

International Commission of



Agricultural Engineering

# **CIGR**

**Newsletter Quarterly**

**Newsletter No 76  
March 2007**

*Since 1930–2006  
76 Years of CIGR*

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

## 1. CIGR NEWS

### Prof. Luis Santos Pereira's farewell letter

My mandate as acting President of CIGR is ending in a few days; it has already ended when you will read this farewell letter. I am pleased to tell all of you that it has been a great honour to serve the CIGR in this quality. I'm afraid I have not done all the necessary but I feel good at this moment, when I pass the responsibilities to a new President, Prof. Irenilza Naas and I wish her all the best to lead our CIGR to a greater success.

I had the privilege to know several Presidents before me, either in professional terms or as acting within CIGR bodies. This fact, recognizing their capacities and their devotion to the society, placed heavy responsibilities on my shoulders. However, the fact that managing CIGR is done through a Presidium is a good solution. We don't decide alone, we share our approaches. The past four years in the Presidium is a good experience of working together with the past Presidents El Houssine Bartali and Axel Munack, and with two Secretaries Generals, Peter Schulze-Lammers and Takaaki Maekawa. I am sure that we became friends. I hope that Irenilza will have a similar feeling after the mandate she is starting now.

During this mandate I tried to support all working bodies of CIGR and help for effectiveness of their work. This is not easy and not always successful. I could be present in some but few meetings of Technical Sections and Member Societies, which constituted nice experiences and occasions to know people and understanding their objectives and



Prof. Luis S. Pereira

motivations. It has been a very enriching experience to know better so many and interesting people that everywhere in the world is contributing to CIGR and that feels that CIGR is important for them, for their activities and for the development of science and technology for their countries and regions.

I want to sincerely thank all colleagues that have been contributing to CIGR as Section Chairs or in the Section Boards, as members of the Executive Board, as Auditors, as Chairs and members of Working Groups, and as associate editors and reviewers of the Ejournal. A special word goes to Bill Stout and Lingjuan Wang, respectively Coordinator and Editor-in-Chief of the journal, with the hope that ISI will soon recognize the importance of the journal:

My thanks also go to all those that accepted to become the new Section Chairs and Board members, the new Chairs and members of Working Groups, new members of the Executive Board and Auditors. I wish them a successful work in the next four years.

We had this year a splendid Congress, well reported in the last Newsletter. The dynamics of CIGR was well evidenced there, including through the creation of new Working Groups and special work teams as for upgrading the website. In two years we will have an International Conference. Let's make it a great and dynamic event, with a strong involvement of CIGR bodies, the Sections in particular, through appropriate collaboration with the Brazilian colleagues. See you all there!

18 December 2006  
Luis Santos Pereira  
Past President of CIGR

## Outlook of CIGR

### International Commission of Agricultural Engineering *Commission Internationale du Génie Rural (CIGR)*

The human race is currently confronted with the problem of the disturbance of the ecosystem as a result of human activity, the depletion of resources and environmental decay. In particular, we have to use our wisdom to meet the challenge of ways to overcome the phenomenon of global warming and the change in the environment as well as their influence on securing water resources and the production of food etc. The International Commission of Agricultural Engineering is the sole academic society that uses specialists the world over in order to contribute to the advancement and development of science and technology that in turn contributes to the progress of the human race and the efficient utilization of resources such as water resources and food production as well as the formation of systems to develop the continuation of resources, land management information, farming and food production etc.

The organization is allied with international bodies such as

FAO, ISO and UNIDO. The basic behaviour criteria of CIGR are autonomous management—which does not control the



Dr. Takaaki Maekawa

country, politics and thought—and supporting many free activities in the management and individual specialist groups, agricultural societies and the union bodies in each country.

The background of CIGR is as follows:

**Founded:** Aug 1930, Liège (Belgium), at the 1<sup>st</sup> International Congress of Agricultural Engineering. Statutes changed: 2

Oct 1958, Brussels (Belgium); modified: 9 Mar 1964, Lausanne (Switzerland); 1969, Baden-Baden (Germany FR); 26 Sep 1974, Flevohof (Netherlands); 12 July 1979, East

Lansing MI (USA); 7 Sep 1989, Dublin (Ireland). It was previously known in German as the *Internationale Kommission für Technik in der Landwirtschaft*. The current statutes were adopted on 30 Nov 2000 in Tsukuba (Japan) and have been effective since January 2001.

**Aims:** To promote the arts, science and technology and agricultural engineering; to encourage and coordinate research; to assist and organize activities; to promote the creation and activities of national and regional associations of agricultural engineers, technicians and architects; to facilitate relations and the exchange of research results and technology among specialists in the field; to encourage education, training and the mobility of young professionals and to constitute a documentation source and assist in publishing useful information for members.

**Goals:** To become a worldwide networking service organization that connects, coordinates and reinforces the activities carried out by its members; to become a worldwide representative organization of agricultural engineers and agricultural engineering; to effectively co-operate with related (Governmental and Non-Governmental) International Organizations, promote the founding of Regional and Agricultural Engineering National Societies/Associations all over the world and develop all other required activities to serve the general aims.

**Structure:** A General Assembly (biennial), consisting of Honorary Presidents, the Presidium—the President, Incoming President, Past President and Secretary General, Representatives of National and Regional Societies and Individual and Corporate Members. An Executive Board and Technical Board comprising the Presidium and Chairpersons of the following seven Technical Sections: Land and Water Engineering; Farm Buildings, Equipment, Structure and Environment; Equipment Engineering for Plant Production; Rural Electricity and Other Energy Sources; Management, Ergonomics and Systems Engineering; Postharvest Technology and Process Engineering and Information Systems.

**Languages:** English., **Finance:** Members' dues and grants.

**Consultative Status:** ECOSOC; -- FAO, **IGO Relations:** Links with: -- UNIDO, Links indicated by: -- Arab Organization for Agricultural Development (AOAD)

**NGO Relations:** In liaison with the following technical committees:-- International Organization for Standardization (ISO) Links with: -- Club of Bologna; -- European Association for Animal Production (EAAP); -- International Association of Agricultural Medicine and Rural Health (IAAMRH) -- International Commission on Irrigation and Drainage (ICID); -- International Committee of Work Study and Labor Management in Agriculture; -- International Society for Horticultural Science (ISHS); -- International Soil Tillage Research Organization (ISTRO) and -- International Union of Forest Research Organizations (IUFRO).

**Activities** Organizes world congress (currently, every four years; previously, every five years) with themes related to strategic developments in the field.

'*Technical Sections*' (7) hold sectional and intersectional conferences, seminars and workshops.

--Section 1. Land and Water Engineering: engineering applied to the science of soil and water management.

--Section 2. Farm Buildings, Equipment, Structures and Environment: optimization and design of animal, crop and horticultural buildings and related equipment, climate control

and environmental protection, farm planning and waste management.,--Section 3. Equipment Engineering for Plant Production: farm machinery and mechanization, forestry mechanization, sensing and artificial intelligence, modelling and information systems and the application of advanced physics.,--Section 4. Rural Electricity and Other Energy Sources: applications of electricity and electrotechnology for agriculture, rationalization of energy consumption, use of renewable energy sources and related technologies and automation and control systems., --Section 5. Management, Ergonomics and Systems Engineering: farm management, working methods and systems, labour and work planning, optimization, human health, ergonomics and safety of workers, rural sociology and systems engineering.,--Section 6 Postharvest Technology and Process Engineering: physical properties of raw (food and non-food) materials, quality of final products, processing technologies and processing management and engineering.,--Section 7. Information Systems: The mission of this section is to advance the use of information and communication systems in agriculture.

