, they expressed a shared interest in a harmonization of the core curricula structure, within this ground, to stimulate and enhance student mobility across Europe.

World famous agricultural machinery producers, such as AGCO, Case-New Holland, Claas, and others presented their current programmes by means of video tapes and oral presentations during afternoon Sessions.

Information regarding the 35<sup>th</sup> Symposium in the year 2007 will soon be available at the web site:

<http://www.agr.hr/aed/index.htm>

Prof. Silvio Kosutic,  
Convenor of the Symposium  
Prof. Daniele De Wrachien,  
Past President of EurAgEng

## 35 th International Symposium "Actual Tasks on Agricultural Engineering" 19. - 23. February 2007, Opatija, Croatia

### About Symposium

Symposium "Actual Tasks on Agricultural Engineering" has been organised for 34 years that shows its tradition and importance. During last years the Symposium achieved more international meaning thanks to co-sponsoring of EurAgEng, CIGR, AAEE and AAEESEE. Papers from Symposium's proceedings are indexed into world's famous databases as ISI Proceedings (part of the ISI's Web of Knowledge), ISI - Index to Scientific & Technical Proceedings, CABI Agricultural Engineering Abstracts, InterDok and Cambridge Scientific Abstracts - Conference Papers Index.

### Aim of Symposium

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.

### Topics

The main topics to be covered by Symposium are:

- \*Land & Water Use and Environment
- \*Power and machinery
- \*Information Systems and Precision Farming
- \*Livestock Technology
- \*Processing & Post Harvest Technology and Logistics
- \*Energy and Non-Food Production Technology
- \*Systems Engineering and Management
- \*Fruit & Vegetable Cultivation Systems
- \*Global Issues

### Travelling

To arrive in Opatija You can travel by plain, train or bus to Zagreb, Ljubljana (Slovenia) or Trieste (Italy) and then by train or bus to Rijeka. From Rijeka to Opatija drives local bus.

### Accommodation

Symposium secretariat will book rooms at Grand Hotel Adriatic for authors who intend to attend Symposium. Information about hotel will be available at Internet: <http://www.pro.hr/adriatic/>

### Registration fee

The registration fee of 100 € covers proceedings and farewell banquet. Only those papers of authors who pay the registration fee will be published in the conference proceedings. Members of EurAgEng, CIGR, AAEE and AAEESEE will be given 20% lower fee.

### Language

The official language of the symposium will be English and Croatian.

### Call for papers

Abstracts in English not exceeding 500 words should be submitted before 15. September 2006. Each Abstract will be reviewed and the decision of the Scientific Committee will be conveyed to each author by 01. October 2006. The full papers must be submitted by 01. December 2006. The

instructions for writing the paper are available on Web site. Instructions can be also send by fax or e-mail by author's request.

#### Key dates

Submission of abstract	September	15, 2006
Notification of paper acceptance	October	01, 2006
Submission of full paper	December	01, 2006
Fee payment deadline	December	10, 2006

#### Symposium Secretariat

Faculty of Agriculture  
Agricultural Engineering Department  
Svetosimunska 25  
HR-10000 Zagreb  
Croatia

Tel.: +385 1 2393819 Fax: +385 1 2393724

E-mail: [skosutic@agr.hr](mailto:skosutic@agr.hr)

#### For more Information:

<http://www.agr.hr/aed/index.htm>

## NEWS FROM ICID SANCID Symposium 2006

The South African National Committee on Irrigation and Drainage (SANCID) of ICID is organizing the second Symposium on "The Changing Face of Irrigation in Southern Africa" from 15-17 November 2006 at the Aventura Swadini Resort. The first SANCID symposium was held in November 2004 in the Eastern Cape. The symposium aims to attract a multi-disciplinary group of professionals involved with irrigation and drainage in Southern Africa

The irrigated agriculture industry is one where on-going change is a reality. Water users and their support services have in the last decade had to deal with new challenges due to changes in both the policy and natural environment they operate in. Access to water is being regulated through new water allocation methods; urban development and economic growth is putting additional strain on our water sources, thereby increasing competition for water and demanding greater efficiency; access to international markets requires strict control measures to be adhered to; new labour laws demand greater accountability from irrigation farmers – the list goes on.

