



International Commission of Agricultural and Biosystems Engineering

CIGR

Newsletter Quarterly

Newsletter No. 98
April 2013

Since 1930
83 Years of CIGR

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Commission Internationale du Génie Rural (CIGR)

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

1. CIGR NEWS

Challenges of Agricultural and Biosystems Engineers – A Message from the CIGR President

Agricultural and biosystems engineering applies science and technology to the production and processing of agricultural and food products. With the development of future-oriented new technologies, agricultural and biosystems engineers still have many challenges ahead.

Automation, robotics, wireless communication, web-based processing technologies are now used in agricultural and food production. Networked system technology applies in cattle, dairy, pig and poultry husbandry. The food chain utilises intelligent RFID tags for food safety and quality monitoring. Sensor-based monitoring is also used for ethical parameters as well as animal health and comfort. Automatic animal feed dispensers apply to individual animal feeding. Agricultural and biosystems engineers must have expert knowledge and skills to function in these novel technologies.

In power and machinery, renewable energy sources such as synthetic fuel, hydrogen and fuel cells are increasingly used. Small autonomous vehicles are deployed for scouting, weeding and cultivation. Farm machinery is also equipped with automatic data gathering for improving farm management and for documentation. As a result, agricultural and biosystems engineers face challenges to develop methods and design equipment incorporating automation, precision, smart and intelligent technologies for land preparation, planting and harvesting.

Agricultural and food processing equipment is more specialized and more optimized than ever before. Standardised electronic communication is employed to control processes and to implement and respond appropriately to processing requirements. Physical treatments are increasingly used to replace using chemicals for plant protection and pest management. Fertiliser application is optimised to meet the needs of small crop areas or even single plants to minimise negative effects to the environment. Agricultural and biosystems engineers should make farming and processing sustainable, safe, and environmentally friendly. They should conduct process analysis and evaluate new methods and technologies to improve the use of land, increase yields, and conserve resources. They should also develop strategies to protect health and safety in farming and processing.

Crop harvesting has moved from simple field collection to quality dependent sorting and grading. Integrated postharvest technology has been employed to minimise losses and maintain quality. Therefore, agricultural and biosystems engineers should be able to find the best techniques to reduce crop losses due to field damage,



Prof. Da-Wen Sun

mishandling and sorting as well as improper packaging and processing.

CIGR is the largest global organisation representing our agricultural and biosystems profession. In order for our profession to contribute more to society, networking and concerted actions should be undertaken to meet the above challenges and to provide food security solutions for the growing world population.

*Prof. Da-Wen Sun
President of CIGR*

Message and Announcements from the CIGR Secretary General

Dear Colleagues,

On behalf of the General Secretariat of CIGR, Secretary General, Prof. Toshinori Kimura would like to send a message and some announcements to you.

The year of 2013 is the last year for us as a current General Secretariat (GS) of CIGR. We deeply appreciate the support given by CIGR members and we all are very sure to complete our duties and services to the last.

Member change in GS

There were a few changes in the GS members in 2012 and 13. Firstly, Secretary General, Prof. Toshinori Kimura retired from Hokkaido University, Japan in the end of March, 2013 and became a Professor Emeritus of the university. However he will precisely continue to serve as Secretary General and complete his duty until the end of December, 2013. Professor Kazunori Iwabuchi who is a current board member of CIGR Section IV joined GS in April, 2013 and he will deal with financial matters. The GS members, Drs. Shuso Kawamura and Takashi Inoue were upgraded to Professor, and Dr. Hiroshi Okamoto to Assoc. Professor of Hokkaido University.

Current report of 2012 financial year

Although stagnation of the world economy has still been casting a dark shadow over the CIGR's financial situation, we could gain much more income of membership fees than expected in the 2012 budget because of the tireless efforts to encourage the inactive members to pay the dues in arrears and to re-join the CIGR activities. In addition, financial assistance from Hokkaido University amounting to more than 11,000€, and advertisement fee for CIGR Newsletters by Yammer Co., Japan amounting to 2,750€ contributed a lot to the net positive result, which amounted to more than 10,000€. The final report will be sent to CIGR Auditors shortly for the official auditing.

Last Presidium Meeting through Skype

The first Presidium Meeting through Skype for this year was held on 12th April, 2013, where following agenda were discussed.



Prof. Toshinori Kimura

- 1) CIGR Election 2014: In 2014, CIGR Election regarding next Incoming President, Members of Executive Board and Section Board, which servicing term starts from 1st January, 2015, will be taken place. At first, PM will discuss about the candidate nomination for next Incoming President in the next PM Meeting to be held in Prague, Czech, in September 2013. Then the list of candidate nomination of Board Members will be prepared accordingly.
- 2) CIGR Awards & Prizes: The CIGR Awards & Prizes Committee has been established for the awarding during the period of next CIGR World Congress to be held in Beijing, China in 2014. The Chair of Awards & Prizes Committee, Prof. Tadeusz Juliszewski, Incoming President of CIGR will call for candidate nomination to CIGR National & Regional Members and Chairs of Section Boards shortly.
- 3) CIGR Initiative and CIGR corporative ties with ASABE, EurAgEng, etc: CIGR will send Prof. Fedro Zazueta, Past President and Prof. Toshinori Kimura, Secretary General to the round table to be held at Kansas City, USA in July, 2013. And Prof. Fedro Zazueta, Past President will participate in FAO Conference to be held at FAO Headquarters in Rome in June, 2013.
- 4) International Academy of Ag. and BioSys Eng.: Creation of a virtual academy to recognize contributions of professionals in the field was discussed.

