



International Commission of Agricultural and Biosystems Engineerin

# CIGR

*Newsletter  
Quarterly*

**Newsletter No. 101  
July 2014**

*Since 1930  
83 Years of CIGR*

1. CIGR News ..... 2
2. News from Regional and National Societies ..... 4
- 3 CIGR Sponsored Activities ..... 5
- 4 Publications ..... 5
5. Miscellaneous..... 6

***Commission Internationale du Génie Rural (CIGR)***

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

## 1. CIGR NEWS

### Message from the President CIGR World Congress – A Great Gathering for Our Profession



Prof. Da-Wen Sun

As we are approaching September, the next big event will be the XVIII World Congress of CIGR to be held in Beijing in China, which is organized by the Chinese Academy of Agricultural Mechanization Sciences (CAAMS), the Chinese Academy of Agricultural Engineering (CAAE) and the China Agricultural University (CAU). Traditionally, the World Congress is a great gathering for our profession to stimulate meaningful debate, enable in-depth technical discussions and allow significant exchange of new research findings. I therefore believe that participating in the Congress will prove to be productive for all of us.

As usual, the Congress arranges technical sessions related to all seven CIGR Sections and also features a specially designed Chinese cultural night, as well as technical forums including an Agricultural Machinery Standardization Forum and an Asian Forum. The forums will provide the opportunity for participants to discuss technological development and application of small-scale agricultural machinery manufacturing in Asian countries.

The Congress has invited well-known leaders to share their views in the developments of agricultural and biosystems engineering. In addition, technical tours have been organized, to such notable locations as the Mengniu Production Base, Changyu AFIP Chateau and Beijing Organic Food Garden. Optional tours are also available for those who are interested in Chinese historical places and traditional culture, like the Forbidden City, Summer Palace and Hutong rickshaw tour.

The organizing committee has worked hard for the success of the Congress. At the time of writing, the total of online registrations for participating in the Congress is 1803, and 1747 abstracts have already been received. Thus, this will be one of the biggest CIGR events ever. I sincerely hope that members of the CIGR community will continue to give their full support and express my grateful appreciation to all the hard working staff in this Congress for their valuable contributions.

*Prof. Da-Wen Sun  
President of CIGR*

### Special Message From the New Secretary General

The CIGR Secretariat was transferred from Germany to Japan

in 2006. Dr. Takaaki Maekawa was designated as the Secretary General in 2006-2009 while Dr. Toshinori Kimura served in 2010-2013. The two general secretaries excellently performed their duties and responsibilities and managed the CIGR with fairness and transparency during their respective terms. Thus, they have received much-deserved appreciation and recognition from the members of the association. The CIGR members have requested that Japan again serve as the CIGR Secretariat for the period 2014-2017.

CIGR activities in Japan are supported by the Science Council of Japan (SJC) and Japanese Association of International Commission of Agricultural and Bioengineering (JAICABE). CIGR Section of SCJ (Chair, Prof. Noboru Noguchi) and JAICABE acknowledged the request of the members that the CIGR Secretariat retained in Japan. Kyoto University was chosen as the headquarters. However, considering the increasing workloads of the active professors in the University, the task was given to the retired professors. Although the latter do not have supporting staff in the office, they have time and ample knowledge to carry out the functions of the Secretariat.

Considering the involvement of Prof. Emeritus Mikio Umeda in the association for a long time particularly in Section IV, he was nominated as the Secretary General of CIGR. He was elected to the Secretary General at the General Assembly of Conference 2012 in Valencia

He designated Prof. Emeritus Makoto Hoki as the Assistant to the Secretary General. Prof. Hoki had worked at the International Rice Research Institute (IRRI) in the Philippines and later obtained his PhD at Michigan State University. He also served as the President of the AAAE and a member of the CIGR Executive Board in the early 2000.

On the other hand, Engr. Peachie B. Melendez, the current treasurer of the Philippine Society of Agricultural Engineers (PSAE), is selected as the CIGR Secretary who is tasked to work as an English oriented secretary. She is also responsible for the membership invoices and newsletters.