In the light of these developments, SANCID will be hosting this symposium to consider all related aspects and evaluate the changes that have taken place.

The sub-themes of the Symposium are : (i) Design, Technologies and Innovation; (ii) Irrigation Management; (iii) Natural Resources and Environmental Aspects; (iv) Institutional Environment; (v) Human Resource Development. The Organizing Committee wish to specifically encourage young professionals in the field of irrigation water management to participate and/or contribute to the conference. Please submit abstracts electronically (MS Word format) to the Program Coordinator, Litha Magingxa at [magingxa.sci@mail.uovs.ac.za](mailto:magingxa.sci@mail.uovs.ac.za) by 16 June 2006. Notice of acceptance/rejection by 21 July 2006. Final paper submission deadline for inclusion in proceedings is 13 October 2006. For more information, please contact : Isobel van der Stoep (Convener), Department of Civil and Biosystems Engineering, University of Pretoria, Pretoria

0002, South Africa; Tel : +27(0) 12 420 2174; Fax : +27(0)12 362 5218; E-mail : [Isobel.vanderstoep@up.ac.za](mailto:Isobel.vanderstoep@up.ac.za); website : <http://www.sancid.org.za>

### Fifth International Scientific and Practical Conference «ECOLOGY AND AGRICULTURAL MACHINERY» 15-16 May 2007

sponsored by:

THE RUSSIAN ACADEMY OF AGRICULTURAL SCIENCES  
THE AGRICULTURE MINISTRY OF THE RUSSIAN FEDERATION  
NORTH-WEST RESEARCH AND METHODOLOGY CENTER OF THE  
RUSSIAN ACADEMY OF AGRICULTURAL SCIENCES  
EURO-ASIAN ASSOCIATION OF AGRICULTURAL ENGINEERS  
NORTH-WEST RESEARCH INSTITUTE OF AGRICULTURAL  
ENGINEERING AND ELECTRIFICATION (SZNIIMESH)

#### First Announcement and Call for Papers

1<sup>st</sup> Scientific and Practical Conference «Ecology and Agricultural Machinery» (May, 1998) gathered 87 participants. In the 4<sup>th</sup> conference (May 2005) more than 150 scientists and experts from 17 countries took an active part that indicates ever-increasing urgency of the problems of agricultural machinery and techniques application and environment. The organizers have an honor to invite you to the 5<sup>th</sup> Conference "Ecology and Agricultural Machinery".

#### Aims and Objectives

- to present and discuss the latest and the most efficient developments in agricultural engineering and production aimed at reducing the adverse effect of agricultural techniques and machinery on the environment
- to stimulate the wide dissemination of the most advanced concepts, experiences and investigation results as well as to promote international cooperation and «know-how» transfer
- to give the researchers, agricultural machinery manufacturers and farmers from Russia, CIS and Western countries an opportunity to establish personal contacts and exchange opinions and ideas

The scientific program will include plenary sessions, parallel oral sessions and poster sessions on **the following topics**:

#### Plant production

- New environmentally friendly cropping technologies and devices
- Engineering aspects of organic farming
- Designing methods and environmental assessment of site-specific technologies, machinery and equipment
- Precision farming

#### Livestock production

- New environmentally friendly technologies and devices in livestock management
- Designing and reconstruction of farm buildings for animal keeping
- Animal wastes management

#### Energy in farming

- Optimization of energy use in agriculture
- Renewable energy sources and their agriculture application
- Electrical safety



Registration form and paper abstract not exceeding 500 words	October 1, 2006
Notification of acceptance, terms of participation, hotel booking, guidelines for authors	November 1, 2006
Submission of full papers	January 31, 2007
Conference	15-16 May 2007

- Automation in farming
- Climate control

**Farming tractor/implement systems performance**

- CALS technologies

## VENUE

North-West Research Institute of Agricultural Engineering and Electrification (SZNIIMESH), Saint-Petersburg-Pushkin, Russia