As I announced already, the CIGR Business Meetings for the year of 2013 will be held in Prague, Czech in September, 2013. All the Executive Board, Technical Board and Section Board members are requested to participate. The Section Boards which will not have board meeting at Prague should discuss about MOSA updating, and nomination of CIGR Election 2014 and CIGR Awards and Prizes.

Thank you so much, and best regards,

Prof. Toshinori Kimura
Secretary General of CIGR

CIGR Backs Up International Events!

CIGR backs up international events (congresses, conferences, symposiums, etc) in the following three ways.

1. CIGR Sponsored Events

- CIGR takes the CIGR Sponsored Events very important. CIGR would back up the CIGR Sponsored Events in

more various ways than other two events noted bellow, like by sending the delegate (CIGR Presidium, for example) to the event or scheduling the CIGR business meetings during the event, if applicable.

- The organizer and CIGR have to make an agreement regarding several important matters such as payment of levies and etc beforehand. After the event, the organizer will pay the levies to CIGR based on the agreement.
- The CIGR Sponsored Events have to be allowed by CIGR Executive Board meeting, beforehand. The organizer is advised to send the request for the CIGR Sponsored Event to CIGR not later than 1 year before.
- CIGR will allow the organizer to use CIGR's name and Logo as a sponsor.
- CIGR will introduce the event in the event calendar of CIGR website as well as in CIGR Newsletter.
- After the event, the organizer has to send the report to CIGR Secretary General. This report will be presented in CIGR Newsletter.

2. CIGR Supported Events

- CIGR will allow the organizer to use CIGR's name and Logo as a supporter.
- CIGR will introduce the event in the event calendar of CIGR website as well as in CIGR Newsletter if requested.
- After the event, the organizer has to send the report to CIGR Secretary General. This report will be presented in CIGR Newsletter.

3. Other Events

- CIGR will introduce the event in the event calendar of CIGR website. Please send CIGR Secretary General an e-mail to inform the event and request for introduction in CIGR website.

How to get your event sponsored/supported by CIGR

- a) The event can be sponsored/supported by CIGR, when a CIGR national (or regional) member or CIGR Section (or Working Group) hosts or co-organizes the event.
- b) Please send CIGR Secretary General an e-mail of request for the sponsorship/support beforehand.
- c) After gaining the approval from CIGR Presidium, CIGR Secretary General will notify the applicant of the approval.

CIGR World Congresses and Internatinal Conferences, 2014–2018

The XVIII CIGR World Congress 2014 Agricultural & Biosystems Engineering - Upgrading Our Quality of Life Beijing, China, 16-19 September 2014

The 18th World Congress of the International Commission of Agriculture and Biosystems Engineering (CIGR) will be held in Beijing, China on September 16th to 19th, 2014. Under the energetic guide of the General Assembly of CIGR, this Congress will remain faithful to the pattern

established in past CIGR World Congresses, while incorporating innovative new elements to promote exchange and collaboration among agricultural engineers, and to offer a unique opportunity to present the results of research and to discuss important issues from a global perspective.

For global agricultural engineering scientists, engineers and other professionals seeking to expand their knowledge of the field and learn about the most up-to-date advancements and discoveries, the 18th World Congress of CIGR cannot be missed. The special social and tour programs will also be

arranged, it will give participants a wonderful taste of unique Chinese culture to entertain you and your family during and after the Congress. With tremendous support from CIGR, the Chinese Society for Agricultural Machinery (CSAM), the Chinese Society of Agricultural Engineering (CSAE), and many local, regional and international associations, the Organizing Committee will deliver the most dynamic and invigorating Congress to all of you.

The preparation has started smoothly and the Organizing Committee hereby is pleased to invite you and your association to join in this big event as much as you could. It is sincerely hoped that the 18th World Congress of CIGR in Beijing will bring all of participants together to share in the common goal of advancing and developing the field of Agricultural and Biosystems Engineering, and to provide a discussion forum on how to promote scientific and technological innovations in agricultural engineering into the new millennium.