'*Working Groups*' (8):

--WG1: Agricultural Engineering University Curriculum Harmonization, --WG2: Means to Encourage the Mobility of Young AgEng Professionals, --WG11: Water Management and Information Systems, --WG13: Air Quality Environment in Animal Houses, --WG14: Cattle Housing, --New WG1: Remote Sensing for Water and Land Management, --New WG2: Rural Development and the Preservation of Cultural Heritages, --New WG3: Rural Landscape Protection and Valorisation

**Events:** *Quadrennial Congress* Liège (Belgium) 1930, Madrid (Spain) 1935, Rome (Italy) 1951, Brussels (Belgium) 1958, Lausanne (Switzerland) 1964, Baden-Baden (Germany FR) 1969, Flevohof (Netherlands) 1974, East Lansing MI (USA) 1979, Budapest (Hungary) 1984, Dublin (Ireland) 1989, Milan (Italy) 1994, Rabat (Morocco) 1998, Tsukuba (Japan) 2000, Chicago IL (USA) 2002, Bonn (Germany) 2006.

**Publications:** *CIGR Newsletter* (quarterly) in English, French, Chinese and Arabic. CIGR also serves European AgEng by publishing the following. *Agricultural Engineering International: The CIGR Journal of Scientific Research and Development* (electronic); *The University Structure and Curricula on Agricultural Engineering: An Overview of 25 countries* (1994) and the *CIGR Handbook of Agricultural Engineering* (6 vols. published to date); section reports and congress and symposium proceedings.

**Members:** Relations with a network of regional and national associations of agricultural engineers including individual members in 92 countries.

--**Africa:** Algeria, Congo DR, Egypt, Ethiopia, Kenya, Lesotho, Malawi, Morocco, Mozambique, Rwanda, South Africa, Sudan, Tanzania UR, Zambia, Zimbabwe, Oman, Burkina Faso, Cote d'Ivoire, Mauritania, Chad, Togo, Senegal, Tanzania and Zaire.

--**Americas:** Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Rep, Ecuador, Mexico, Paraguay, Peru, Uruguay, the USA and Venezuela.

--**Asia** China, Indonesia, Iran Islamic Rep, Israel, Japan, Korea Rep, Philippines, Thailand, Taiwan and the UAE.

--**Australasia/Oceania:** Australia.

--**Europe:** Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Rep, Denmark, Estonia, Finland, France Georgia, Germany, Greece, Hungary, Italy, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey, the UK and Uzbekistan.

**Regional Associations:**

-- American Society of Agricultural and Biological Engineers,-- Asian Association for Agricultural Engineering (AAAE), -- Association of Agricultural Engineering of South Eastern Europe (AAESEE),-- Euro-Asian Association of Agricultural Engineers (EAAAE), -- European Society of Agricultural Engineers (EurAgEng),-- Latin American Association of Agricultural Engineering (ALIA),-- Southern and Eastern Africa Society of Agricultural Engineers (SEASAE)

*Takaaki Maekawa*  
*Secretary General of CIGR*

## CIGR World Congresses and Conferences 2008–2014

### CIGR International Conference of Agricultural Engineering, Rio 2008, Brazil, 1–7 Sept 2008

[http://www.acquacon.com.br/cigr\\_rio2008](http://www.acquacon.com.br/cigr_rio2008)

The conference will be held in Rio de Janeiro, Brazil from 1–7 Sept. 2008. The main theme is ‘Technology for all and sharing knowledge for development’. The Organizing Committee has announced the first call for papers.

The following Technical Sessions have been planned:

1. Structure and Environment
2. Bio-Systems Engineering
3. Food and Feed Processing Technology
4. Information Technology
5. Energy
6. Soil and Water
7. Power and Machinery
8. Issues without Frontiers

### The XVII CIGR World Congress 2010, Québec, Canada, 16–23 June 2010

<http://www.bioeng.ca/Events/CIGR/index.htm>

The Canadian Society of Bioengineering, the Société Canadienne de Génie Agroalimentaire et de Bioingénierie (CSBE/SCGAB) will be the host society.

The scientific programme includes plenary sessions and parallel oral and poster sessions on the following topics:

1. Soil and Water Systems Engineering
2. Biological Systems Engineering
3. Bioprocessing Systems Engineering
4. Information Systems Engineering
5. Machinery Systems Engineering
6. Building Systems Engineering
7. Waste Management Engineering
8. Environmental Engineering
9. Biomass and Bioenergy Engineering

More information about the XVII CIGR World Congress, 2010 is available on the following website:  
<http://www.bioeng.ca/Events/CIGR/index.htm>

## CIGR International Conference 2012

Some societies have submitted applications to host the CIGR International Conference 2012. The matter is currently under consideration.

## XVIII CIGR Congress September 2014, Beijing, China

The development and application of the science and technology of agricultural engineering has played a key role.

**Sponsors:** CIGR, CSAM, CSAE

Co-sponsors: Will include local government offices; local, regional and international associations and societies and institutions engaged in agricultural engineering

**Organizers:** Chinese Academy of Agricultural Mechanization Sciences (CAAMS), Chinese Academy of Agricultural Engineering (CAAE) and China Agricultural University

**Topics:**

- \*Land and water engineering
- \*Farm buildings, equipment, structures and environment
- \*Equipment engineering and plant production
- \*Rural electricity and other energy resources
- \*Management, ergonomics and systems engineering
- \*Postharvest technology and processing engineering
- \*Information systems

**Time and Venue:** September 2014

The Beijing International Convention Center

## Other CIGR News

### The farewell letter of Prof. Pierre Abeels

Prof. Pierre Abeels, former coordinator of the CIGR Working Groups, addressed the following letter:

Dear colleagues,

1. All the CIGR working groups (WGs) are working on a voluntary basis. They gather at national or international occasions such as meetings, congresses, specialized fairs and industrial presentations and usually prepare reports about these sessions. The President or an associate member of the WG undertakes the task and sends the report to the general secretariat. Recently, however, I have not received any such reports. We have had to pressurize the WGs several times in the past in order to receive specific information about activities. I am sure that they work efficiently but do not like to be overloaded with the task of preparing reports for CIGR. The World Congress in Bonn could be an opportunity for a reversal of this situation and a new beginning in forming technical relations within the various WGs.
2. I request to be discharged of the tasks that I have had the great honour of fulfilling for CIGR to date. As an emeritus for 11 years, I feel that young people must introduce novel,

positive ways to activate our CIGR and support the secretariat. Thank you for having accepted me for such a long period (1966 or 67–2006!) Thank you and farewell, CIGR.

*Sincerely,  
Pierre F. J. Abeels*

### Integration of the Institute and the University

The Danish Institute of Agricultural Sciences (DIAS) is merging with the University of Aarhus as a faculty of Agricultural Sciences from 1 January 2007. The integration was accomplished as part of the government reform regarding Danish universities and research institutes.

The Department of Agricultural Engineering, Research Centre Bygholm at DIAS will be known as the Institute of Agricultural Engineering at the Faculty of Agricultural Sciences, Aarhus University.

The current projects, research areas, collaborations, partnerships etc. at the Department of Agricultural Engineering will be continued at Aarhus University. As an institute at the University of Aarhus, we will broaden the scope of our activities by teaching bachelors and graduate students of biosystems and agricultural engineering.

The new position in a strong and broadly founded university environment holds promising prospects for further development and the expansion of cooperation with current and new stake holders.

### Next CIGR Meeting

The next CIGR Meeting, including the Presidium meeting, Executive Board meetings, Technical Board meetings and ad hoc committees will be held from 1–3 July 2007 at the EFITA/WCCA 2007 conference in Glasgow (<http://www.efitaglasgow.org/>). We are arranging the meetings with the organizing committee of the EFITA/WCCA 2007 conference.