Booked in advance accommodation will be provided in the

hotels in Saint-Petersburg and Pushkin

## ADDITIONAL INFORMATION

- Conference languages are Russian and English (translation provided)
- Oral presentations should not exceed 15-20 minutes
- Conference Proceedings will be published in book format after the revision of the submitted papers

**International Advisory Committee under the leadership of acad. Yury Lachuga, Vice-President of the Russian Academy of Agricultural Sciences, will include the representatives of the organizers and the leading Russian and foreign research centers.**

## DATES AND DEADLINES REGISTRATION

[www.sznii.ru](http://www.sznii.ru)

## CONTACTS

Larissa Levchenko

Guenrikh Agapov

☎ (812) 466 78 04

☎ fax (812) 466 56 66

☎ [nii@nevsky.net](mailto:nii@nevsky.net);

## 7. OTHER ACTIVITIES

### International Conference of Bionic Engineering

The organizing committee calls for papers the coming international conference entitled "International Conference of Bionic Engineering" to be held on 17 -20 September 2006 in Changchun, China.

The topics of the conference include: fundamental understanding of animals and plants for bionic and bio-mimetic engineering; manufacturing, materials, information and control technology, architecture, locomotion, intelligence, design and system integration relating directly to bionics and bio-mimetic. Please visit the website: <http://kltmb.jlu.edu.cn/english/> for more details.

We look forward to meeting you in Changchun.

Jiang Zhou

Secretary,

Organizing Committee of

International Conference of Bionic Engineering

### TANZANIA SOCIETY OF AGRICULTURAL ENGINEERS

#### The 2006 Annual Scientific Conference and General Meeting

##### FIRST ANNOUNCEMENT AND CALL FOR PAPERS

The 2006 Annual Scientific Conference and General Meeting of the Tanzania Society of Agricultural Engineers (TSAE) will be held at the Muslim University of Morogoro (MUM), **Morogoro, Tanzania** from 20<sup>th</sup> to 22<sup>nd</sup> November 2006. The TSAE 2006 Annual General Meeting (AGM) will be held at the end of the Scientific Conference on 22<sup>nd</sup> November 2006.

##### Main Theme:

The Role of Engineers in Creating an Environmentally Sustainable Future: Challenges and Prospects for the

Developing Countries

##### Sub-themes:

- Safety and health in the agricultural sector.
- Safety and health in engineering design (ergonomics).
- Safety and health in agricultural industrial processes.
- Safety and health in industrial exploitation of forests.
- Laws, regulations, and policies.
- Education and training.
- Environmental issues.
- Gender issues.
- Role of the private sector.
- Renewable energy sources.
- Labour saving technologies.
- Conservation agriculture.
- Xxiii. Entrepreneurship and job creation.
- Water supply and sanitation.
- ICTs

Members of TSAE, Institution of Engineers Tanzania (IET), and the general public within and outside Tanzania are invited to submit papers on any of the sub-themes listed above. **Abstracts** should be sent to the undersigned to reach him before 31<sup>st</sup> May 2006. **Full papers** for accepted abstracts should be received by 31<sup>st</sup> August 2006.

Dr. Baanda A. Salim, President

The Honorary 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.

Cell Phone: +255 (0) 745 753233

E-mail: [tsae@suanet.ac.tz](mailto:tsae@suanet.ac.tz), [tsae1973@yahoo.co.uk](mailto:tsae1973@yahoo.co.uk)

<http://eng.suanet.ac.tz/>



**International Conference1 on  
WATER SAVING IN MEDITERRANEAN  
AGRICULTURE &  
FUTURE RESEARCH NEEDS  
14-17 February, 2007  
CIHEAM, Mediterranean Agronomic Institute  
of Bari, Italy**

• **objective and main topics of the Conference**

The Conference aims to bring together all relevant local and regional key-actors and scientists in order to discuss and identify the priorities in research to support national and regional strategies on water saving in the Mediterranean region.

