

International Commission of Agricultural and Biosystems Engineering

CIGR Quarterly Newsletter Quarterly

Newsletter No. 104 June 2015

> Since 1930 85 Years of CIGR

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Commission Internationale du Génie Rural (CIGR)

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

1. CIGR NEWS

Message from the President

If you ask anybody working outside the agricultural industry today to list the most important problems currently solved by agricultural engineering, they will most likely have trouble answering. It would be even harder for a non-farmer to answer the what problems question: await agricultural and biosystems engineers in the future?



Prof. Tadeusz Juliszewski

Information on academic

and practical achievements, both past and present, is unfortunately not being popularised. The concept of "agricultural engineering" in many places over the world is stereotypically reduced to a "tractor and combine harvester". Moreover, little information has been disseminated concerning biosystems engineering as a discipline deriving from agricultural engineering but representing a new range of research and practical applications.

I request all CIGR Members – whenever they pursue their professional and social activities – to popularise agricultural and biosystems engineering. I suggest that they present engineering-related problems that we solved both locally and globally in the past– concerning the production and processing of biological raw materials into food and non-food products. Such coverage should be supplemented with environmental, ergonomic and economic aspects, indicating problems that will solve in the future. The daily press and non-scholarly periodicals should be the main channel for this popularisation.

As the President of CIGR, I will submit a request by mail to the Chairs and Members of CIGR Technical Sections to write articles promoting agricultural and biosystems engineering, for the daily press and popular weekly magazines. However, in my Message, I will ask all CIGR Members all over the globe to take action to promote agricultural and biosystems engineering. I believe that the upcoming autumn (2015), when young people throughout the world start university studies, would be a good time to publish articles for the general public in printed media and the Internet.

During the last meeting of Presidium, Executive Board and Technical Sections in St Petersburg in Russia, in May 2015, we discussed the need to develop another volume of the CIGR handbook. The concept behind volume VII under the working title "Production Engineering of the Non-Food Biological Raw Materials" was accepted. I am currently organizing the team of editors who will determine the scope of this manual and select the authors for individual chapters. The issues covering the engineering of production and processing of plant fibres and animal skins/hides for the cosmetic. clothing industry, raw materials for pharmaceutical industries, and for chemical industry

(vegetable oils, dyes), production of wool, feathers, silk – these are just a few issues which should be presented in the handbook. Writing and publishing such a handbook is an endeavour which will keep us occupied for a couple of years. To gather engineering knowledge on the production and processing of biological raw materials for non-food purposes would be very useful to students in the fields of agricultural and biosystems engineering, as well as to all those who are dealing with the production and processing of biological non-food raw materials. In a subsequent message I will provide further information about the handbook.

Yet another idea that the Presidium Members and I are considering pertains to the ways of utilising the body of scientific and expert knowledge accumulated in our organisation to undertake commercial endeavours such as research projects, expert reports, construction of machinery, designing new production technologies etc. We should take up this idea – repeatedly formulated by our colleague, Mr. Y. Kishida of Japan – and also by other Members of CIGR – with a deep conviction that it is feasible on an international scale. We will still discuss how to practically implement this idea, and any thoughts are therefore welcome by CIGR Presidium. Although CIGR is a non-profit organisation, it does not mean that we may not undertake such joint endeavours in order to support the budget of our organisation.

I would like to thank our colleagues from St Petersburg in Russia, and particularly Professor Vladimir Popov, for their hospitality and the professional preparation of the meetings of the Presidium, Executive Board, and Technical Sections of CIGR. This beautiful town, and its atmosphere of friendly discussions will surely stay in our memories for a long time to come.

Prof. Tadeusz Juliszewski President of CIGR

Message and announcements from the Secretary General

Dear Colleagues,

On behalf of the General Secretariat of CIGR, I would like to announce the status of the CIGR Annual Dues collections as well as the updates of the CIGR business meeting which was held at St. Petersburg, Russia in May 2015.