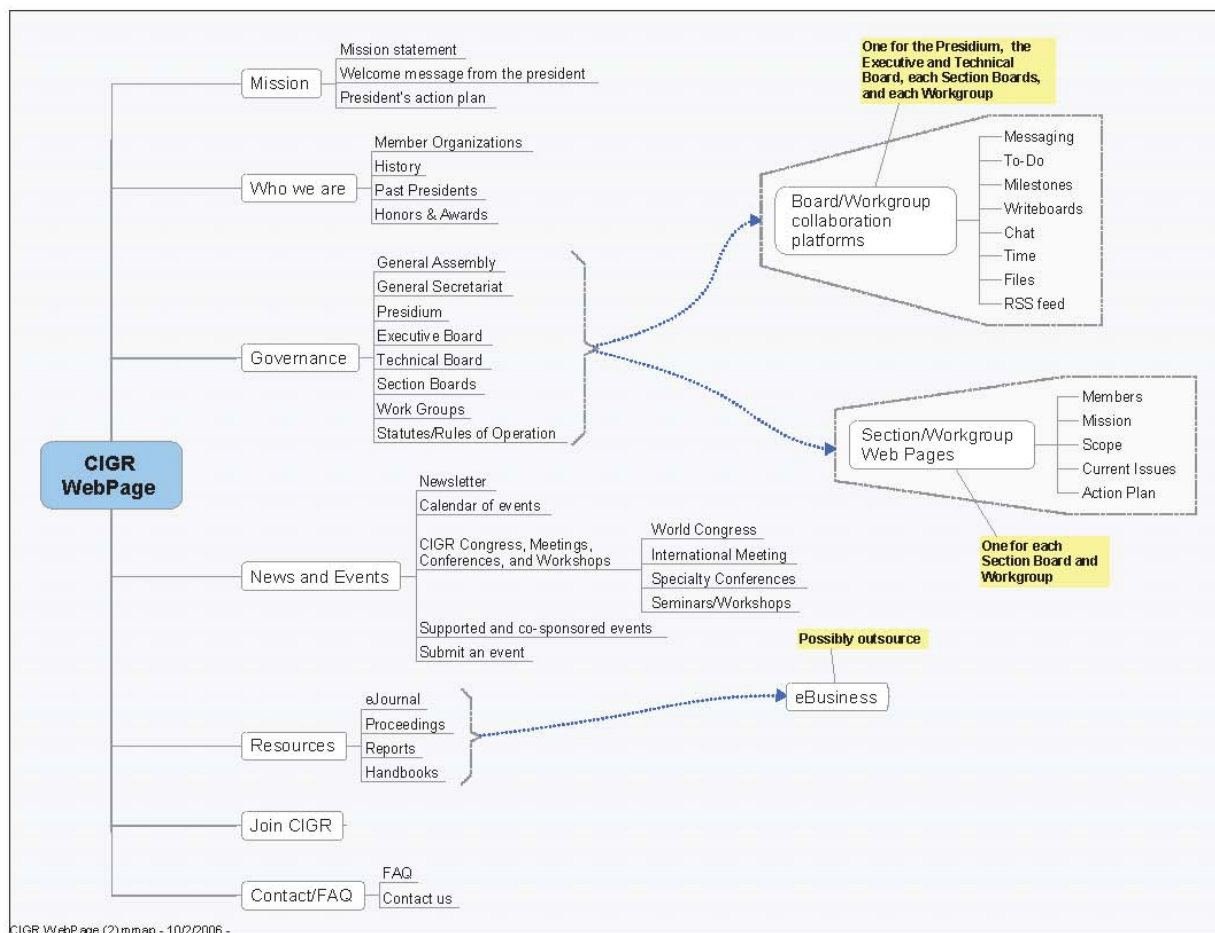
Temporary schedule

2007 CIGR Meeting in Glasgow		
Date	Time	Meeting Room
July 1	9:00–12:00	Ad hoc Committee for the Revision of CIGR Statutes
	13:00–17:00	CIGR Presidium
July 2	13:00–17:00	Joint Meeting of Executive and Technical Boards
July 3	9:00–12:00	Ad hoc Committee for Upgrading the CIGR Website

### Upgrading the CIGR Website

An ad hoc Committee was appointed by the Presidium to redesign and upgrade the CIGR website. The proposed map of the new website is shown in the figure below. The committee invites suggestions regarding the new CIGR website; these may be sent to Prof. Fedro Zazueta (e-mail: [fsz@ufl.edu](mailto:fsz@ufl.edu)).

### Proposed Map for the CIGR Website



CIGR WebPage (2).mmmap - 10/2/2006 -

## CIGR Elections 2006

### Composition of the CIGR Board for 2007–2008

<b>Presidium</b>	
President	Prof. Irenilza de Alencar Nääs
Past President	Prof. Luis Santos Pereira
Incoming President	Prof. Søren Pedersen
Secretary-General	Prof. Takaaki Maekawa
<b>Executive Board</b>	
1. Prof. Jiannong Xin	(ASABE)
2. Prof. Vilas M. Salokhe	(AAAE)
3. Prof. Daniele De Wrachien	(EurAgEng)
4. Prof. Omar Ulloa	(ALIA)
5. Prof. Oleg Marchenko	(EAAAE)
6. Prof. Nicolay Mihailov	(AAESEE)
7. Prof. Evandro C. Mantovani	(Brazil, International Conference 2008)
8. Prof. Yohei Sato	(Japan, Sections)
9. Prof. Shujun Li	(China)
10. Prof. Lal Kushwaha	(Canada, World Congress 2010)
11. Prof. El Houssine Bartali	(Arabian Countries)
(Co-opted)	
1. Prof. Da-Wen Sun	(Coordination of Working Groups)
2. Prof. Peter Schulze Lammers	(Continuance of CIGR)
3. Prof. Bill Stout	(Ejournal)
4. Mr. Yoshisuke Kishida	(Asian Countries and Public Relations)
<b>Auditing</b>	
Prof. Josse De Baerdemaeker, Prof. El Houssine Bartali, Mr. Yoshisuke Kishida	

### Section Boards

<b>Section I: Land and Water Engineering</b>			
Chair	Jose M. Tarjuelo (ES)		
Vice Chair	Pat D. Taylor (USA)		
Secretary	Guanhua Huang (CN)		
Members	Mario Falciai (IT)	Akira Goto (JP)	Luis Santos Pereira (PT)
	Jose M. Goncalves (PT)	Amadou H. Maiga (EIER)	Andre Musy (CH)
	Gerrit J. Carsjens (ND)	Terry A. Howell (USA)	Yohei Sato (JP)
	Narendra K. Tyagi (India)	(Hon. Chair)	Mauro Greppi (IT)
	Budi I. Setiawan (ID)	Hubert N. van Lier (NL)	
<b>Section II: Farm Buildings, Equipment, Structures and Environment</b>			
Chair	Daniel Berckmans (BE)		
Vice Chair	Thomas Banhazi (AUS)		
Secretary	Eberhard Hartung (GE)		
Members	Giovanni Cascone (IT)	Baoming Li (CN)	Hisamitsu Takai (DK)
	Joseph Flaba (BE)	Vasco Fitas Cruz (PT)	Victoria B. Vidal (ES)
	Richard Gates (USA)	Nikolay Morozow (RU)	(Hon. Chair)
	Eileen F. Wheeler (USA)	Gert-Jan Monteny (NL)	Soren Pedersen (DK)
	Shuso Kawamura (JP)	Daniella J. Moura (BR)	(Hon. members)
	Tadeusz Kuczynski (PL)	Krister Sällvik (SE)	Jorge Meneses (PT)
			Irenilza Naas (BR)