Furthermore, a retired private firm accountant in the person of Ms. Ikuyo Watanabe has been designated as the Assistant to the Treasurer. She will be in charge of the CIGR's practical businesses.

The System and WEB management is an indispensable service of CIGR which has been entrusted to Dr. Masahiko Suguri at Kyoto University.

In addition to these five CIGR personnel dealing with practical matters, Prof. Naoshi Kondo (Newsletter), Prof. Hiroshi Shimizu (Accounting) and Prof. Michihisa Iida (Information), who are active members of the faculties at Kyoto University, will be supporting the secretariat for total checking of CIGR matters.

Rice production in the Asian Monsoon region is now entering a developing stage of agricultural mechanization. Before long,

the mechanization of agriculture in Africa is also foreseen. The importance of Agricultural and Biosystems Engineering is increasing all over the world, not only for the upland farms in the western countries, but also for the diversified farms in Asia and Africa. It will be a great pleasure to take over the secretariat, particularly at the present when the role of the CIGR is becoming even more significant.



Members of the New Secretariat of CIGR  
Front from left, Prof. Hoki, Prof. Umeda, Prof. Kondo  
Back from left, Dr. Suguri, Prof. Iida, Ms. Watanabe  
Top from left, Prof. Shimizu, Engr. Melendez

Your cooperation and assistance will be highly appreciated.

*Prof. Mikio Umeda  
Secretary General of CIGR*

## Science Council of Japan (SCJ) welcomes CIGR President at headquarters in Tokyo

CIGR President Prof. Da-Wen Sun recently attended the "CIGR Round-table Meeting" which was sponsored by the SCJ on 12 May, 2014 in Tokyo, Japan. During the meeting, the council members clarified the role of the CIGR and emphasized the importance of a mutual partnership in the future.



Front, President of CIGR Prof. Da-Wen Sun and  
Vice-President of SCJ Dr. Fumiko Kasuga

SCJ Vice-President Dr. Fumiko Kasuga presented their CIGR-related activities and future prospects. Director General Mr. Kazuya Taguchi, SCJ Deputy Director General Shinya Iijima and Director Mr. Masakazu Sato also discussed the various aspects of the CIGR activities in Japan.

Prof. Da-Wen Sun was accompanied by Secretary General Prof. Mikio Umeda, EB member Mr. Yoshisuke Kisida, Auditor Prof. Taichi Maki, and Prof. Noburu Noguchi

## Press Conference for 18<sup>th</sup> World Congress of CIGR held in Beijing, China



The Press Conference for the 18th World Congress of CIGR was held in Beijing, China on May 17, 2014. Prof. Da-Wen SUN, Chair of Organizing Committee, and Scientific Committee of the 18th World Congress of CIGR, CIGR President (2013-2014), Academician Xiwen LUO, Chair of Organizing Committee, and Scientific Committee of the 18th World Congress of CIGR (Academician of Chinese Academy of Engineering), Prof. Shujun LI, Chair of Organizing Committee, and Scientific Committee of the 18th World Congress of CIGR (President of Chinese Academy of Agricultural Mechanization Sciences), Prof. Ming ZHU, Chair of Organizing Committee, and Scientific Committee of the 18th World Congress of CIGR (President of Chinese Academy of Agricultural Engineering) and Prof. Lujia HAN, Dean of College of Engineering, China Agricultural University attended the conference, made addresses and answered the questions from 19 media agencies, including the Xinhua News Agency, "People's Daily", CCTV as well as three Internet media.

Prof. Lanfang ZHANG, the Editor-in-Chief of the CIGR Journal chaired the conference.

CIGR President, Prof. Da-Wen Sun introduced the CIGR:

- CIGR is the largest and highest international commission in the field of agricultural and biosystems engineering.
- The main tasks of CIGR are to simulate the development of science and technology in the field of Agricultural and Biosystems Engineering, encourage education, training and mobility of young professionals, and strengthen the communication and mobility at the national, regional and worldwide level for the people and associations in this field.
- The World Congress is the biggest event sponsored by CIGR, which helps CIGR to implement its main tasks into practice.