SPONSORS

International Commission of Agricultural and Biosystems Engineering (CIGR)

Chinese Society for Agricultural Machinery (CSAM)

Chinese Society of Agricultural Engineering (CSAE)

CO-SPONSORS

Asian Association for Agricultural Engineering (AAAE)

Agricultural Engineers Association (AEA) (England)

German Agricultural Society (Deutsche Landwirtschafts-Gesellschaft, DLG)

Association of Overseas Chinese Agricultural Biological Food Engineers (AOCABFE-AOC)

United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (UNAPCAEM)

Additional societies and institutions will be available through the website: www.cigr2014.org

ORGANIZERS

Chinese Academy of Agricultural Mechanization Sciences (CAAMS)

Chinese Academy of Agricultural Engineering (CAAE)

China Agricultural University (CAU)

Theme

Agricultural & Biosystems Engineering – Upgrading Our Quality of Life

Time

September 16th (Tue) – 19th (Fri), 2014

Venue

China National Convention Center

Congress Languages

English, Chinese

IMPORTANT DATES

On-line registration opens: Sep. 1st, 2013

Abstract submission opens: Sep. 1st, 2013

Abstract submission deadline: Mar. 1st, 2014

Notification of abstract acceptance: Apr. 15th, 2014

Early bird registration: May 31st, 2014

Full paper submission: Jun. 1st, 2014

Information to authors on website: Jul. 1st, 2014

Hotel reservation and tour deposits: Aug. 1st, 2014

PROGRAM AT A GLANCE

Date	Morning		Mid-noon	Afternoon		Evening
Sept.15 th	Registration					
Sept.16 th	Opening Ceremony	Plenary Sessions with Invited Speakers	Working Lunch	Plenary Sessions with Invited Speakers		Welcome Reception
Sept.17 th	Oral Session		Working Lunch	Oral Session		
	Poster Session / Exhibition			Poster Session / Exhibition		
Sept.18 th	Oral Session		Working Lunch	Oral Session	Closing Ceremony	Banquet
	Poster Session / Exhibition			Poster Session / Exhibition		
Sept.19 th	Technical Tour					

CALL FOR PAPERS

The Congress welcomes abstracts relevant to the preliminary topics. A person intending to give an oral presentation (15 - 20 minutes) or a poster at the Congress is requested to submit a one-page abstract (A4 size, approximately 500 words) to the Academic Committee no later than **April 1st, 2014**. An abstract should be well written, clear and informative by describing the work with emphasis on objectives and factual results. An abstract should include keywords related to the Congress Preliminary Topics. Notification of acceptance or rejection of abstract will be given by **Apr. 15th, 2014**. Authors are invited to prepare a full-length paper after the acceptance. Abstracts and full papers should be submitted online using the templates provided.

Preliminary Topics

Full list of the detailed main topics will be available at www.cigr2014.org

1. Land and Water Systems Engineering
2. Machinery Engineering for Plant Production

3. Bioprocessing System Engineering
4. Information Systems and Precision Farming
5. Rural Electricity and Renewable Energy
6. Farming Buildings and Livestock Environmental Engineering
7. Management, Ergonomics and System Engineering

Oral and Poster Presentation

In the registration system, authors are asked to indicate their preference for an oral presentation or a poster on the website. The Scientific Committee will try to satisfy each author's first choice. The final decision will come along with the notification of abstract acceptance.

Proceedings

The full proceedings of the Congress will be published in CD-ROM and provided to the delegates and students at the registration desk during the Congress.

Please visit the Congress Website at www.cigr2014.org for detailed information regarding abstract guideline,

submission instruction, presentation options and other related information.

Accommodation

Participants who request hotel accommodation should register on the website at www.cigr2014.org, and submit the decision and pay the registration fee. A sufficient number of rooms will be provided at hotels near the Congress Venue. If

your room request is unavailable, you will be assigned a room in another hotel as close as possible to your choice.

Registration

On-line registration will open on **September 1st, 2013** at www.cigr2014.org and ways of payment will be announced on the website later.

Registration fee (in US Dollars)

Registration Type	Early Bird Registration by May 31 st , 2014	Regular Registration After Jun. 1 st , 2014	Desk Rate
Delegates except LIC & LMIC ^[1]	\$700.00 ^[2] /\$750.00	\$800.00 ^[2] /\$850.00	\$850.00 ^[2] /\$900.00
Delegates from LIC & LMIC	\$500.00	\$550.00	\$600.00
Students ^[3]	\$400.00	\$400.00	\$450.00
Accompanying person	\$300.00	\$300.00	\$350.00
One-day admission ^[4]			\$400.00
Banquet ^[5]		\$80.00	

[1] LIC and LMIC: The list of low income and low-middle income countries is from the World Bank. [2] CIGR members. [3] Students: Please attach a copy of your student identification card to your registration form. [4] One-day admissions will only be sold the same day at the registration desk. [5] Banquet: A buffet style banquet will be held at 19:00 on Sep. 18th, 2014. The fee of the banquet is not included in the registration. Participants who wish to attend the banquet should make reservation (USD80/person) together with your registration.