<b>Section III: Equipment Engineering for Plants</b>			
Chair	Arturo Lara-Lopez (MX)		
Vice Chair	John K. Schueller (USA)		
Secretary	Bogdan Jasinski (PL)		
Members	El Hassan Bourarach (MA) Bassam A. Snobar (JO) Evandro C. Mantovani (BR) Noboru Noguchi (JP)	Ettore Gaspareto (IT) Vilas M. Salokhe (TH) Fang Xianfa (CN) Pierluigi Febo (IT)	William Chancelor (USA) Vladimir Popov (RU) (Hon. Chair) Oleg Marchenko (RU)
<b>Section IV: Rural Electricity and Other Energy Sources</b>			
Chair	Mikio Umeda (JP)		
Vice Chair	Milan Martinov (YU)		
Secretary	Pavel Kic (CZ)		
Members	Cengiz Akdeniz (TR) Janusz Piechocki (PL) Laurentiu Fara (RO) Nikolay Mihailov (BG)	Volkyard Scolz (DE) Ramadani Abdellah (MA) Abdel Ghaly (CA) George Papadakis (GR)	Dmitry Strebkov (RU) Jadir Nogueira da Silva (BR) (Hon. Chair) Zoltan Sibalszky (HU) Kamaruddin Abdullah (ID)
<b>Section V: Management, Ergonomics and Systems Engineering</b>			
Chair	Pietro Piccarolo (IT)		
Vice Chair	Claus Gron Soerensen (DK)		
Secretary	Ladislav Nozdrovicky (SV)		
Members	Gyula Szeles (HU) D. Goense (NL) Ludwig Weiershäuser (DE) Gajendra Singh (India)	Werner Luder (CH) Tarmo Luoma (FIN) Adolfo Cazorla (SP) Minzan Li (CN)	Hisashi Horio (JP) (Hon. Chair) Tadeusz Juliszewski (PL)
<b>Section VI: Postharvest Technology and Process Engineering</b>			
Chair	Jozef Grochowicz (PL)		
Vice Chair	Shujun Li (CN)		
Secretary	Paolo Menesatti (IT)		
Members	Zhongli Pan (USA) Kiyohiko Toyoda (JP) Vilas M. Salokhe (TH) Cesar Kapseu (CM) Arzhang Javadi (IR)	Linus U. O' Para (OM) Manuela Zude (GE) Pavel Kadlec (CZ) Alain LeBail (FR) Francisco A. Calero (ES)	Luis L. Lagos (CH) Margarita R. Altisent (ES) (Hon Chair) Da-Wen Sun (IE)
<b>Section VII: Information Systems</b>			
Chair	Fedro Zazueta (USA)		
Vice Chair	Haruhiko Murase (JP)		
Secretary	Stavros Voigioukas (GR)		
Members	Josse De Baerdemaeker (BE) Roger Martin Clouaire (FR) Maohua Wang (CN) Kamil Okyay Sindir (TR) Enrique Molto (ES) John F. Reid (USA) Hermann Auernhammer (GE)	Vjacheslav Fedorenko (RU) Wilson Esquivel (CH) Antonio Saraiva (BR) Fabricio Mazzetto (IT) Simon Blackmore (DK) Petraq Papajorgji (USA)	(Hon. Chair) Axel Munack (GE) Yasushi Hashimoto (JP) (Past. Chair) Nick Sigrimis (GR) (Liaison) Thomas Banhazi



## 2. News from National and Regional Societies

### 10<sup>th</sup> Inter-Regional Conference on Water and Environment (ENVIROWATER 2007)

#### Ensuring Water and Environment for Prosperity and Posterity

New Delhi, India

Indian Agricultural Research Institute  
17–20 October 2007

#### Organized by

Indian Society of Water Management

#### In collaboration with

Indian Society of Agricultural Engineering and  
International Commission on Agricultural Engineering  
<http://www.iswam.in/envirowat2007/>

#### Presentation

Ecological foundations such as water, soil and biodiversity, which are essential for sustainable enhancement in productivity, are under severe threat. Water is one such natural resource that has the greatest influence on all facets of human existence. However, the ever-increasing demands for fuel, feed, fodder and fibre in order to meet the spiralling demands of the escalating population are placing enormous strain on this precious and finite resource in both irrigated and rainfed areas. The allocation of water for agriculture is fighting a losing battle with the industrial, domestic, power and other sectors; a consequence of this is that the share of water allocated to agriculture is expected to reduce by 10 to 15 percent in the next two decades.

There is also a compulsion to increase agricultural production in an eco-friendly and sustainable manner with the added constraint of continuously declining per-capita land and water availability in most developing countries. The already dismal situation is exacerbated by the rapid rate of increase in water pollution beyond acceptable levels. Moreover, the impact of inefficient water management in many irrigated areas has resulted not only in large-scale water logging and secondary salinization but also in significant productivity growth decline in recent years and a marked reduction in water-use efficiency, while the conflicts arising from water shortages are increasing daily. The quantity and quality of surface and ground water is diminishing and deteriorating extremely rapidly. The adverse impact of the expected climate change on precipitation, temperature and sea level rise as a consequence of global warming is no longer a theoretical conjecture and will further aggravate the precarious situation. Input costs are increasing while farm productivity is decreasing. It is imperative that any technology and policy for enhancing agricultural productivity must take into account the need for evolving programmes for efficient water management without causing detrimental impact on the environment.

Considering the emerging scenario above, the decade beginning in 2005 has been declared as the Decade of Water for Life by the UN at the global level. This has therefore prompted the Indian Society of Water Management to organize the 10<sup>th</sup> Inter-Regional Conference on Water and Environment with a focus on an extremely relevant and

important theme, 'Ensuring water and environment for prosperity and posterity', in collaboration with the International Commission of Agricultural Engineering, Tsukuba, Japan and the Indian Society of Agricultural Engineering, New Delhi. The conference will provide a forum for university teachers, students, scientists, engineers, economists, planners and decision makers to meet together on one platform, exchange views and experiences on various state-of-the-art technologies related to the field of water management and environmental protection and emerge with a set of salient recommendations encompassing sound strategies for R&D programmes.

(A. K. Singh)

#### Objectives

The objectives of the international conference are to conduct in-depth deliberations on state-of-the-art technologies related to irrigated and rainfed water management, the use of poor quality and waste water in agriculture, pressurized irrigation systems, the application of modern tools such as Remote Sensing and GIS for water resource management, integrated watershed management, participatory irrigation management, the role of public/private institutions and ecological as well as economic aspects of water management. Eminent scientists, engineers and policy makers will be invited to deliver special lectures during the symposium. In addition, there will be contributory oral and poster presentations on different themes.

#### Conference Venue and Date

The 10<sup>th</sup> Inter-Regional Conference will be held at the NASC Conference Hall/IARI Auditorium, New Delhi, India from 17–20 October 2007.

#### Conference Themes and Topics

##### Water Quality and Quantity Concerns

Status of Water Resources in the Global, Asian and Indian contexts; Assessment of surface and ground water resources Infrastructure for resource development; Matching water demand and supply; Water security and risk management Impact of climate change on water resources; Interlinking of rivers

##### Water Quality and Environmental Safety

Water quality criteria for various uses, Waste Water Management, Eco-system water requirements

##### Eco-friendly Water Management Technologies

Indigenous traditional knowledge on water management, Resource conservation technology including pressurized irrigation, Water-nutrient interaction for enhancing crop productivity, Precision farming, Rainwater management, Ground water management, Conjunctive use, Water management for maintaining coastal ecology and Water management strategies for other sectors of the economy

##### Non-agricultural and Multiple Uses of Water

- Domestic uses: Urban and Rural
- Industrial uses
- Aquaculture



- Recreational uses
- Coastal ecology and water needs
- b) **Socio-Economic, Institutional and Policy Issues and their Implications**
  - Water shortage woes
  - Water rights and pricing
  - People's participation in water management
  - Virtual water and its implications in import/export
  - Capacity building for water governance
- c) **Land Use Planning for Managing Water Scarcity**
  - Water Scarcity Scenarios at the Local, National, Regional and Global levels
  - Mitigating water scarcity impact through appropriate farming system technologies for water stress areas
  - Land use planning, tools and techniques, methodology for water stress areas
  - Water management techniques for water scarce areas
  - Crop management strategies for water scarce areas
  - Cultural (Agronomic) practices for efficient utilization of available water resources

**Deadlines**

Notice of Intent:	30 November 2006
Submission of Extended Summaries:	31 January 2007
Acceptance of Extended Summaries:	28 March 2007
Submission of full manuscripts:	31 May 2007
Registration fee without late fee:	31 July 2007
Registration with late fee:	Open

The proceedings of the conference in print form containing accepted extended summaries will be provided to all registered delegates. Full-length papers will be provided on a CD to all the delegates at the time of registration.