Prof. Xiwen Luo briefed the audience on the preparation of the 18<sup>th</sup> World Congress of CIGR. There are 9 sessions with some special sessions in conjunction with the international societies and associations. Total number of online registrations reached 1800 and more than 1700 abstracts submissions. World famous scientists are invited to be the congress plenary keynote and session plenary keynote speakers. The 18<sup>th</sup> World Congress of CIGR will surely accelerate the advancement of agriculture and bio-systems engineering and enlarge the international impact of CIGR.

Prof. Shujun LI traced the collaboration history between China

and CIGR. Since 1980s, China has made great efforts in the internationalization of agricultural engineering, actively participated in the academic activities performed by CIGR, successfully hosted the 2004 CIGR International Conference in Beijing and contributed to CIGR Journal by offering volunteer work of editing CIGR Journal papers. All those resulted in the 18<sup>th</sup> World Congress of CIGR coming to China in 2014.

During the Q&A session, many questions related to CIGR, CIGR world congress, agricultural and biosystems engineering as well as the collaboration between the sponsors, organizers were raised.

## 2. NEWS FROM REGIONAL AND NATIONAL SOCIETIES

### Japan holds Round-table Meeting on Current Status and Future Direction of CIGR

For the past 8 years, Japan has served as general secretariat and has it has been decided that it will be serve for the next 4 years (2014-2017). CIGR Section of Science Council of Japan (SCJ) and Japanese Association of International Commission of Agricultural and Bioengineering (JAICABE) have been strongly supporting the CIGR activities in Japan. The Round-table Meeting in Tokyo was held on 12 May, 2014 to further stimulate the activities. CIGR President Prof. Da-Wen Sun and the representatives were invited from the following societies JSIDRE, JSAM, SAMJ, JSFWR, SASJ, JAAE, ARP, SEE, JSAI and JSABEES. Historical aspects, recent activities and future direction of CIGR were addressed by the invited speakers according to the program given below. Constructive opinions were exchanged at the discussion which yielded fruitful results.

Opening address: Prof. Noboru Noguchi (Chair, CIGR Section of SCJ)

#### I Speech

**CIGR Current Status and Future Direction:** Prof. Da-Wen Sun (President of CIGR)

History of CIGR like former Presidents, Secretary General, Activities of 7 Sections and Working group, Past Congress including 18<sup>th</sup> Congress 2014 in Beijing, also CIGR Journal and Awards were explained.

**History of CIGR in Japan:** Prof. Yasushi Hashimoto (Honorary Chair of Section VII)

**CIGR and JAICABE-CIGR Symposium 2011:** Prof. Taichi Maki (Auditor)

**CIGR and International Contribution:** Mr. Yoshisuke Kishida (Co-optd Asian Countries and Public Relation)

**The Role of CIGR Secretariat:** Prof. Toshinori Kimura (Former Secretary General)

**II Discussion for Stimulation of Activities of CIGR** (Chaired, Prof. N. Noguchi)

Closing address: Prof. Mikio Umeda (Secretary General)



Round-table Meeting at SCJ in Tokyo

### ASABE and CSBE Joint 2014 Annual International Meeting in Montreal, Canada

The American Society of Agricultural and Biological Engineers (ASABE) and the Canadian Society for Bioengineering (CSBE/SCGAB) are holding their joint 2014 Annual International Meeting in Montreal, Canada from July 13<sup>th</sup> through 16<sup>th</sup>. There will be more than one thousand oral and poster presentations, as well as committee meetings and other networking opportunities. Sergio Marchionne, the CEO of Fiat and Chrysler and the Chairman of CNH, will give a keynote address. CIGR members may be especially interested in the special Global Engagement Day on July 15<sup>th</sup> when leading experts will examine the grand challenges facing humanity in food security, water security, energy security, sustainability, and climate change. The 2015 and 2016 Annual International Meetings will be held in New Orleans and Orlando respectively.