Additional information

Additional information on the Congress news, maps, and updates on our programs will be available through the website: www.cigr2014.org

Contact information

Address: Room B206, No. 31 Building, Chinese Academy of Agricultural Mechanization Sciences (CAAMS), No. 1 Beishatan, Deshengmen Wai, Chaoyang District, Beijing 100083, China

Phone: 0086-10-64882358

Fax: 0086-10-64883508

Email: cigrwc2014@yahoo.com

Website: www.cigr2014.org

The 4th CIGR International Conference - AgEng Conference-2016 Robotics, Environment and Food Safety 26-29 June 2016, Aarhus, Denmark

The Conference will be held at University of Aarhus 26-29 June 2016 as a joint event between CIGR (International Commission of Agricultural and Biosystems Engineering) and EurAgEng (European Society of Agricultural

Engineering) and cosponsored by NJF (Nordic Association of Agricultural Scientists) and Aarhus University.

Preparations for this event are progressing with the Organising Committee making the preliminary preparations.

Contact: Prof. Søren Pedersen

Email: soeren.pedersen@agrsci.dk

The XIX CIGR World Congress 22-26 April 2018, Antalya, Turkey

In CIGR General Assembly which was held in Valencia, Spain on 9 July 2012, Turkey was approved to host the XIX CIGR World Congress.

The Congress will be held on 22-26 April, 2018 in Antalya, Turkey.

Preparations for this event are progressing with the Organising Committee.

Contact: Prof. Can Ertekin

Email: ertekin@akdeniz.edu.tr

2. NEWS FROM REGIONAL AND NATIONAL SOCIETIES

CIGR National Member South African Institute of Agricultural Engineers

The involvement of the South African Institute of Agricultural Engineers (SAIAE) with the International Commission for Agricultural Engineering CIGR (Commission Internationale du Genie Rural) runs from

1974 when SAIAE became a full member of CIGR as adopted at their Flevohof Congress in the Netherlands.

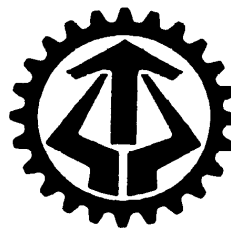
The South African Institute of Agricultural Engineers was founded on 11 November 1963 when forty-four passionate agricultural engineers in South Africa held a meeting where it was formally and unanimously decided to establish the Institute. At the first meeting of the Board of the Institute on 11 February 1964, the constitution was approved and the objectives of the Institute as set out in the Constitution are as follows:

- The promotion and development of the science and technique of Agricultural Engineering;
- The promotion of the agricultural engineering profession;
- The promotion and encouragement of research and training in agricultural engineering;
- The dissemination of knowledge, information and ideas in agricultural engineering field through meetings and publications;
- The creation of mutual encounter opportunities for agricultural engineers and related technologists in South Africa;
- The establishment of a body with authority on agricultural engineering issues in South Africa and also to develop and recommend on standards and codes;
- The protection of the interests of members of the agricultural engineering profession and mutual assistance in technical and other fields.

Various actions and activities are addressed to meet these objectives and include the following:

- Organising of symposia and conferences;
- Publishing of journals, papers and other technical documents, newsletters and CDs; awards for merit and achievements of individuals and organizations;
- Liaising with other professional engineering institutions such as the Engineering Council of South Africa;
- International liaison with CIGR and the International Commission on Irrigation and Drainage (ICID);
- Liaison with relevant South African bodies, such as the South African National Committee on Irrigation and Drainage and the South African Irrigation Institute.
- Assist with the accreditation of the Agricultural Engineering degree programme at universities.

The official emblem of SAIAE was accepted in August 1969 and the three main elements in the emblem reflect the agricultural engineering motto:



*We produce
We develop
We conserve*

To produce is symbolized by the gear,
To develop is portrayed by an upward arrow indicating growth, and

To conserve is reflected by the two protective hands.
The three elements simultaneously also symbolize the three branches of the agricultural engineering profession:

- The gear - mechanization and energy;
- The arrow-structures, agricultural buildings and housing;
- The hands-conservation and utilization of natural resources, land and water.

Active engagement of SAIAE with CIGR led to the acceptance of nominations to five sections of CIGR at the 59th Meeting on 15 August 1978. South Africa then successfully hosted the International CIGR Symposium from 20 - 24 January 1986 which was attended by more than 400 delegates. SAIAE also co-hosted the 7th CIGR International Technical Symposium, entitled "Innovating the Food Value Chain" from the 26th to 28th of November 2012 at the University of Stellenbosch, Western Cape where over 300 delegates attended the event.

The South African Institute for Agricultural Engineers grew from a small beginning to a 400 strong membership base today. SAIAE will celebrate its Golden Jubilee (50 year anniversary) in 2014 with 40 years of full membership with CIGR and we look forward to maintaining a sound relationship and thereby participating in this international arena.

*Felix Reinders
SAIAE-CIGR Representative*



Delegates at the 7th CIGR International Technical Symposium,
Stellenbosch, Western Cape, South Africa

CIGR Corporate Member The United Nations Industrial Development Organization (UNIDO)

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability.

UNIDO's mandate is to promote and accelerate sustainable industrial development in developing countries and economies in transition.

In recent years, UNIDO has assumed an enhanced role in the global development agenda by focusing its activities on poverty reduction, inclusive globalization and environmental sustainability. The Organization carries out two core functions: as a global forum, it generates and disseminates industry-related knowledge; as a technical cooperation agency, it provides technical support and implements projects.