## 65<sup>th</sup> International Conference on Agricultural Engineering Land Technik AgEng 2007

**Engineering Solutions for Energy and Food Production  
9–10 November 2007, Hanover**  
[www.vdi.de/land.technik-ageng2007](http://www.vdi.de/land.technik-ageng2007)

The title, LAND. TECHNIK AgEng 2007, of the 65<sup>th</sup> International Conference on Agricultural Engineering to be held in Hanover promises change. The well-known conference that takes place every other year as the prelude event to AGRITECHNICA, the most important agricultural engineering fair worldwide, wants to pursue its international ambitions even further.

The conference is 'on probation' for the time being and is currently being prepared by a programme committee composed of members of the Max-Eyth-Society for Agricultural Engineering of the VDI (VDI-MEG) and the European Society of Agricultural Engineers (EurAgEng).

The most significant novelty probably is that English will be the general conference language. As all agricultural engineering businesses as well as universities are global players, this changeover will be beneficial for the process of internationalisation for engineers.

The conference has adopted the motto of 'Engineering Solutions for Energy and Food Production' and will deal

with recent developments in the main technical topics listed, which were deliberately chosen to be closely connected to the main topics of the AGRITECHNICA (<http://www.agritechnica.com/>) conference. The programme committee hereby invites the submission of papers. The conference is aimed at engineers working in the industry, involved in research and working at universities. It is also intended for agricultural consulting and practising engineers who are interested in new technical concepts, processes, products, engineering work methods and, last but not least, the exchange of knowledge and information.

**Deadlines**

Submission of papers:	31 March 2007
Decision of the programme committee:	30 April 2007
Notification of acceptance to the authors:	15 May 2007
Camera-ready manuscript:	3 August 2007

## International Conference TAE 2007 Czech University of Life Sciences, Prague Technical Faculty

**12–14 September 2007**

<http://tae2007.tf.czu.cz/>

**Conference Topics:**

- Precision Farming
- Renewable Energy Sources
- Fuels for the Future
- Physical Methods in Agriculture
- Materials and Manufacturing Technologies for Agriculture
- Information and Controlling Technology

**Invited Lectures**

- Naoki Sakurai (Japan): Non-destructive and Destructive Methods for the Quality Evaluation of Soft Agricultural Products by Acoustic Vibration
- Richard Godwin (UK): Recent Advantages in Precision Farming—Sensors and Traceability
- Dmitry S. Strebkov (Russian): Renewable Energy Technologies for Rural Areas
- Jozef Horabik and Krystyna Konstankiewicz (Poland): Physical Methods in the Assessment of the Quality of Agromaterials
- Osman Yaldiz (Turkey): From Agricultural Waste Management to Energy Production; Circular Economy and CO<sub>2</sub> Trading in Agriculture

**Important Dates**

- Preliminary application: 28 February 2007
- Binding application: 30 April 2007
- Abstract: 30 April 2007
- Paper: 30 June 2007
- Fee: 30 June 2007

## The 2007 Annual Scientific Conference and General Meeting Tanzania Society of Agricultural Engineers (TSAE)

<http://www.suanet.ac.tz/tsae/>

**First announcement and call for papers**

The 2007 Annual Scientific Conference and General Meeting of the Tanzania Society of Agricultural Engineers (TSAE) will be held at the Muslim University of Morogoro from 5–7 November 2007. The TSAE 2007 Annual General Meeting (AGM) will be held at the end of the Scientific Conference on 7 November 2007.

**Main Theme:** Energy Crisis in Developing Countries: Developing Sustainable Solutions

**Sub-themes:**

i. Energy Demand: Agriculture, Forestry, Livestock, Transportation, Industries, General, ii. Energy Supply: Conventional Supplies and Reserves, Energy Securities  
iii. New and Renewable Energy, iv. Environmental Issues  
v. Energy for Sustainable Development, vi. Policy and Regulatory Issues, vii. Role of the Private Sector,  
viii. Gender Issues, ix. HIV/AIDS, x. ICTs

Members of TSAE, the 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 May 2007. Complete papers for accepted abstracts should be received by 31 August 2007.

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) 755 753233  
E-mail: [tsae@suanet.ac.tz](mailto:tsae@suanet.ac.tz) OR [tsae1973@yahoo.co.uk](mailto:tsae1973@yahoo.co.uk)

## The 50<sup>th</sup> Anniversary Meeting of the Korean Society of Agricultural Engineers (KSAE) 18–22 October 2007, Seoul, Korea

The Korean Society of Agricultural Engineers (KSAE) is one of the leading scientific membership organizations in Korea, and was founded in 1957 for the advancement of engineering applications related to agricultural, food and biological systems. It is my pleasure to invite you to our semicentennial meeting in Seoul, Korea as we celebrate our 50<sup>th</sup> anniversary in service this year. Providing a new agenda for the future of agriculture and the rural environment, the meeting will be held from 18–22 October 2007, with various programs such as rural development, soil and water engineering, structure and materials and geotechnical engineering. We also plan to invite leaders in agricultural engineering societies from overseas to share their vision for the future as well as the latest information on technology and research.

The construction of agricultural infrastructure for the past 50 years has been successful based on twentieth century standards; however, those are not completely compatible with the current needs of the twenty-first century. Accordingly, we have to re-establish developmental goals and social values that are suitable for this rapidly developing age. While celebrating our 50<sup>th</sup> anniversary, we would like to suggest topics and present a desirable vision for the future, together with our national and international participants.

**For more information, contact**

Mr. In-Hoc Lee  
E-mail: [iblee@snu.ac.kr](mailto:iblee@snu.ac.kr)

*Sincerely,  
Jeong-Jae Lee  
President of Korean Society of Agricultural Engineers*

## Society for Engineering in Agriculture 2007 National Conference Agriculture and Engineering Challenge Today, Technology Tomorrow 23–26<sup>th</sup> September 2007, Adelaide, South Australia <http://www.ncea.org.au/seag/seag.htm> Call for Papers

**Key Dates:**

- Abstract Deadlines: 31 March 2007
- Acceptance of Abstracts: 30 April 2007
- Registration Deadline: 1 June 2007
- Paper Deadline: 29 June 2007

## AgEng2008 International Conference on Agricultural Engineering & Industry Exhibition Agricultural and Biosystems Engineering for a Sustainable World 23-25 June 2008 Hersonissos, Crete – Greece <http://www.ageng2008.com/index.html>

The European Society of Agricultural Engineers (EurAgEng) and the Hellenic Society of Agricultural Engineers are delighted to invite you to the “Agricultural Engineering 2008 Conference and Industry Exhibition”, AgEng2008 which will be held in Hersonissos, Crete. The conference will take place in the Aldemar resort hotel, which provides a perfect environment for all activities, scientific, business and recreational. The Island of Crete offers a unique atmosphere for the AgEng2008 conference combining history, memory and culture of more than 3000 years long, together with modern agricultural, industrial and tourist development. The subjects for which we are seeking your contributions, are similar to the previous AgEng conferences, however we intend to emphasise in the latest developments related to the role of European Agriculture as energy producer. Scientific trends in agricultural and biosystems engineering will be highlighted and new issues will be explored. The conference will show how biology and engineering come together to bring the future in our every day life.

**Important Dates**

- October 1st, 2007 – Submission of extended abstract
- December 14th, 2007 – Notification of acceptance
- March 14th, 2008 – Submission of full papers
- April 25th, 2008 – Final Program
- June 23 – 25, 2008 - Conference

*Prof. George Papadakis  
Chairman of the Conference Committee*

### 3. News from Sections and Working Groups

#### Section Board Activity 2007

##### Section I: Land and Water Engineering

The main plan of action of Section I for the next few years is to continue organising the ENVIROWATER conference and cosponsoring other parallel activities of the different members of the section. The following events are currently planned:

- **10<sup>th</sup> Inter-Regional Conference on Water and Environment (ENVIROWATER 2007):**

**Ensuring Water and Environment for Prosperity and Posterity;** New Delhi, India, Indian Agricultural Research Institute, 17–20 October 2007.

- Development of coordinated action with the organizer of the **International Conference of Agricultural Engineering**, which will take place at Rio de Janeiro, Brazil, from 1–7 September 2008. The typical scientific and technical activities of ENVIROWATER shall be discussed at the Technical Section on **Soil and Water**.