To date, the number of members with unpaid annual dues are increasing. The General Secretariat would like to request paying their annual dues.



Prof. Mikio Umeda

On the other hand, during the business meeting which was held in St. Petersburg, Russia, the Regional and National Balance of Technical Section (TS) members was discussed.

The CIGR then decided to call for candidates for the TS members until December 31, 2015. However, the candidates should be proposed by the members of each Section. The lists of proposed candidates will be reviewed by the Presidium and the Executive Board. The result will be submitted to the General Assembly during the CIGR Conference 2016 for approval.

The aspirants for the TS membership are also requested to review Section VII, Nr. 1, 3, 4, 5 and 6 of Article 14 of the CIGR Statutes prior to their application.

The CIGR Election 2016 for the next Incoming President and Secretary General will be done during the CIGR Conference 2016. The result will be authrized in the forthcoming General Assembly. Additional information is available at the CIGR website.

Lastly, the General Secretariat often announces the CIGR activities like symposia and conferences. However, we only have a few reports on the CIGR activities conducted. Thus, we are requesting the members to submit their reports on such activities to the General Secretariat.

Best regards

Prof. Mikio Umeda Secretary General of CIGR

Minutes of the 70th Executive Board Meeting

on Monday 25 May 2015, from 15:00 to 18:00 held at the Room 4, Wing 2, Park Inn Pulkovskaya Hotel in St. Petersburg, Russia

In attendance: Tadeusz Juliszewski (President), Shujun Li (Incoming President), Mikio Umeda (Secretary General), ¥Jeff Smithers (South Africa), Can Ertekin (Congress 2018), Lanfang Zhang (CIGR journal), Naiqian Zhang (Auditor)

Observers: Yoshisuke Kishida (Chair of Fund Strategy Committee), Remigio Berruto (Chair of Tech. Section V) and Oleg Marchenko (Former EB member)

Excused: Da-Wen Sun (Past President), Folarin Alonge (ASABE), Vilas M. Slokhe (AAAE), Peter Schuluze Lammers (EurAgEng), Fedro Zazueta (ALIA), Stéphne Godbout (Canada), Adolf Rybka (Czech), D. Jorge de Moura (Brazil), Gajendra Singh (India), Seishi Ninomiya (TB), Thomas Banhazi (WGs), Toshinori Kimura (Cont CIGR), C. Grøn Sørensen (Conference 2016), Stefan Böttinger (Auditor), Eiji Inoue (Auditor)

1. Welcome and Roll Call

The CIGR President welcomed all the participants and thanked them for attending the meeting.

2. Adoption of the Agenda

The agenda was unanimously adopted.

3. Approval of the minutes of the 69th Executive Board Meeting of CIGR

The minutes of the 69th Executive Board Meeting of CIGR was approved as presented.

4. Activity reports from the Presidium members a) The President

The President reported that a total of six Skype meetings had been conducted from November 2014 to May 2015. He also mentioned that the Skype meetings had enabled the Presidium Meeting (PM) to make very efficient discussions for the last six months.

- Election for next Incoming President and next Secretary General

The announcement for call for candidate for next Incoming President and next Secretary General have been already uploaded into the CIGR website. The deadline for filing of applications is on 31 December 2015

- iAABE

The President postponed on iAABE which was proposed by Past President, Prof. Da-Wen Sun, to the next EB meeting in Arhus, Denmark in 2016 since the proponent was absent.

- CIGR Handbook VII – Production Engineering for Non-Food Biological Raw Materials

The President proposed to develop another volume of CIGR Handbook with a working title "Production Engineering of the Non-Food Biological Raw Materials." The EB approved the said proposal. Thus, the CIGR President, Former President Fedro Zazueta and Editor-in-Chief Lanfang Zhang will discuss the composition of the editors who will determine the scope of this manual and select the authors for individual chapters.

b) The General Secretariat

The GS had uploaded the following in CIGR website:

- CIGR Newsletters, No. 102 and No. 103
- Call for the next Incoming President and next Secretary General
- Statutes on iAABE

5. Accounts and Budgets

Prof. Naiqian Zhang, representative of three CIGR Auditors, reported that the three auditors had already approved the auditing results of the balance and the budget from 1 January to 31 December, 2014. Likewise, the proposed 2016 budget by SG was approved by the EB without any corrections.