The Agribusiness Development Branch supports both of UNIDO's core functions, with emphasis on technical cooperation. The Branch's technical cooperation services are provided to assist developing countries add value to the output of their agricultural sector; this process generates increased employment opportunities in off-farm activities for rural communities, thereby contributing to increased food security and a sustainable reduction of poverty.

The services of the Branch are geared towards linking resources and markets in the agribusiness value chains; strengthen forward and backward industrial linkages to improve employment and income opportunities, and



Mr. Chakib Jenane

support economic transformation and sustainable livelihoods. The benefits extend to poor and marginalized rural population groups, to urban agro-industries, and to communities facing human security challenges or requiring urgent supplies of agricultural equipment and the rehabilitation of food industries.

The Branch focuses its activities through a number of functions:

- Providing technical cooperation and capacity-building services to agro-based and agro-related businesses and industries, inter alia, in the food, leather, textiles, wood, and agricultural equipment sectors.
- Support the development of agro-industries in rural areas.
- Promote investment in agribusiness and value chain development, and build partnerships and linkages with strategic financing institutions.
- Undertake various global forum activities.

To achieve mandate, the Branch mobilizes expert services from its three interlinked units and develops effective linkages with other specialized services of UNIDO on issues such as cluster development, conformity with quality and standards, rural energy, environmental management and cleaner production. The three interlinked units are:

- Agribusiness Development Unit
- Agro-Industries Technology Unit
- Rural Entrepreneurship Development and Human Security Unit

The work of the Branch contributes to Millennium Development Goals 1, 3 and 8; contributing to UNIDO's vision of a world where economic development is sustainable and economic progress is equitable.

*Chakib Jenane
Chief, Agro-industry technology Unit
Deputy-Director, Agribusiness Development Branch*

3. CIGR SUPPORTED ACTIVITIES

Synergy in the Technical Development of Agriculture and Food Industry GÖDÖLLŐ, Hungary October 13-19, 2013.

Topics

Focusing on technical and technological development the conference discusses the synergy between the agriculture and industry, energetics, education, and research. The topics are focused on crop and horticultural production systems, post-harvest technologies, animal husbandry, measuring techniques, basic research for agricultural engineering, economics of agricultural production, forest engineering, renewable energy resources and raw materials, mechanical engineering, maintenance, and machinery management.

The conference deals with the up-to date questions of the solar, geothermal, wind, biomass energy, heat pumps, and hybrid power plants of regenerative energies. Besides of

the above mentioned actual questions and research results of the environmental industry, logistics, precision farming, furthermore issues of computer aided engineering, production systems, project management also will be discussed.

Important Information

- | | |
|------------------------------------|----------------------|
| Deadline for abstract submission: | May 27, 2013. |
| Final registration: | July 22, 2013. |
| Deadline for full text submission: | September 16, 2013. |
| Opening of the conference: | October 13, 2013. |
| Optional two day study trips: | October 17-18, 2013. |

The detailed conference programme and registration information are provided at:
<http://www.synergy.szie.hu>

For more information

Dr. Zoltán BÁRTFAI, Organizing Committee
e-mail: synergy@gek.szie.hu
tel: +36-28-522047

**TRENDS IN AGRICULTURAL
ENGINEERING**
5th International Conference TAE 2013
Prague, Czech Republic
3-6 September, 2013

Dear friends and colleagues

It is my privilege and big pleasure to invite you to participate in the 5th International Conference Trends in Agricultural Engineering 2013 to be held in Prague this September.

I would like to remember here the successful previous conferences. The first of them was organised in the year 1994 and there 107 participants took part. The second one was organised in the year 1999 and there 126 participants took part. The third one was organised in the year 2007 and there 101 participants took part. The fourth one was organised in the year 2010 and there 157 participants took part. I believe that our conference will be the successful continuation of the previous conferences and you will use the opportunity to exchange new experiences, ideas and scientific results in the so complicated complex of scientific discipline.

Nineteen years of the conferences on the trends in agricultural engineering represent also the years of changes in this discipline. At the beginning of this period the main domain of the discipline consists mainly in improving of the agricultural machinery, development of automation and robotics. Now, the main role consists in detection of the product quality and in developing of the agricultural technologies more precise and friendly related to environment.

I am looking forward to meeting you and offer an interesting scientific programme and an attractive programme of social cultural activities in Prague. This is also feeling of all my colleagues in Local Organisation Committee that are ready to prepare the best conference conditions for you.

Martin Libra
Chairman of the Scientific Board

Conference venue

Czech University of Life Sciences, Faculty of Engineering (Round hall), Kamycka 129, 16521 Prague 6 - Suchdol, Czech Republic

Dates: 3rd-6th September 2013

Opening Ceremony: 4th September 2013 at 9:00 a.m.