Accordingly, the Conference will comprehend research findings, national reports and regional comparative studies on the following main themes:

- state-of-the-art of research and on-ground implementation of water saving strategies and practices for improvement of:
  - Water Use Efficiency and Water Productivity,
  - Irrigation Systems Performance,
  - Use of Non-conventional Water Resources and
  - Institutional and policy dimensions of water saving;
- integration and harmonization of water saving approaches at different scales, from field to irrigation district, watershed, national and regional basin: state-of-the-art and scaling up effects;
- socio-economic, environmental and institutional indicators for sustainable development of land and water resources and water saving in the Mediterranean region;
- policies and guidelines for conservation of land and water resources and sustainable water use at national and regional level and
- priority actions and innovative tools for water saving in the Mediterranean irrigated agriculture in spite of local and regional environmental conditions and expected socio-economic development and climatic changes.

• **Sessions**

The Conference will include the following main thematic sessions:

1. Water Use Efficiency and Water Productivity
2. Irrigation Systems Performance and Management
3. Use of Non-conventional Water Resources in Irrigated Agriculture
4. Innovative approaches and tools for water saving
5. Socio-economic and environmental aspects of sustainable water management
6. Institutional and policy dimensions of water saving
7. Integrated strategies for water saving in Mediterranean region
8. Euro-Mediterranean cooperation: building up common water saving policies, strategies and priorities

The presentation of research projects and initiatives related to water saving in Mediterranean region and financed by European Commission and other regional and national funds is expected within the last session.

Call for papers and submission of abstracts

The papers are invited on the topics outlined in the announcement and others falling within the general objectives of the Conference. The participation of researchers, scientists and young professionals who are not directly involved in WASAMED Network is strongly encouraged. Furthermore, the presentation of experiences from the regions others than Mediterranean will be highly appreciated.

The abstracts should not exceed 500 words and should be submitted to the Conference Secretariat electronically at [wasamed@iamb.it](mailto:wasamed@iamb.it). The author(s) should include full address and indicate the title of session in which intend to present the work. The abstracts will be reviewed by the members of Scientific Committee.

Publication of papers

All papers accepted for the Conference will be published in the Conference Proceedings, a Special Volume of Options Méditerranéennes, which will be available to the participants at the time of registration. The Proceedings will be distributed widely to research institutions, Universities and institutional libraries in the Mediterranean region.

Selected papers, presented at the Conference, will be published as peer-reviewed documents in a Special Volume on "Water Saving Issues for Mediterranean Agriculture" realized in cooperation with an outstanding international publisher.

Important dates

- **July 31<sup>st</sup> 2006** – deadline for submission of abstracts
- **September 15<sup>th</sup> 2006** – information about acceptance/rejection of abstracts
- **December 15<sup>th</sup> 2006** – deadline for the submission of full papers

Organizing Committee

M. Raeli, CIHEAM-IAMB  
C. Baublys, CIHEAM-IAMB  
C. Bogliotti, CIHEAM-IAMB  
S. De Santis, CIHEAM-IAMB  
N. Lamaddalena, CIHEAM-IAMB  
A. Scardigno, CIHEAM-IAMB  
M. Todorovic, CIHEAM-IAMB

• **For more details to see;**

<http://wasamed.iamb.it/conference>

**THE MISR SOCIETY OF AGRICULTURAL  
ENGINEERING**

[www.geocities.com/awady37/msae.html](http://www.geocities.com/awady37/msae.html)

**THE 14<sup>th</sup>. ANNUAL CONFERENCE  
(1<sup>st</sup>. Annoncement)**

The MSAE 14<sup>th</sup>. Conference will be held this year on the 22<sup>nd</sup> of Nov. 2006 in the premises of the "College of Agriculture, Ain-Shams University), Cairo, Egypt, under the motto:

**"NEW TRENDS IN AGRICULTURAL ENGINEERING".**

Topics of the conference include:

1. Agricultural Mechanization; Recent Trends.
2. Modern Field-Irrigation Engineering.
3. Renewable Energy; Applications in Agriculture.
4. Post-Harvest Engineering.
5. Recycling of Farm Residues; Environmental

- Management; and Sustainable Development.  
6. Rural Communities and Planning.