6. CIGR Bodies

a) National and Regional Member Societies

The exchange of opinions for individual members and non-paid National Societies

b) Technical Sections & Working Groups

- Report on the activities of the Working Groups
The SG was instructed to request Dr. Thomas Ba

The SG was instructed to request Dr. Thomas Banhasi, EB member Working Groups in-charge, to report on the activities of the Working Groups.

7. CIGR Information and Communication System a) CIGR Journal

Prof. Lanfang Zhang, Editor-in-Chief, reported the activities. The report was published at 4. Publication in this Newsletter 104.

8. CIGR Congresses and Conferences

Prof. Can Ertekin presented the status of preparations for the XXXI CIGR World Congress 2018 by using PPT.

9. Miscellaneous

a) Activities of Fund Strategy Committee

Mr. Yoshisuke Kishida reported on the activities of the committee from 2014 to date.

10. Candidate events for next CIGR business meetings, EB and General Assembly

- The 4th CIGR International Conference 2016, 26-29 June 2016, Aarhus, Denmark

The meeting was ended at 18:30.

Reported by Secretary General Mikio Umeda

CIGR World Congresses and International Conferences, 2016–2020

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

The CIGR and EurAgEng (European Society of Agricultural Engineering) will be jointly spearheading the conduct of the 4th CIGR International Conference – AgEng Conference 2016 – Automation, Environment and Food Safety which will be co-sponsored by the NJF (Nordic Association of Agricultural Scientists) and Aarhus University.

The conference will be held at University of Aarhus on 26-29 June. 2016.

Program overview

Saturday June 25: CIGR and AgEng Presidium and executive meetings

26 June 26 (Sun): CIGR technical meetings. Registration.

27 June 27 (Mon): Opening session, technical sessions, welcome reception at the Town Hall

28 June (Tue): Technical sessions, Awards ceremony, Conference dinner

29 June (Wed): Technical sessions, closing ceremony

30 June (Thu): Technical tours

General topics

Ask for Special parallel conferences

AP: Animal Production Technology

ED: Education and Curricula

EN: Energy, biomass and biological residues

ES: Ergonomics, Safety and Health

IT: Information Technology, Automation and Precision Farming

PF: Post Harvest, Food and Process Engineering

PM: Power and Machinery RD: Rural Development

SE: Structures and Environmental Technologies

SW: Soil and Water Engineering

PhD courses, pre and post Program your own drone Controlled traffic farming Autonomous vehicles and safety CFD modelling and climate control Biorefinery Biogas production Field Robotic Event Operations management

Important dates

1 Jan. 2016: On-line registration opens 1 Jan. 2016: Abstract submission opens 29 Feb. 2016: Abstract submission deadline

15 Apr. 2016: Notification of oral and paper acceptance

30 Apr. 2016: Early bird registration deadline 31 May 2016: Full paper submission deadline.

Please see in detail

http://conferences.au.dk/cigr-2016/

The preparation for the conduct for the said conferences is on-going. Likewise, the Organizing Committee is currently leading the preliminary preparations.

For inquiries, you may send an email to the following heads of the Committee:

President of the conference: Prof. Morten Dam Rasmussen at Aarhus University

Email: mdr@ eng.au.dk

Chair of the scientific committee: Dr. Claus Grøn Sørensen

at Aarhus University

Email: claus.soerensen@eng.au.dk

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

During the 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.

The Organizing Committee is already preparing for the conduct of the said event.

For queries, you may send an email to Prof. Can Ertekin of Akdeniz University in this email address ertekin@akdeniz.edu.tr.