Short communications

Vladimír Jurča (Dean of Faculty of Engineering)
Martin Libra (Chairman of the conference)
Invited guests

Scientific Secretariat

TAE 2013
Department of Physics
Faculty of Engineering
Czech University of Life Sciences, Prague
(abstracts, papers, programme)

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Czech Republic
Tel.: +420-2-2438-3284
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Organising Secretariat

TAE 2013
Conference Partners, Ltd.
(registration, accommodation, tours)
Rumunská 12
120 00 Prague 2
Czech Republic
Tel.: +420 224 262 109
Fax: +420 224 261 703
E-mail: info@conference.cz
<http://www.conference.cz/tae2013>

Conference topics:

- Precision Farming
- Energy Sources
- Physical Methods in Agriculture
- Agricultural Engineering
- Soil Management and Protection
- The Others

Official conference page:

<http://www.conference.cz/tae2013>

Registration Fee

	before June 30, 2013	after June 30, 2013	on-site registration
Full Registration	EUR 250.-	EUR 300.-	EUR 300.-
Student Registration	EUR 150.-	EUR 200.-	EUR 200.-
Accompanying Person	EUR 80.-	EUR 80.-	EUR 80.-

Conditions of student registration

- age less than 30 years,
- written reference of the applicant's supervisor,
- presentation of a paper at the Conference.

SCIENTIFIC INFORMATION

The plenary opening ceremony will begin on Wednesday morning and will be followed by plenary session with invited lectures. Afternoon parallel symposia and workshops will be organised. On Thursday morning plenary session with invited lectures will be organised and it will be followed by parallel symposia and workshops. The conference programme will be closed on Thursday afternoon. An sight-seeing of Prague will be organised on Friday.

Language

The official language of the conference will be English.

Technical Support

Computer and data-projector (Power Point) will be available. If other equipment is needed, please contact the Scientific Secretariat before September, 2013.

Oral presentation

Plenary lectures are limited to 45 minutes. Other oral presentations in symposia or workshops are limited to 15 minutes followed by 5 minutes for discussion.

Poster Exhibition

The maximum area available for each poster will be 120 cm (height) and 90 cm (width). Posters will be displayed in the Faculty Engineering throughout the conference.

Poster Presentation

Posters will be displayed throughout the conference and discussions will be held daily during coffee-break and lunchtime.

Important dates:

Abstract submission:	May 20, 2013
Proceedings submission:	June 20, 2013
Early registration:	June 30, 2013
Early reg. fee payment:	June 20, 2013
Accommodation:	July 15, 2013

On-line registration:

<http://www.conference.cz/tae2013/>

Report on the 41st International Symposium Actual Tasks on Agricultural Engineering 19 - 22 February 2013, Opatija, Croatia

The 41st International Symposium Actual Tasks on Agricultural Engineering was held on 19th-22nd February 2013 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. In addition, CIGR, EurAgEng, AAAE bestowed their support and endorsement on the Event.



This year 60 participants from 9 countries attended the Symposium. It consisted of Opening Session and six Topic Sessions covering all the broad subject-areas that fall under the scope of Agricultural Engineering. At the Opening Session Prof. Dr. Daniele De Wrachien, former president of the EurAgEng, in his speech highlighted briefly the main historical steps of the symposium emphasising its significant role as a gathering event for scientists, engineers and dealers from south-east European countries and brought the greetings of EurAgEng and CIGR. Prof. Dr. sc. Ines Han Dovedan, vice dean of Faculty of Agriculture, University of Zagreb addressed the audience bringing the greetings and good wishes for a successful work. The Convenor, Prof. Dr. Silvio Kosutic ended the Opening Session with the greetings of the Croatian Society of Agricultural Engineering to the audience. A number of lectures followed, among which are worth mentioning: "Water droplets ballistics in a sprinkler spray flow: the classical and quantum dynamic frameworks for a single and many-particle systems" presented by Prof. Dr. Daniele De Wrachien from Italy, "Pulse width control of the solenoid valve for the application of pesticides using fuzzy logic controller" given by BSc Peter Berk from Slovenia, "Introduction of low-cost precision GPS/GSSN to agriculture" presented by BSc Aljoz Osterman from Slovenia, "Probabilistic approach regarding cleaning process efficiency from harvesting machines" featured by Prof. Dr Nicolae Filip from Romania, "Influence of different soil preparations and vehicle speed on process parameters at seeding of peas (*Pisum sativum*) with trailed pneumatic universal seed drill" performed by Dr. Sc. Gergard Moitzi from Austria, "Spatial distributions of air humidity in a cows barn under different rates of forced ventilation" delivered by Prof. Dr. Goran Topisirovic from Serbia, "Harvestable and on-field remaining crop residues of wheat and soybean" proposed by BSc Marko Golub from Serbia, "CO2 emission in decentralized plant oil production" introduced by dr. sc. Viktor Jejcic from Slovenia, "The suitability of utilizing cotton stalk for low cost binderless panels" highlighted by Clara Eugenia Ferrandez Garcia from Spain and "Mechanical properties of profiles from recycled agricultural plastic waste mixed with wood powder" presented by Dr. Aleksandra Dimitrijevic from Serbia. In the Topic Sessions, each starting with a review report, 44 papers were discussed, in oral presentation. At the Closing Session the Convenor emphasised the role of EurAgEng and CIGR in the ecologically sustainable development of agriculture and in the preservation of the rural cultural heritage within the East-European countries. Participants were given electronic copies of the Proceedings consisting in volumes of 420 pages, containing 44 papers all peer reviewed. Papers from the Proceedings have been indexed in Thomson Reuters (The Conference Proceedings Citation Index, a Web of Science® database) since 1997. Maziva Zagreb d.d.-INA group (national petrol company) presented its new palette of bio-degradable oils emphasising the progress made in keeping pace with well known worldwide competitors. Especially interesting commercial presentation titled "Countrywide ICT-backbone supporting farm-management, advisory services, logistics, precision farming and other chain partners as well as farmers integration into environmental caretaking and risk management" was performed by Walter H. Mayer, CEO of Progis Software GmbH, Austria.