- **Inter-Regional Conference on Water and Environment (ENVIROWATER 2009)**. Cairo, Egypt (June 2009), organized by Institut de Recherche pour le Développement (IRD) and the Ministry of Agriculture.

- Development of coordinated action with the organizer of the **XVII World Congress of the International Commission of Agricultural Engineering Summer 2010**, which will take place at Québec, from 13–18 June 2010. The typical scientific and technical activities of the ENVIROWATER conference will be developed.

- Co-sponsor the **IV Congreso Nacional y I Congreso Ibérico de Agroingeniería 2007** to be held at Albacete (Spain), from 4–6 September 2007



Prof. Jose Mª Tarjuelo

*Jose Mª Tarjuelo,  
Chairperson of Section I*

##### Section II: Farm Buildings, Equipment, Structures and Environment

CIGR Section II activity plan for 2007:

Section II Board meeting: 18 March 2007, Conference Centre 'De Reehorst', Ede, the Netherlands

Working Group meetings: 2<sup>nd</sup> workshop of the CIGR Section II Working Group 'Animal Housing in Hot Climates', 1–4 April 2007, Cairo, Egypt

Co-organized Conferences:

- International Ammonia Conference in Agriculture, 19–21 March 2007. The Conference will be held in the 'De Reehorst' Conference Centre, Ede, the Netherlands

- International Dust Conference (DustConf) 2007—How to improve air quality; 23–24 April 2007 in Maastricht, the Netherlands

- 3<sup>rd</sup> European Conference on Precision Livestock Farming (ECPLF), 3–6 June 2007, Skiathos, Greece

- GreenSys2007 'High Technology for Greenhouse System

Management', 4–6 October 2007, Naples, Italy

Discussion about new working groups:

- Working group on Greenhouse engineering; discussion to be held during GreenSys2007 in Naples, Italy

##### For more information, contact

Prof. Dr. Habil. Eberhard Hartung

Christian-Albrechts-Universität zu Kiel

Institut für Landwirtschaftliche Verfahrenstechnik

Institute of Agricultural Engineering

Postal address: Olshausenstr. 40, 24098 Kiel, Germany

Street address: Max-Eyth-Str. 6, 24118 Kiel, Germany

Phone: +49 (0) 431-880-2107; Fax: +49 (0) 431-880-4283

E-Mail: ehartung@ilv.uni-kiel.de

<http://www.ilv.uni-kiel.de>

*Daniel Berckmans (Chairman of CIGR Section II)*

*Thomas Banhazi (Vice Chairman of CIGR Section II)*

*Eberhard Hartung (Secretary of CIGR Section II)*

##### Section V: Management, Ergonomics and Systems Engineering

The general aim of Section V is to optimise work organization and farm management through labour and work planning as well as systems engineering, and to improve the health and safety of workers with respect to environmental factors as well as ergonomic, psychological and social factors such as work satisfaction.

**The activities of section V deal with the following themes:**

**1) Ergonomics:** Related to the workload and safety of farmers' use of combines, tractors and other technical equipment, including the compatibility of signs and manuals in the actual workplace.

**2) Risk analysis:** Related to accident prevention in all agricultural operations that impose varying levels of physical and mental stress.

**3) Work organization:** Related to the investigation of work methods and labour operation time with combines, tractors and other equipment, including the effect of weather conditions on daily planning.

**4) System Management:** Related to the information technology and decision support systems used to improve productivity and product quality as well as cost reduction, including the reduction of the impact of agricultural production on the environment.

**The Challenging Theme** that will play a key role in agriculture in the future is **agro-food and non-food logistics**, which is a field that will empower and adapt our agricultural activities to the third millennium. Logistics is the part of the supply chain that involves the planning, implementation and control of the efficient and effective flow and storage of goods, services and related information from the point of



Prof. Pietro Piccarolo

origin to the point of consumption in order to meet the requirements of customers.

The main R&D activities of Section V related to logistics for agriculture could be the following:

- Supply-chain of fresh products, cold products storage and transportation
- Supply-chain of locally grown products
- Traceability and food safety
- High capacity harvesting and transportation chains
- Transport of raw products from fields to farms and/or to collecting centres
- Product flow and transport optimisation within the farms
- Transport and delivery of biomass for energy production
- Manure and waste management
- Segregation and handling of IP products (non-GM vs. GM)
- E-commerce in agriculture

**The themes of Section V** may help to meet the increasing demand for both food and non-food agricultural products and related supply-chains. In order to increase competition, one challenging domain is that of **increasing energy efficiency and higher labour productivity in agriculture.**

On the one hand (especially in technologically advanced countries or regions), electronics will make the processes more efficient in various ways: labour saving, labour easing, fuel saving and input saving in site-specific applications; the processes will hence be made more ecologically friendly.

On the other hand (especially in developing regions and for labour-intensive crops), reducing the workload without producing labour saving would result in higher rural unemployment.

In this environment, expert knowledge, management skills and IT-based management support systems become critical success factors for all activities.

**Section V** works in collaboration with the '**Commission Internationale de l'Organisation Scientifique du Travail en Agriculture**' (CIOSTA).

**CIOSTA** was founded in 1950 as a non-profit, professional organization to promote agricultural economy with a focus on agricultural production systems, yield and quality automation, labour economics and ergonomics and safety.

**Section V** and **CIOSTA** organize a biennial international conference. The next conference will be held from 17–19 September 2007 at the Slovak University of Agriculture in Nitra (the Slovak Republic).

Title of Conference: '**Advances in labour and machinery management for profitable agriculture and forestry**'

The topics will be:

- Methods and modelling
- Process engineering and controlling
- Calculation and planning
- Farm management
- Ergonomics and workplace design
- Work safety, Prevention and Risk analysis

The conference language is English.

<http://www.mf.uniag.sk/ciosta>

*Pietro Piccarolo*  
*Chairperson of CIGR Section V*

## **Section VI: Postharvest Technology and Process Engineering**

### **Future activities of CIGR Section VI**

#### **1. Mission statement:**

The mission statement of Section VI is accurately described in a report entitled 'Objectives of Section VI Activities: Postharvest Technology and Process Engineering', published in CIGR Newsletter No. 75, pp. 15–16, by Former Chair Prof. Da-Wen Sun (presently Honorary Chair of Section VI).

As the aims mentioned must be achieved, it is necessary to continue the ongoing activities as well as to develop new ones:

- Organization of seminars, workshops or conferences connected with the objectives of CIGR Section VI
- Cooperation with the special CIGR working groups covering the themes of CIGR Section VI
- Increasing cooperation with the Ejournal by contributing papers and serving as reviewers
- Developing cooperation and contacts with similar international organizations
- Expanding sponsorships and the cooperation of CIGR to national conferences as far as possible; this will increase the presence of CIGR in scientific activities within the field of postharvest technologies and food process engineering.

#### **2. Activities:**

The actual name of Section VI is 'Postharvest Technology and Process Engineering'. Within this broad frame, it comprises not only agricultural but also food engineering processes, which makes it the largest organization connected with the production and processing of agricultural products.

Thus far, Section VI has had limited cooperation with worldwide organizations that are active in the food engineering and technology fields.

Therefore, it is necessary to establish relationships with other international organizations and societies that are involved in activities similar to that of CIGR Section VI.

It is extremely desirable to initiate closer cooperation with the International Association of Engineering and Food (IAEF) as well as the International Union of Food Science and Technology (IUFoST).

Further, it is necessary to cooperate with the local national organizations and regional societies (such as EurAgEng, AAEE, EAAAE etc.) by jointly organizing conferences and workshops.

Special attention must be simultaneously placed on the development of new processes as well as on developing small and simplified technologies, adjusted to the climatic and economic circumstances of developing countries and in order to minimally process food.