The 5th CIGR International Conference 2020

Integrating Agriculture and Society through Engineering 14-17 June 2020, Quebec, Canada

During the CIGR General Assembly in Beijing, China on 17 September 2014, Quebec was approved to host the 5th CIGR International Conference.

The Conference will be held on 14-17 June, 2020 in Quebec, Canada.

Program overview

14 June (Sun): Registration and welcome reception

15 June (Mon): Opening ceremony, Technical sessions and

Cruise on the St.-Lawrence River

16 June (Tue): Plenary session, Technical sessions and

CIGR Awards Ceremony

17 June (Wed): Technical sessions and closing ceremony

Congress venue: The Quebec Convention Centre

For queries, you may send an email to the Organizer and/or Local Committee Chair at the following email addresses: stephane.godbout@irda.qc.ca

2. NEWS FROM REGIONAL AND NATIONAL SOCIETIES

American Society of Agricultural and Biological Engineers (ASABE)

Mr. Yoshisuke Kishida (Chair of CIGR Fund Strategy Committee) was selected as a 2015 ASABE Fellow and in which was recently honored during the ASABE Annual International Meeting held in New Orleans, July 26-29, 2015. The Fellows Ceremony and induction as an ASABE Fellow occurred on Mon. July 27 at the Marriott Hotel in New Orleans.

To obtain news release information, please access the following ASABE News and Public Affairs the website link

 <u>http://www.asabe.org/news-public-affairs.aspx</u> and under Recent News on that page,

Carol L. Flautt Awards Administrator ASABE 2950 Niles Road St. Joseph, MI 49085-9659

Phone: (269) 932-7036 Email: flautt@asabe.org



3. NEWS FROM SECTIONS AND WORKING GROUPS

9th CIGR Section VI International Symposium Greating Value from Bioresorces through Novel Technologies 16-20 November 2015, Ackland New Zealand

This Symposium creates a meeting place for agricultural and biosystem scientists, engineers and associated professionals from across the globe.

It will highlight recent scientific and technological advances in creating high value bioresources and consumer products using successful examples drawn from New Zealand, Australia and Oceania.

Key themes are novel research approaches and innovative engineering solutions for increasing sustainable production, improving nutritional quality raw materials and foods, thereby adding value while enhancing human wellbeing and environmental benefits.

Venue: The Symposium will be held at Massey University, Albany Campus, Auckland, New Zealand.

For more information, please visit: www.cigrVI.com.

Report on XXXVI CIOSTA & CIGR Section V Conference 2015 Environmentaly Firendly Agricutural and

Forestry for Future Generations 26-28 May, 2015, St. Petersburg, Russia

The 36th CIOSTA & CIGR Section V Conference was held on 26-28 May 2015 in Park Inn by Radison,, Pulkovskaya Hotel in St. Petersburg, Russia.

240 participants from 29 countries in particular 60 from China and 40 from Turkey attended the Conference. It consisted of Plenary Session and eleven Topic Sessions covering all the broad subject-areas that fall under the scope of Agricultural, Biological and Forest Engineering. At the Opening of the conference Prof. Vladimir Popov, President of CIOSTA 2015, Prof. Tadeusz Juliszewski, President of CIGR addressed. At the plenary session Prof. Yury Lachuga from Russian Academy of Science "Energy and ecological assessment of agroecosystems in livestock production". Prof. Dionysis Bochtis from Denmark "Planning: the missing link for knowledge based agricultural production system" and Prof Berruto Remigo

from Italy gave lectures. At eleven topic sessions 146 oral and 50 poster were presented.

Next CIOSTA & CIGR Section V Conference 2017 will be held at University of Palermo, Sicily, Italy.