Deadlines for papers:

- |                            |              |
|----------------------------|--------------|
| 1. Abstracts               | End of June, |
| 2006                       |              |
| 2. Full Manuscripts        | Mid August   |
| 2006                       |              |
| 3. Scrutinized Manuscripts | Mid October  |
| 2006.                      |              |

Subscription rates: **(From outside the country)**

- 200 US\$ or EURO for individuals supported by organizations.  
(Special facilities are offered for the society members).
- 1000 US\$ or EURO for organizations (covering up to 5 participants).
- Participation in machine, technical shows, videos, etc.. by special agreement. (Contact the Executive Chairman of the Conference).

Payments:

Payments are made in cash or money orders payable to the account of the *"Misr Society of Agricultural Engineering"*, at one of the following addresses:

**Prof. Dr. Mohamed Nabil El Awady,**  
Scientific Chairman of the Conference; President  
of the Society.  
Ag. Engineering Department,  
College of Agriculture, A-Shams U.  
P.O.Box 68, Hadaek Shobra,  
Cairo 11241, Egypt.

Or to:

**Prof. Dr. Mahmoud Mohamed Hegazi,**  
Executive Chairman of the Conference,  
Head of the Ag. Engineering Dept.,  
College of Agriculture, A-Shams U.  
P.O.Box 68, Hadaek Shobra,  
Cairo 11241, Egypt.

**From Invention and Development to  
Product; From Research Institutes to the Water  
Industry  
at the Sede Boqer Campus, Israel,  
on 21-23 November 2006.**

The "Zuckerberg Institute for Water Research" invites you for the forthcoming International Conference "From Invention and Development to Product; From Research Institutes to the Water Industry" to be held at the Sede Boqer Campus, Israel, on 21-23 November 2006.

More details and Registrations form you can find at our website:

<<http://www.ziwr.co.il>>[www.ziwr.co.il](http://www.ziwr.co.il).

We look forward to seeing you.

Prof. Eilon Adar  
ZIWR Director  
ZIWR - Zuckerberg Institute for Water Research  
Jacob Blaustein Institutes for Desert Research  
Ben Gurion University of the Negev  
ISRAEL  
Phone: +972-8-6596984, 972-6596979  
Fax: +972-8-6596889

E-mail: <<mailto:ziwr@bgu.ac.il>>[ruthal@bgu.ac.il](mailto:ruthal@bgu.ac.il)

## 8. PUBLICATIONS

### CIGR E-Journal ISSN 1682-1130

The CIGR electronic journal is now in its eighth year of publication. It has grown from a modest beginning and is now attracting many quality manuscripts. All of the published papers are available free of charge on the website---[cigr-ejournal.tamu.edu](http://cigr-ejournal.tamu.edu) Here is a summary of the number of papers published to date:

#### Peer reviewed original research papers (total-225):

Vol. I(1999)----7	Vol. II(2001)----10
Vol. III(2000)---3	Vol. IV(2002)---25
V(2003)---29	Vol. VI(2004)---44
Vol. VII(2005)-53	Vol. VIII(2006)--36

#### Invited overview papers (total-86):

Vol. I-----2	Vol. II-----4	Vol. III-----8
Vol. IV---20	Vol. V---24	Vol. VI-----6
Vol. VII---10	Vol. VIII--12	

As you might expect the published papers come from a broad international base: (48 countries).

#### Peer reviewed original research papers:

Australia-2, Belgium-3, Botswana-1, Brazil-6, Canada-9, Cameroon-2, China-5, Czech Republic-3, Denmark-11, Estonia-3, Ethiopia-1, France-1, Germany-14, Greece-5, India-9, Indonesia-2, Ireland-1, Iran-1, Israel-2, Italy-7, Japan-27, Lebanon-2, Lithuania-3, Mexico-1, Netherlands-3, Nigeria-15, Poland-6, Portugal-6, Spain-6, Sweden-3,

Tanzania-1, Thailand-4, Turkey-3, United Arab Emirates-1, USA-19.

#### Invited overview papers(Including Club of Bologna keynote presentations):

Australia-1, Brazil-3, Canada-2, China-4, Denmark-2, Egypt-1, FAO-3, France-1, Germany-10, Greece-1, India-4, Indonesia-1, Israel-1, Italy-11, Japan-4, Kenya-1, Mexico-1, Morocco-1, Netherlands-3, Nigeria-9, Oman-3, Palestine-1, Poland-1, Portugal-1, Russia-1, Swaziland-1, Taiwan-1, Thailand-2, UK-1, USA-18, Yugoslavia-1, Zimbabwe-1.