Widely and obligatorily introduced systems for food safety and quality (HACCP, GMP, GHP, TQM etc.) require new technologies and equipment for sensing and computing. One can expect that such cooperation will be extremely helpful in adopting a new approach to food safety by introducing



Prof. Józef Grochowicz



'traceability' that permits the identification of products through the entire food processing cycle—'from the field to the table'. This can be achieved through the multidisciplinary cooperation of specialists from the fields of agriculture process engineering, postharvest and food engineering, food machinery construction and computer science. Additionally, the cooperation of specialists from biochemistry or biotechnology would be desirable.

### 3. Future International Symposia:

During the board meeting conducted in Bonn, the following plan for future international conferences to be organized by Section VI was accepted:

- 2007: 3<sup>rd</sup> conference, Naples
- 2008: 4<sup>th</sup> conference, Brazil
- 2009: 5<sup>th</sup> conference, Bangkok

During the symposia, the board meetings of Section VI will be conducted.

4. **Ejournal**—should be given special attention by all members. During the Section VI board meeting in Warsaw, Prof. Manuela Zude was accepted as the Section VI representative for the position of the editor of the Ejournal.

*Prof. Józef Grochowicz  
Chair of Section VI*

### Section VII: Information and Communication Systems Activity Plan

The mission of the Section is to advance the use of information and communication systems in agriculture.

Activities for 2007 and 2008 fall under the following categories:

1) CIGR Website Redesign. During the 2006 International

Meeting in Bonn, the CIGR Presidium appointed a committee to redesign the CIGR website. The intent is to redesign and enhance the current website by adding web-based services that facilitate communication and collaboration amongst members of the society.

2) Online CIT Workshop. In 2007, the Section will sponsor a workshop/symposium conducted completely online. The intent is to make expertise related to ICT available to a wider



Prof. Fedro S. Zazueta

audience through the use of web-based technologies as well as to develop a working model for this type of online event that can be used by CIGR regularly.

3) Session at the Next International Meeting. The Section will organize one or more sessions related to current developments and non-traditional uses of ICT in agriculture.

4) Collaboration with Other Societies. The section will participate with INFITA in the organization of the 2007 and 2008 World Congresses on Computers in Agriculture to be held in Glasgow and Tsukuba, Japan respectively. In addition, the Section will participate in the organization of sessions at the International meeting of the American Association of Agricultural Engineers and collaborate with the 2005 International ASABE meeting.

Individuals interested in participating in any of the above are welcome.

*Fedro S. Zazueta  
Chair, Section VII*

## 4. CIGR Co-Sponsored Activities

### EFITA/WCCA 2007

#### 'Environmental and rural sustainability through ICT'

Glasgow Caledonian University, Glasgow, Scotland  
2–5 July 2007

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

The European Federation of IT in Agriculture and the World Congress on Computers in Agriculture warmly invites you to participate in EFITA/WCCA 2007.

Contact Caroline Parker

E-mail: [c.g.parker@gcal.ac.uk](mailto:c.g.parker@gcal.ac.uk)

### The XXXII CIOSTA & CIGR Section V Conference Advances in labour and machinery management for profitable agriculture and forestry

Slovak University of Agriculture in Nitra, Slovakia  
17–19 September 2007

<http://www.mf.uniag.sk/ciosta/>

CIOSTA, CIGR and EurAgEng are honoured to invite you to the XXXII CIOSTA-CIGR V Congress at the Slovak University of Agriculture in Nitra, in the south-west region of

Slovakia. The scientific programme will include plenary, parallel oral and poster sessions on the following topics:

- Methods and modelling
- Process engineering and control
- Calculation and planning
- Farm management
- Ergonomics and workplace design
- Work safety, prevention and risk analysis

Furthermore, a technical tour will be organized based on interests. The scientific committee will decide whether contributions are accepted as oral presentations or posters on the basis of the submitted abstracts. Papers on both oral presentations and posters will be published in the conference proceedings.

The conference language is English. Conference fee (provisional estimate): normal rate, approximately 300 €

#### Deadlines

- Submission of abstracts: **28 February 2007**
- Notification of acceptance: **30 March 2007**
- Submission of camera-ready manuscripts: **1 July 2007**

#### For more information, contact

President: Prof. Dr. Ladislav Nozdrovicky,

E-mail: [Ladislav.Nozdrovicky@uniag.sk](mailto:Ladislav.Nozdrovicky@uniag.sk)

Coordinator: Mrs. Jana Havrankova,

E-mail: [Jana.Havrankova@uniag.sk](mailto:Jana.Havrankova@uniag.sk)

## 5. Other Activities

### The Report of the 1<sup>st</sup> International Conference on Sustainable Irrigation Management, Technologies and Policies

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 was satisfied by the expansion of agricultural land. Currently, any increase in agricultural production will necessarily rely on a more accurate estimation of crop water requirements on the one hand, and on major improvements in the operation, management and performance of existing irrigation systems on the other. All these factors and constraints compel scientists, technicians and decision-makers to review the strengths and weaknesses of current trends in irrigation and rethink technology, research thrust and institutional and financial patterns, so that service levels and system efficiency can be improved in a sustainable manner.

An international conference concerning these themes was held in Bologna, Italy, from 5–7 September 2006. The event was organized by the Convenors, Prof. G. Lorenzini of the State University of Bologna and Prof. C. Brebbia, Director of the Wessex Institute of Technology, UK, and was sponsored by CIGR and EurAgEng.

The objective was to bring together engineers, scientists and managers in order to exchange knowledge and expertise in the field of irrigation in its broadest sense. The conference aimed to cover technical as well as policy-related topics to find innovative solutions to the numerous problems that have to be resolved in order to reach sustainable irrigation solutions. The conference emphasised interdisciplinary activities and explored new areas for collaboration among the different professionals involved in irrigation studies and application. This made the 1<sup>st</sup> International Conference unique.

The event consisted of an Opening Session and four Topic Sessions: Irrigation controls, Irrigation systems and planning, Irrigation modelling and Irrigation management.

At the opening session, Prof. C. Brebbia highlighted the scope and goals of the conference, along with the activities carried out at the Wessex Institute, which aims to act as a centre for knowledge transfer at an international level. Prof. G. Lorenzini then welcomed the delegates and stressed the challenges that irrigation technology will have to face and cope with within the next few years.

Two keynote lectures followed. The first was given by Prof. I. Smout, Director of the Water Engineering and Development Centre of Loughborough University, UK. His report, '**AWAM: A model for optimal land and water resources allocation**', drawn up in cooperation with S. D. Gorantiwar of the Agricultural University of Rahuri, India, described the main features and characteristics of a model for allocating crops and water to land within canal irrigation schemes.

The second key note address, '**Theoretical and experimental analysis on the thermal fluid dynamics of water droplets in irrigation**', was delivered by Prof. G. Lorenzini. The lecture, drawn up in cooperation with Prof. D. De Wrachien, described a new approach to water droplet

dynamics; this approach has been recognised by the international scientific and professional community as a useful indicator of the performance of sprinkler irrigation systems. In the Topic Sessions, forty papers were presented in oral presentations or as posters.

The Proceedings of the Conference, (416 pp., ISBN: 1-84564-043-8) are available in hardback from WIT Press. Orders can be placed by e-mail at [marketing@witpress.com](mailto:marketing@witpress.com) or via the WIT Press website at [www.witpress.com](http://www.witpress.com).

Papers from the conference will also be hosted online at the WIT eLibrary as **volume 96 of WIT Transactions on Ecology and the Environment** (ISSN: 1743-3541). For more details, visit the WIT eLibrary at [www.witpress.com](http://www.witpress.com)

*Prof. Carlos Brebbia*  
*Director of the Wessex Institute of Technology, UK*  
*Prof. Daniele De Wrachien*  
*ISAC (International Scientific Advisory Committee)*  
*Chairman*  
*EurAgEng Past President*  
*Member, Executive Board of CIGR*

### International Conference 'Progress in Biogas'

Conference with workshops and exhibition at  
 University Hohenheim, Stuttgart, Germany  
 19–21 September 2007

<http://www.biogas-Zentrum.de/ibbk>

#### Motivation

The use of biogas in German agriculture has an almost 60-year old tradition. First built in a do-it-yourself method, agricultural biogas plants were adapted to an industrial standard in international dissemination campaigns and later professionalized in Germany through the introduction of guaranteed compensation in the feed-in law. In the international context, biogas technology plays an important role in contributing to resource saving and is indispensable for climate protection

#### Future Markets

The following issues have been discussed within the framework of the 2004 renewables conference held in Bonn, Germany:

-How can renewable energies give 2 billion people access to modern energy supply systems?