4. CIGR SUPPORTED ACTIVITIES

Sixth International Conference on Energy Efficiency and Agricultural Engineering

Organized by Bulgarian National Society of Agricultural Engineers with the support of CIGR Section IV, EurAgEng

(Special Interest Group 23), Union of Scientists-Ruse, Federation of the Scientific Technical Unions Ruse, and University of Ruse Angel Kanchev

more information, please visit: http://eeae-conf.uni-ruse.bg

5. PUBLICATIONS

CIGR Journal Report (Sept. 1, 2014- May 5, 2015)

This report will summarize CIGR Journal work from Sept. 1, 2014 to May 5, 2015.

Total submission is 244 manuscripts, including 64 papers submitted to the 18th World Congress of CIGR. Plus 130 papers submitted before, so the total handled paper from Sept. 1, 2014 to May 5, 2015 is more than 270.



Prof. Lanfang Zhang

Three (3) issues published by the end of December 2014, by the end of March 2015 and by the end of April 2015 (Special Issue of the 18th World Congress of CIGR). The number total of the published papers is 108,

Right now 108 papers are in reviewing and 35 are in editing.

1. Section distribution of CIGR Journal manuscripts

Section distribution of total submissions

Technical Sections	Number of submission	Percentage
I-Land and Water Engineering	25	10%
II-Farm Buildings and Construction	22	9%
III-Equipment Engineering for Plant Production	48	19.7%
IV-Energy in Agriculture	39	15.9%
V-Management, Ergonomics and Systems Engineering	21	8.6%
VI-Postharvest Technology and Processing Engineering	81	33%
VII-Information Systems	10	4%
Total	244	100.2%

2. Country and continent distribution of CIGR Journal manuscripts

The authors of 244 manuscripts are from 43 countries of: Iran, Nigeria, India, Germany, Korea, Egypt, China, Italy, Brazil, Japan,

Bangladesh, Turkey, Slovakia, Denmark, Mongolia, USA, Czech, Australia, Netherlands, Ghana, Kenya, Ethiopia, Peru, Ireland, Sudan,

Mali, France, Pakistani, Malaysia, Greece, Sweden, Puerto Rico, Mexico, Thailand, UK, Indonesia, Spain, Canada, Bulgaria, UAE(United Arab Emirates), Hungary, Argentina and the Philippines.

Top 16 counties with papers submissions

No.	Countries	Number of submission	Percentage
1.	Iran	53	21.7%
2.	Nigeria	42	17.2%
3.	India	34	13.9%
4.	Germany	8	3.3%
5.	Korea	8	3.3%
6.	Egypt	7	2.9%
7.	China	6	2.5%
8.	Italy	6	2.5%
9.	Brazil	6	2.5%
10.	Japan	6	2.5%
11.	Bangladesh	6	2.5%
12.	Turkey	6	2.5%
13.	Slovakia	6	2.5%
14.	Denmark	5	2%
15.	Mongolia	5	2%
16.	USA	5	2%

Continent distribution of total submissions

Continent	Country numbers	Submissions	Percentage in submission
Asia	14	132	54.1%
Africa	7	57	23.4%
Europe	14	40	16.4%
North America	4	8	3.3%
South America	3	8	3.3%
Oceania	1	3	1.2%
Total	43	248*	101.7%

^{*}Remarks: 4 papers were written by the authors from two or three countries

Characteristics of CIGR Journal submissions in country distribution:

- 1) First three countries (Iran, Nigeria and India) take up 52.9% of the total submissions;
- 2) Authors from Asian countries submitted the most manuscripts, which take up 54.1% of the total submission;
- 3) There are 68 manuscripts submitted by authors from 19 developed countries, taking up 27.86% of the total submissions, 176 manuscripts submitted by the authors from 24 developing countries, taking up 72.13%

3. Status of CIGR Journal submissions from Sept.1 2014 to May 5, 2015

Status of submissions

Status of submission	Number of submissions	Percentage
Published	67	27.5%
Archived	75	30.7%
In editing	24	9.8%
In review	78	32%
Total	244	100%

4. Statistics of CIGR Journal published from Sept.1 2014 to May 5, 2015

Three issues were published from Sept. 1, 2014 to May 5, 2015, they are Vol.16 No.4, Vol.17, No.1 and Special Issue of the 18th World Congress of CIGR, the details are shown as the follows.

