

Newsletter N° 73
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CIGR NEWS

From Germany to Japan: the CIGR General Secretariat on the Move

Looking Ahead and Back

The year 2006 starts with a great change for CIGR: the General Secretariat is moving from Bonn, Germany, to Tsukuba, Japan, and the Secretary-General Prof. Dr. Peter Schulze Lammers passes his responsibilities on to another colleague and friend, Prof. Dr. Takaaki Maekawa. This is the last Newsletter produced in Bonn. It is thus time for thanks and for wishes.

Peter Schulze Lammers has been Secretary-General for eight years. This is an enormous achievement because he fulfilled this responsibility in addition to all his other tasks, often quite heavy, of teaching and research as a professor of the University of Bonn. From my limited experience as President I know that sometimes it is very difficult to find an appropriate balance between one's academic responsibilities and the requirements of our Society. Peter succeeded very well in this. It is not easy to have the Newsletter published regularly and distributed worldwide, to keep the website updated, to maintain appropriate correspondence with all member societies and working bodies of the CIGR, to keep the financial situation of the society in good order, to perform one's tasks as a member of the Presidium and, last but not least, to be deeply involved in the organization of the World Congress 2006, but Peter did it all on a voluntary basis! Hence, it is my duty and my pleasure to thank Peter in the name of CIGR and its members and in my own name for all he has given to CIGR; and it is a great pleasure to congratulate him on the excellent performance he achieved! Another reason to congratulate him, and another reason why CIGR is deeply indebted to him is that Peter is good at finding and managing good collaborators, such as Frauke Beeken and Ludger Tolksdorf, who supported him in the CIGR General Secretariat. Frauke Beeken was a true, devoted and pleasant Secretary of CIGR. Peter's collaborators will remain active for CIGR, particularly working for the Congress, but at this moment they also deserve sincere thanks, warm congratulations, and hopeful wishes for their professional activities in the future.

The Secretariat General was supported by the German government throughout the last eight years, making it possible to keep the CIGR fees very low compared with similar societies or even regional and national societies. Moreover, making it possible to extend the benefits of our society to many professionals around the world, this support has also been a sign of solidarity from a wealthy country to many unknown individuals around the world. To acknowledge this support in name of CIGR and all members is not only my duty but my great pleasure. Thanks



Prof. Luis Santos Pereira

in particular to Dr. Volker Niklahs at the Federal Ministry of Consumer Protection, Food and Agriculture, for spearheading this support.

The Science Council of Japan and the Japanese Society for Agricultural Engineering are now taking over the General Secretariat of CIGR. This is another highly welcome gift to all member societies and to many professionals around the world. It constitutes a guaranty of the continuity of CIGR and the services that our society offers and intends to increase in the future. It is with great hope that, in name of CIGR, its members and myself, I thank our General Secretariat for this support. Thanks are also due to Prof. Osamu Kitani his efforts in finding a new General Secretariat.

The new Secretary-General is Prof. Dr. Takaaki Maekawa. He knows what challenges he has to face, performing his task after other excellent Secretary-Generals before him. His academic career is a guaranty of quality and of his devotion to accomplishing his responsibilities with excellence and friendship. On the occasion of his assuming his new duties, we warmly welcome him and wish him all the best for the future. In the name of CIGR, its members worldwide and myself, I thank him and congratulate him on accepting this challenging duty and offer him the best collaboration.

The installation of the General Secretariat at Tsukuba this spring will be the occasion for a ceremonial event and a symposium, to be held on 27 March, as announced in this Newsletter. We welcome all of you who are planning to participate and be present in honour of those who have served and those who will serve CIGR.