-How can renewable energies show their strengths as key technologies for climate protection, economic development and technological progress?

-In this context, biogas technology is at the beginning of a new breakthrough.

To date, Germany has played a leading role in the development and implementation of biogas technology. The German success with biogas sets an example for neighbouring countries in Europe and contributes to their own progress. The German Renewable Energy Act sets a global standard for the promotion and encouragement of applying biogas technologies and also serves as model for efficient market development. In a global context, the most promising markets for the implementation of biogas

technology are China, Japan, India, Canada and the US. The utilisation of organic wastes and energy plants in agricultural biogas plants leads to a substantial growth potential for both agriculture and industry.

#### The International Conference

The International Conference provides an overview of the state-of-the-art developments related to biogas production as well as its economic viability. Well-known speakers from the international centres of biogas development, important research facilities and companies as well as experts from governmental departments and NGOs assure the high standard of the conference. In addition to and along with the conference poster sessions, a formal reception with the Minister of Food and Rural Areas, Mr. Peter Hauk, as well as a study tour will complement the programme.

#### Organiser:

**IBBK** (leading organization)

International Biogas and Bioenergy Centre of Competence IBBK, **University of Hohenheim**, Institute for Agricultural Machinery and Construction Works, **Ministry of Food and Rural Areas of Baden-Württemberg**,

#### In cooperation with

German Society for Sustainable Biogas and Bioenergy Utilisation GERBIO

## HYDRO 2007

### New Approaches for a New Era

15-17 October 2007 Granada, Spain

<http://www.hydropower-dams.com/>

Main conference themes:

- Potential, development needs and plans
- Small, mini and micro hydro
- Updating and refurbishment
- Project finance and contractual aspects
- Environmental and social aspects
- Research and development
- Sedimentation management
- Hydropower equipment
- Civil engineering challenges
- Pumped-storage development
- Tidal power and in-stream flow technology
- Educational tools

#### Dates and deadlines:

Notification of acceptance	April 2007
Full paper submission	27 July 2007
Final Bulletin	June 2007

For additional information contact: Hydro 2007, Mrs Margaret Bourke, Aqua-Media International, Westmead House, 123 Westmead Road, Sutton, Surrey SM1 4JH, UK. Fax: +44 20 8643 8200. Email: mb@hydropower-dams.com

## Water Malaysia 2007

An International Water Conference & Exhibition

14-16 May 2007,

Kuala Lumpur Convention Centre, Malaysia

<http://www.watermalaysia.com>

Water Malaysia 2007 will witness the gathering of players and stakeholders in the water industry covering the water supply, sewage management, wastewater and industrial water sectors and will include special highlights such as conferences, networking, business matching sessions and a

convention.

The theme of the three-day conference is 'Towards sustainable water resources management and use', and it is a power-packed event that will feature a distinguished panel of internationally reputed speakers comprising industry players, government officials and policymakers stressing on important and pertinent water issues currently affecting developing countries. The conference is expected to attract 500 delegates from the region. Another highlight of the trade event is the Southeast Asia Water Utilities Network (SEAWUN) Convention, a convention that will address key issues related to water supply, sanitation and services in South East Asian (SEA) developing member countries.

#### For more information, please contact

Ms Kelly Liao Tel: 603-6140-6666; Fax: 603-6140-8833; e-mail: kellyliao@protemp.com.my

## 3rd Indian International Conference on Artificial Intelligence (IICAI-07)

December 17-19 2007, Pune, India

<http://iiconference.org/>

A Special Session on AI Applications in Agriculture and Social Sciences will be held during the 3rd Indian International Conference on Artificial Intelligence (IICAI-07) <http://iiconference.org/iicai07/agriculture.html>. AI techniques are extensively used in the design of planning and management tools for governments, organizations, farmers, foresters, and the general public. The session is primarily focused on the practical use and development of AI methods for modelling and managing the systems in agriculture and social sciences. It is intended to identify and discuss the common problems faced by researchers applying AI to agriculture in which both deep and surface knowledge is highly imprecise and/or uncertain and may be incomplete or vague. Temporal reasoning and spatial reasoning are critical for modelling the natural processes as well as individual or social behaviour (including adaptability). The session also serves as a vehicle to make other researchers in the AI community more aware of the needs and opportunities coming out of the specific context provided by agricultural domain. The topics covered by the session include but certainly not limited to:

- AI and Agricultural commodities
- Expert Systems
- Pests and Disease Forewarning System
- Rough sets and Fuzzy sets in Agricultural Domain
- Statistical vs. AI Techniques in Agriculture
- AI in Identification of Socio Economic Categories
- Artificial Neural Networks and Agriculture
- Scope and Potential of GA in Agriculture
- AI and Plant/Animal Biotechnology
- AI in Forecasting
- Uncertainty Handling in Agriculture

#### Deadlines:

April 2nd 2007: Paper manuscripts due.

May 18th 2007: Notification of acceptance.

June 25th 2007: Camera ready papers and Pre-registration due.

Session Chair: Dr. Rajni Jain, Ph.D.

email: rajnijain67@gmail.com, rajnijain67@yahoo.com

Phone: 91-11-25847628, 91-11-25848731



## 6. Publications

### Agricultural Engineering International: the CIGR Ejournal

**Dr. Lingjuan Wang, Editor-in-Chief**

<http://cigr-ejournal.tamu.edu>

ISSN 1682-1130

Send manuscripts for peer review to:  
[stout@tamu.edu](mailto:stout@tamu.edu)

The CIGR electronic journal is now in its ninth year of publication. It has grown from its modest beginnings to now attract numerous quality manuscripts. All published papers are available free of charge on the website <http://cigr-ejournal.tamu.edu>. The following is a summary of the number of papers published to date:

**Peer reviewed original research papers (total: 261):**

Vol. I (1999)-----7	Vol. II (2001)-----10
Vol. III (2000)----23	Vol. IV (2002)----25
Vol. V (2003)----29	Vol. VI (2004)----44
Vol. VII (2005)---53	Vol. VIII(2006)---68
Vol. IX (2007)-----1	

**Invited overview papers (total: 101):**

Vol. I-----2	Vol. II-----4	Vol. III-----8
Vol. IV----20	Vol. V-----24	Vol. VI-----6
Vol. VII--10	Vol. VIII--23	Vol. IX-----2

As you might expect, the published papers originate from a broad international base of 50 countries.

**Peer reviewed original research papers:**

Australia-2, Belgium-4, Botswana-1, Brazil-6, Canada-9, Cameroon-3, China-6, Czech Republic-3, Denmark-11,

Egypt-1, Estonia-4, Ethiopia-1, France-1, Germany-14, Greece-6, India-12, Indonesia-2, Ireland-1, Iran-1, Israel-2, Italy-8, Japan-29, Lebanon-2, Lithuania-3, Mexico-2, Netherlands-3, Nigeria-29, Pakistan-1, Poland-6, Portugal-6, Spain-6, Sweden-4, Tanzania-2, Thailand-7, Turkey-3, United Arab Emirates-1, USA-20.

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

Australia-1, Bangladesh-1, Brazil-3, Canada-2, China-4, Denmark-2, Egypt-1, FAO-3, France-1, Germany-12, Greece-1, India-5, Indonesia-1, Israel-1, Italy-16, Japan-4, Kenya-1, Mexico-1, Morocco-1, Netherlands-3, Nigeria-10, Oman-3, Palestine-1, Poland-1, Portugal-1, Russia-1, Swaziland-2, Taiwan-1, Thailand-2, UK-3, USA-18, Yugoslavia-1, Zimbabwe-1.

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

*Dr. B. A. Stout, Coordinator, 22 February 2007*

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