## AgEng2014 will be held in Zurich, Switzerland between 6-10<sup>th</sup> July

### EurAgEng with VDI-MEG in the Land.Technik-AgEng conferences 2015 in Hannover, Germany

Agricultural engineers from Europe and elsewhere are looking forward to AgEng2014 which will be held in Zurich, Switzerland from 6-10<sup>th</sup> July. It will be a great opportunity to hear about the latest ideas and research in Agricultural Engineering as well as to network with colleagues old and new. The AgEng conferences have grown in size and scope over the years since the first one was held in Cambridge, UK in 1984. At the last event in Valencia in 2012, hosted jointly with CIGR, there were over 1000 attendees.

EurAgEng also cooperates closely with VDI-MEG in the Land.Technik-AgEng conferences, held in the alternate years to AgEng and immediately before Agritechnica (November 2015 is the next one) in Hannover, Germany. These conferences too have grown in recent years and attract many participants involved with agricultural engineering, especially

the Power and Machinery sector.

Similar to CIGR, EurAgEng is run by a Council of representatives from its member countries. They elect an Executive Committee whose members serve a four year term. Each president serves for two years and of course the immediate past president and president elect have important roles in the organisation. AgEng Zurich 2014 will see the hand over Presidency hand over from Robert Kaufmann of Agroscope, Tänikon, Switzerland to Emmanuel Hugo, who is Head of Technologies and Information Systems at IRSTEA, France and is also an active CIGR member.

*Emmanuel Hugo* at Land.Technik AgEng 2013 in Hannover.



You can find out more about EurAgEng and keep up to date with events in Europe by visiting the website [www.eurageng.eu/events](http://www.eurageng.eu/events) or contact the Secretary General, David Tinker [secgen@eurageng.eu](mailto:secgen@eurageng.eu)

## 3. CIGR SPONSORED ACTIVITIES

### Plant Factory Conference 2014 rescheduled to 10-12 November, 2014

The CIGR sponsored event Plant Factory Conference 2014 in will be held at Clock Tower Centennial Hall, Kyoto University

Japan.

Conference Date has been changed to 10-12, November from 12-14, November. Other dates are not changed. Please see CIGR Homepage for details.

## 4. PUBLICATIONS

### Agricultural Engineering International The CIGR Journal Prof. ZHANG Lanfang, Editor-in-Chief ISSN 1682-1130

Submit manuscripts for peer review to [www.CIGRjournal.org](http://www.CIGRjournal.org)

In January 1<sup>st</sup>, 2012, I accepted the assignment as the Editor-in-Chief of CIGR Journal with a deep respect for this voluntary work, but also with the knowledge that it is a great challenge for our colleagues to continually improve the Journal. As part of efforts to promote the CIGR Journal both in quantity and quality, new Section Editors and reviewers



Prof. Lanfang Zhang

were assigned, and a proposal to reward 6 Section Editors and more than 20 active reviewers in recognition of their hard-work was recently sent to the Chair of CIGR Award Committee. In addition, my goal is to work closely with the CIGR Presidium members and Section Editors during my term. A routine Skype meeting between Past President Prof. Fedro Zazueta and Editor-in-Chief of CIGR Journal has also been developed.

Since the implementation of Open Journal System (OJS) by the CIGR Journal, the numbers of manuscript submissions and

registered users continue to increase. The table below shows the statistics for the CIGR Journal from June 1<sup>st</sup>, 2013 to May 31<sup>th</sup>, 2014 using OJS. With the increasing number of submissions, improving the quality of the papers to be published is the primary goal of the Journal. The authors, reviewers and Section Editors are ones responsible.