*Luis Santos Pereira
CIGR President 2005-2006*

An Overview of Eight Years as Secretary-General in Bonn

CIGR is the association of regional and national societies in Agricultural Engineering. The members being organizations rather than individuals, the tasks of the General Secretariat in managing the organisation differ greatly from the administration of the member societies of CIGR. Services are oriented at supporting the member organizations. For many individuals who want to join CIGR as the world society in agricultural engineering, this constellation is unknown and unexpected: they are members of CIGR as soon as their national societies join CIGR. The Secretariat has often been asked about this, and societies applying for CIGR membership as well as long-time members have inquired about the benefits of CIGR membership and about how the membership fees are used to benefit the national societies and their members. Apart from being the wrong question from professionals who are

part of a world community, the people asking should already know the answer because they must have an interest in being represented in their profession on as wide a scale as possible. CIGR is a platform for members from all over the world to develop their ideas and activities. This type of question, however, reflects people's expectations about the responsibilities and the role of the CIGR Secretary-General.

Membership is a key issue in managing CIGR, and over the last eight years CIGR has been highly successful in this respect. The number of regional and national member societies has risen to more than 90. Thus, CIGR may be said to have grown much stronger as a world organisation, linking many more professionals in the international community. Unfortunately, this increase in membership is reflected mainly in higher expenses for services and less so in increased income from membership fees. In part, this trend has been balanced by savings, but we must be aware that in the future the financial basis of CIGR has to be consolidated, which requires timely and full payment of membership fees.



Prof. P. Schulze Lammers

Financially speaking, the development of CIGR in the past eight years has been successful. Prof. Daelemans, my predecessor as Secretary-General, was confronted with negative balances. In the eight years of my term, there was always a surplus which was deposited to earn interests, which now account for about 10 % of the total income of CIGR. The balanced budget and the earning surplus was a question of saving expenses for printing and shipping the *Newsletter*, of frequent reminders to members to pay their membership fees, and of generally being miserly with expenses.

Milestones in the Past Eight Years

Developed and promoted by Dr. Theo Friedrich of FAO, the CIGR-FAO Global Network was set up and introduced as a new membership service for communication. Structured in analogy to the Technical Sections of CIGR, the mail group system enables fast communication between board members and other interested professionals. FAO keeps the installation operable on its computer facilities.

The *CIGR Handbook of Agricultural Engineering*, was launched, edited by Prof Kitani. The volumes were printed by ASAE. With more than 1500 sales (complete series, individual volumes and CDs) and some volumes of the first edition out of stock, it has become the best-sold book among the publications of ASAE. The royalties were used to present free copies to 36 libraries in the world to make the handbook accessible for students and research staff.

The development of the *Newsletter* can be related to an expanding readership. The French version, supplied by the French member society, has been translated by Mrs. Manchon, whom I thank for her prompt and reliable collaboration, which has been a strong support for the General Secretariat. In the last few years, translations into Chinese and Arabic were organized thanks to the efforts of Dr. Renji Dong and Prof. Bartali, who spearheaded this expansion of the services of CIGR.

The *CIGR E-Journal* is another milestone and a real success story. Prof. Stout originally came up with the idea of an electronic journal, and I remember that at the beginning of my term he had a tough job convincing presidium to support him at a time when e-journals were virtually unknown in the AgEng community and the idea met with incomprehension. Now the CIGR E-Journal is generally agreed to be a major medium for CIGR, offering members a journal that is easy to access and free of charge and with a high level of quality as a result of peer-reviewing by CIGR members.

The technical expertise of CIGR originates in the Technical Sections representing the professional and vocational activities of agricultural engineers. Communication between the Technical Sections and the General Secretariat and the contributions of the Sections to CIGR have for the most part been less than satisfying. Only some Sections have been really active, and I am very grateful to them because they keep CIGR alive as a society that deserves a strong reputation in research and engineering. Others, failing drastically to fulfil their commitments, have been an obstacle to the development of CIGR as a professional organisation. While pointing out these deficiencies, I also wish to emphasize that only a few people around the world are really capable of successfully running a Technical Section with worldwide activities despite tight schedules and limited travel funds. Moreover, managing an international Section is much more demanding than managing a national or regional one because there are no traditional structures such as exist in national associations with their well-organized working groups and task forces. Therefore, President Pereira has newly defined the tasks of the sections with a clarity that the statutes of CIGR previously lacked.

An unexpected support in handling the increasing demands of administration emerged with the development of modern communication technologies such as the world wide web and e-mail for communication and document exchange. The ability to contact organisations and individuals all over the world virtually without delay is a great support for a world organisation such as CIGR.