4.1 Vol.16, No. 4

Totally 32 papers were published with the total pages of 308

Technical Sections	Number of published manuscripts	Percentage
I-Land and Water Engineering	4	12.5%
II-Farm Buildings and Construction	0	0%
III-Equipment Engineering for Plant Production	10	31.3%
IV-Energy in Agriculture	5	15.6%
V-Management, Ergonomics and Systems Engineering	2	6.3%
VI-Postharvest Technology and Processing Engineering	10	31.3%
VII-Information Systems	1	3.13%
Total	32	100%

4.2 Vol. 17. No.1

Totally 34 papers were published with the total pages of 305

Technical Sections	Number of published manuscripts	Percentage
I-Land and Water Engineering	0	0%
II-Farm Buildings and Construction	0	0%
III-Equipment Engineering for Plant Production	11	32.4%
IV-Energy in Agriculture	3	8.8%
V-Management, Ergonomics and Systems Engineering	5	14.7%
VI-Postharvest Technology and Processing Engineering	15	44%
VII-Information Systems	0	0%
Total	34	99.9%

4.3 Special Issue: The 18th World Congress of CIGR

Totally 42 papers were published with the total pages of 335

Technical Sections	Number of published manuscripts	Percentage
I-Land and Water Engineering	2	4.8%
II-Farm Buildings and Construction	11	26.2%
III-Equipment Engineering for Plant Production	5	11.9%
IV-Energy in Agriculture	12	28.6%
V-Management, Ergonomics and Systems Engineering	1	2.4%
VI-Postharvest Technology and Processing Engineering	8	19%
VII-Information Systems	3	7%
Total	42	99.9%

5. Present Status of CIGR Journal

(1) 108 manuscripts are in reviewing

Manuscripts in Review

Manuscripts in Review		
Technical Sections	Number of manuscripts	Number of papers AE handling
I-Land and Water Engineering	16	JMMG: 10 papers RSF: 6 papers
II-Farm Buildings and Construction	3	AJA,PPAP,ARG,PT: 3 papers
III-Equipment Engineering for Plant Production	15	SM: 4 papers SK: 5 papers LL: 3 papers A.A.A: 3 papers
IV-Energy in Agriculture	8	SM: 6 papers LL: 2 papers
V-Management, Ergonomics and Systems Engineering	9	RD:5 papers MC: 4 papers
VI-Postharvest Technology and Processing Engineering	54	GZs:37 papers GFK: 9 papers ZLF: 7 papers LB: 1 paper
VII-Information Systems	3	PB:1 paper YW:1 paper FSZ: 1 paper
Total	108	

(2) 35 manuscripts are in editing

Manuscripts in Editing

Technical Sections	Number of manuscripts
I-Land and Water Engineering	1
II-Farm Buildings and Construction	2
III-Equipment Engineering for Plant Production	7
IV-Energy in Agriculture	6
V-Management, Ergonomics and Systems Engineering	2
VI-Postharvest Technology and Processing Engineering	13
VII-Information Systems	4
Total	35

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

CIGR Section Boards (2015-2018)		
Section I:	Land and Water	Chair: Gerrit J. Carsjens (Netherland)
Section II:	Structures and Environment	Chair: Eberhard Hartung (Germany)
Section III:	Plant Production	Chair:Qin Zhang(USA)
Section IV:	Energy in Agriculture	Chair: R.Cengiz Akdeniz (Turkey)
Section V:	System Management	Chair: Remigio Berruto (Italy)
Section VI:	Bioprocesses	Chair: Amauri Rosenthal (Brasil)
Section VII:	Information Technology	Chair: Seishi Ninomiya (Japan)

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

Professor emeritus Dr. Mikio Umeda, Secretary General Professor emeritus Dr. Makoto Hoki, Assistant to Secretary General

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