**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 June 1<sup>st</sup>, 2013 to May 31<sup>th</sup>, 2014, 299 manuscripts have been submitted, representing nearly 25 submissions per month on average. The average time to complete the review process and publish a manuscript is more than 90 days. Among the said submissions, 45.8% have been peer reviewed and 12.0% are in the review process with some reviewers' comments. More new submissions were accepted by the Section Editors, accounting for 26.1% of the total. Among the 33 manuscripts in editing, 7 of them were submitted before June 1<sup>st</sup>, 2013. Some Section Editors need to make decisions based on reviewers' comments or assign the manuscripts to more reviewers in order to speed up the editorial process. It is also notable that more newly submitted manuscripts were archived before peer reviewing by the Editor-in-Chief, because of their incompatibility with the author's guideline, scope of the CIGR Journal, English level and duplication. It is the Editor-in-Chief's responsibility to filter unqualified manuscripts, sustain and improve the quality of our Journal. During the 12 months surveyed, three issues of CIGR Journal, Vol. 15, No. 2, No. 3

and No. 4; Vol. 16, No. 1 and Special Issue 2014 with 146 manuscripts were published on time. We will continue our endeavor of maintaining the manuscript statistics and prompt communications with Section Editors.

By June 1<sup>st</sup>, 2014, the total number of registered users in CIGR Journal through OJS reached 8752 with 381 new users compared to the statistics accounted last time on May 31<sup>st</sup>, 2013. The total number of registered readers were 7757 with 248 new readers, which 1752 were registered as reviewers with 163 new compared to the database at the end of May, 2013. Also, owing to the incomplete registration information, particularly without clearly indicating the review 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. We appreciate your Journal work and your support. If you have not yet registered in CIGR Journal, please do so by going to the website to register as an author and reviewer.

Right now, there are a total of 142 manuscripts being handled by CIGR Journal is handling, with 33 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 - 2014 Statistics for the CIGR Journal (June 1<sup>st</sup>, 2013–May 31<sup>th</sup>, 2014)

Issues (Vol.15, No. 2, No. 3, No.4, 2013; Vol. 16, No. 1, 2014; Special Issue, 2014)	Published 5 (Vol.15, No. 2, No. 3, No.4; Vol.16, No.1; Special Issue 2014)
Items (Research papers)	31 in Vol.15, No.2 30 in Vol.15, No.3 39 in Vol.15, No.4 37 in Vol.16, No.1 9 in Special Issue 2014
Total new submissions	299
Peer reviewed	137 (45.8%)
Held by Section Editors	49
In review with some review comments	36 (12.0%)
In review without review comments	57 (19.1%)
Accepted as new submissions	78 (26.1%)
Declined as new submissions	129 (43.1%)
Total manuscript in handling	142
Days from submission to complete review	Over 60
Days from submission to publication	Over 90

## 5. MISCELLANEOUS

### Book Review

#### Hermann J. Heege edits: “Precision in Crop Farming – Site Specific Concepts and Sensing Methods: Applications and Results”, Springer 2013

The book aims to show readers that precision farming can substantially help farmers to attain high yields as well as being beneficial to the environment. Likewise, it helps the readers to clearly understand the principles and effects of precision farming. Since GPS was available in the beginning of 1990,

precision agriculture has been studied all over the world. A wide variety of concepts and alternatives have been developed but there have been few textbooks for it. This is considered as a valuable and useful textbook for university students and professors, researcher, engineers and farmers.

The book includes the following contents: Introduction in Capt. 1, Heterogeneity in Fields in Capt. 2, Sensing by Electromagnetic Radiation in Capt. 3, Precision in Guidance of Farm Machinery in Capt. 4, Sensing of Natural Soil Properties, and Crop Properties in Capt. 5 and 6, Site-Specific Soil Cultivation, Sowing, Fertilizing, Weed Control, Sensing for Fungicide Spraying and Recording of Yields in Capt. 7, 8, 9, 10, 11 and 12, Fusions, Overlays and Management Zones in Capt. 13, and Summary and Perspectives in Capt. 14

*Prof. emeritus Mikio Umeda of Kyoto University, Japan*

### CIGR Section Boards (2011-2014)

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

**All correspondence and information on forthcoming activities should be sent to:**

#### CIGR GENERAL SECRETARIAT

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**Professor emeritus Dr. Makoto Hoki, Associate to Secretary General**

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