An electronic version of proceedings of the 40th symposium is available at Symposium's web site

<http://atae.agr.hr/proceedings.htm> Information regarding the 42nd Symposium in the year 2014 will soon be available at the web site: <http://atae.agr.hr>

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

4. OTHER ACTIVITIES

Participation Report of CIGR delegate, Paolo Menesatti, at the Hundred and Forty-fifth Session of the FAO Council, Rome, Italy, 3 - 7 December 2012

It was my great pleasure to have the opportunity to participate to the 145th Session of the FAO Council as CIGR representative.

During the five days of the Council (Rome, Italy, 3 to 7 December 2012), I participate to the works having the possibility to acquire very important information and working methodologies of this fundamental Organization for the human being advance and the fight against hungry and poverty in all the world. Some very interesting side event were also available during the Session period.

The following is a very synthetic summary.

For more detailed information, all the documents are freely available at the web url

<http://www.fao.org/bodies/council/cl145/en/>

The session was opened by the FAO Director-General José Graziano da Silva who said that FAO needed to adapt to face the multidimensional challenges of today and explained what the proposed changes meant to the Organization. The Director-General also requested endorsement of the draft FAO Strategy on Partnerships with Civil Society so the Organization would have a solid and transparent foundation to work with.

He informed the meeting that the partnerships strategy with the private sector would be submitted to the governing bodies in the first quarter of 2013.

Many different interesting themes and side events were held during the conference. The most interesting for CIGR themes are reported below:

- recommendation on the implementation of the Strategy on Sustainable Crop Production Intensification through an eco-system approach and an enabling environment; noted the importance of a comprehensive approach that integrated economic, social and environmental sustainability and production and emphasized the need for a wide range of partnerships (public and private sectors).
- Adoption of the voluntary International Code of Conduct on the Distribution and Use of Pesticides (FAO resolution 10/85) and the adoption of the latter amendments suggested by World Health Organization, the United Nations Environment Programme, FAO Committee on Agriculture and other stakeholders.
- Encouraging all stakeholders to promote and make use of the First Version of the Global Strategic Framework for Food Security and Nutrition where the FAO

Committee on World Food Security formulated strategies, policies and programmes on food security, nutrition, agriculture, fisheries and forests.

- Side event: "securing healthy soils for a food secure world: a day dedicated to soils", that was introduced by Mr. Gaziano Da Silva FAO Director General; it was linked to the Council decision whether to endorse the Observance of the World Soil Day (5th December) as a platform for raising awareness on the importance of soils for food security and ecosystem functions; this side event which participate also the president of the International Union of Soil Sciences (www.iuss.org) presented the Global Soil Partnership (GSP).
- Recommendation to all the state members the participation to the Global Soil Partnership that is a voluntary initiative to improve governance of the limited soil resources of the planet in order to guarantee healthy and productive soils for a food secure world, as well as support other essential ecosystem services, in accordance with the sovereign right of each State over its natural resources; the GSP should become an interactive and responsive partnership and will also develop awareness and contribute to the development of capacities, build on best available science, and facilitate/contribute to the exchange of knowledge and technologies among stakeholders for the sustainable management and use of soil resources.
- Side event: "Reducing and Transforming Food Waste into a Resource" organized by the Italian group of University of Bologna - Faculty of Agriculture - Last Minute Market; Cooperazione Universitaria DGCS MAE; FAO – Global Initiative on Food Loss and Waste Reduction SAVE FOOD, To raise awareness on the importance to reduce food waste. The focus will be on the causes, consequences and impacts of food waste, SAVE FOOD is Global Initiative on Food Losses and Waste Reduction. Roughly one-third of food produced for human consumption, about 1.3 billion tonnes per year, gets lost or wasted globally—the equivalent of 6 to 10 percent of human-generated greenhouse gas emissions. (Gustavsson et al., 2011; Vermeulen et al., 2012 for the calculation on emissions). Although food losses and waste occur at all stages of the food supply chain, the causes and their impact around the world differ. In developing countries, food losses affect small farmers the hardest. Almost 65% of food losses happen at the production, post-harvest, and processing stage. In industrialized countries, food waste often occurs at the retail and consumer level due to a “throw-away” mindset. It is this difference that the SAVE FOOD initiative is targeting by focusing its efforts in strengthening food supply chains in developing countries beginning in Kenya and at the same time

raising awareness of food waste in industrialized countries.