**I invite all of you to submit manuscripts for peer review and publication. There is no cost to publish or to access and print papers. The website has all the details regarding manuscript format, submission instructions, etc. If you have any questions, please send me an email at [stout@tamu.edu](mailto:stout@tamu.edu)**

**Dr. B.A. Stout, Coordinator,  
Dr. Lingjuan Wang, Editor-in-Chief**

#### 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](mailto:martin@asae.org)

## 9. MISCELLANEUS

### Yasushi Hashimoto named winner of international Engineering Award

The American society of Agricultural and Biological Engineers has named Yasushi Hashimoto winner of the 2006 Kishida International Award. The award honors outstanding contributions toward food and fiber production, improved living, and education outside the United States. It will be presented July 12, at an ASABE luncheon at the Society's Annual International Meeting, being held July 9-12 in Portland, Oregon.

Hashimoto is being recognized for his outstanding international achievements relating to research and education in agricultural and biological engineering. Visiting professor, Tokyo University of Agriculture, and professor emeritus, Ehime University, Matsuyama Japan, Hashimoto is recognized worldwide for his leadership and pioneering contributions concerning informatics, measurement and control applications, particularly in plant production and biomechanical systems. His efforts helped advance the progress of precision agriculture. Hashimoto has authored or co-authored more than 200 refereed journal articles, conference proceedings, technical publications and papers, and 36 books. He was the editor for "Measurement Techniques in Plant Science," which became an important reference, and "The Computerized Greenhouse," recognized as one of the first books deal with food-production systems based on computer integrated applications in agriculture.

24-year member of ASABE, Hashimoto has contributed to the international community by providing leadership to the International Federation of Automatic Control (IFAC) and

Commission Internationale du Genie Rural(CIGR).

### International training workshop on Protected Agriculture

The 1st Workshop last year made a success by training participants from 8 different developing countries in the research and technology of protected agriculture. The Ministry of Science and Technology (MOST) of China has approved our application this year for the 2nd training workshop, which will be held from Nov. 20 to Dec. 3, 2006 in Yangling, China, as part of International Training Program of MOST. Participants of the training workshop will learn about the recent research and practical technologies of protected agriculture in China via lectures and field visits, where they can exchange views and share experience with each other.

For details of the international workshop, such as application procedures and admission reference, please see the website [http://www.geocities.jp/cigr\\_sg/](http://www.geocities.jp/cigr_sg/).

We warmly welcome specialists, officials, managers who are engaged in protected agriculture work at universities, research institutes, agencies or companies to come to our workshop.

TANG Limei  
International Exchange Center  
Add: Room 404, No.1 Xinqiao North Road, Yangling,  
Shaanxi, China 712100  
Tel: +86-29-87033981 Fax: +86-29-87036061  
Email: [tang@yangling.gov.cn](mailto:tang@yangling.gov.cn); [iec@yangling.gov.cn](mailto:iec@yangling.gov.cn)

---

All correspondence and information on forthcoming activities should be sent to:  
CIGR GENERAL SECRETARIAT

Emeritus Prof. Dr. Takaaki Maekawa, Secretary- General

University of Tsukuba

Graduate school of Life and Environmental Sciences

1-1-1 Tennodai, Tsukuba, Ibaraki, 305-8572, Japan,

Tel: +81-29-853-6989, Fax: +81-29-853-7496

E-mail: [biopro@sakura.cc.tsukuba.ac.jp](mailto:biopro@sakura.cc.tsukuba.ac.jp)

---

### DISCLAIMER

The CIGR Newsletter is a quarterly publication of the CIGR General Secretariat. This Newsletter is also available in French as "Bulletin de la CIGR". CIGR assumes no responsibility for the statements and opinion advanced by the contributors. Whilst every effort has been made to make the information contained in this newsletter as accurate as possible, no warranty of accuracy is made or implied by the editors. The editors shall have neither liability nor responsibility to any person or entity with respect to loss or damages in connection with or arising from the contents of this newsletter.