- Side event: "Investing in agriculture for a better future – The State of Food and Agriculture 2012", the Economic and Social Department presented the main contents and conclusions of the 2012 edition of the State of Food and Agriculture on how to foster more and better investments in agriculture. This was followed by a panel discussion on the implications of the report with participation of invited experts.
- Side event: FAOSTAT data dissemination tool and the newly released Greenhouse Gases (GHG) database that provides coherent time-series of emission statistics for

all countries in the world over the period 1990-2010. The database provides countries with vital, regularly updated information to help them identify, assess and report the GHG emissions from their agriculture, forestry and other land use sectors. The emissions estimates are based on FAOSTAT activity data and follow the internationally-approved reporting methodology of the Intergovernmental Panel on Climate Change.

Dr. Paolo Menesatti
CIGR Section VI Board member

5. PUBLICATIONS

The CIGR Journal

Agricultural Engineering International
Prof. Lanfang Zhang, Editor-in-Chief
ISSN 1682-1130

Submit manuscripts for peer review to
www.CIGRjournal.org

Since the implementation of Open Journal System (OJS) by the CIGR Journal, the numbers of manuscript submissions and registered users continues to increase. The table below shows the statistics for the CIGR Journal from November 1st, 2012 to February 28th, 2013 using OJS. With the increasing number of submissions, improving the quality of the papers to be published should be the primary goal of the Journal. Authors, reviewers and Section Editors are the key to upgrading the quality of CIGR Journal.

Note: Percentages for peer-reviewed submissions sometimes may not add up to 100% as items resubmitted are either accepted, declined or still in the process of review.

From November 1st, 2012 to February 28th, 2013, 110 manuscripts have been submitted, with nearly 28 submissions per month, which is more than the previous submission rate of about 20 manuscripts per month. The average time to complete the review process and publish a manuscript is more than 90 days. Among the 110 new submissions, 23.6% have been peer reviewed and 10.9% manuscripts are in the review process with some reviewers' comments. On the one hand, more manuscripts were peer reviewed, due to the hardworking of Section Editors and reviewers. On the other hand, fewer new submissions were accepted by the Section Editors accounting for 4.5% of the total submissions. This means that some Section Editors need to make decisions based on reviewers' comments in order to speed up the editorial process. According to the current trend, about 20 manuscripts in total will be published in the 1st issue of Vol. 15 by the CIGR Journal. We will continue our endeavor of maintaining the manuscript statistics and prompt communications with Section Editors.

By March 4th, 2013, the total number of registered users in CIGR Journal through OJS reached 8191 with 142 new users compared to the statistics accounted last time on

November 19th, 2012. Registered readers were 7443 with 99 new and 1478 were registered as reviewers with 85 new compared to the database at the end of October 2012. Also, owing to the incomplete registration information, particularly without clearly indicating the interview interest areas of the reviewers, it is hard for the Section Editors to select proper reviewers according to their expertise. The CIGR Journal warmly welcomes the participation of its members as well as the scientists and engineers engaged in agricultural and biosystems engineering worldwide in the Journal work and appreciates your support. If you have not registered in CIGR Journal, please do so by going to the website and registering as an author and reviewer.

Right now, there are in all 198 manuscripts that CIGR Journal is handling, with 25 papers accepted and in editing, the rest are still in process-under review or revision.

Thank you!

Prof. Zhang Lanfang
Editor-in-Chief of CIGR Journal

2013 Statistics for the CIGR Journal (November 1st, 2012–February 28th, 2013)

Issues (Vol.14, No.4, 2012; Vol.15, No.1, 2013)	Published 1 (Vol.14, No.4; Vol.15, No.1 in publishing)
Items (Research papers)	Published 31 in Vol.14, No.4
Total new submissions	110
Peer reviewed	26 (23.6%)
Held by Section Editors	35 (31.8%)
In review with some review comments	12 (10.9%)
In review without review comments	40 (36.4%)
Accepted as new submissions	5 (4.5%)
Declined as new submissions	32 (29.1%)
Resubmitted	2 (1.8%)
Days from submission to complete review	Over 60
Days from submission to publication	Over 90

CIGR Section Boards (2011-2014)	
Section I: <i>Land and Water</i>	(Chair: Guanhua Huang [China])
Section II: <i>Structures and Environment</i>	(Chair: Thomas Banhazi [Australia])
Section III: <i>Plant Production</i>	(Chair: John K. Schueller [USA])
Section IV: <i>Energy in Agriculture</i>	(Chair: Janusz Piechocki [Poland])
Section V: <i>System Management</i>	(Chair: Claus Gron Soerensen [Denmark])
Section VI: <i>Bioprocesses</i>	(Chair: Linus Opara [South Africa])
Section VII: <i>Information Technology</i>	(Chair: Seishi Ninomiya [Japan])

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