In my term of office CIGR was governed by presidents who represented different parts of the world, and we have succeeded in continuing this trend by agreeing on an Incoming President from South America. The presidents have not only strengthened the relations of CIGR to their home societies, but they have also extended the CIGR network in their respective regions or even continents. Thus, over the last eight years CIGR has reached its greatest expansion ever.

CIGR is the world society of agricultural engineering: as I experienced many times during my term as Secretary-General, many member societies and individuals want a strong representation of their profession, and they want CIGR to be recognized as a world scientific and professional community. This underlines that agricultural engineering is seen as a world profession, and this fact is confirmed by many individuals who offered their respect to me as the General Secretary of CIGR. This was a great honour for me and for CIGR, and it should be a supreme motivation for future General Secretaries and Presidents in shouldering the task of running CIGR and the General

Secretariat as headquarters.

At the end of my term I would like to thank the Presidents who governed CIGR in these years. All of them strengthened CIGR with their enthusiasm, with their initiative, and by cooperating with the General Secretariat rather than ruling it. I appreciated this cooperation highly and it was a great motivation for spending a lot of time and energy for CIGR.

My thanks also go to the two persons working in the Secretariat. Ms Beeken ran the office in all details with great patience and with diplomatic reactions to communications that were sometimes surprising and sometimes disappointing and to a few rather demanding requests. Mr Tolksdorf edited the CIGR Newsletter and improved articles submitted for the Newsletter and of some of our correspondence.

Acknowledgment is also due to the German Federal Ministry of Consumer Protection, Food and Agriculture for supporting the CIGR Secretariat for all of eight years. This support was the basis for running the Secretariat with professional staff. Dr Niklahs was a constant supporter of CIGR, and he helped conveying the importance of CIGR to the Ministry. I am fully convinced that the professional organisation of the General Secretariat in Bonn, which was only possible with the financial support of the Ministry, was noticed by everybody working with and contacting CIGR and has earned CIGR respect as a worldwide organization.

The outlook for CIGR focuses on developing the society as a community with expertise and competence in technology. Being part of agricultural production both in industrialized and non-industrialized economies, technology is a precondition for a sustainable food supply for the entire world population. CIGR and its member societies need to define the role of technology and the related targets for the future. The core activities in agricultural engineering are not restricted to mechanization, they also include technological issues, which are quite well covered by the Technical Sections of CIGR. The challenge to develop a clear definition of the core tasks of engineering in food production must be seen as an ongoing task, and it is a

shortfall of CIGR that we have so far failed to define an appealing profile for CIGR. I agree with Honorary President B. Stout, who keeps emphasizing that engineers need to talk about the importance of their profession and about their contributions to the economy and to general welfare. CIGR is the organisation which enables individuals and societies to act in this spirit and to promote our profession.

*Peter Schulze Lammers
CIGR General Secretary, 1998 to 2005*

The New CIGR Secretary-General: Prof. Takaaki Maekawa

On 1 January 2006 Prof. Takaaki Maekawa from the University of Tsukuba, Japan, took over the CIGR General Secretariat from Prof. Schulze Lammers.

The new CIGR Secretary-General will be inaugurated at the University of Tsukuba, Graduate School Building A110 and A205, on Monday, 27 March 2006. In the opening ceremony, which will take place at 9.30 a.m., the CIGR General Secretariat in Tsukuba will be opened. The ceremony will include addresses by the CIGR President,



Prof. Takaaki Maekawa

congratulatory speeches held by guests from the Science Council of Japan and by the Vice-President of the Japan Association of the International Commission of Agricultural Engineering as well as memorial lectures by Prof. Bill Stout and Prof. Peter Schulze Lammers.

The main theme of the Memorial Symposium, which will be held after the opening ceremony, will be: "Global Issues and Future Agricultural Engineering". It will deal with the necessity of new concepts for Agricultural Engineering due to the high stress of population expansion, environmental degradation, exhaustion of resource, and the loss of biological species.

World Congress Bonn 2006 "Agricultural Engineering for A Better World"

CIGR, EurAgEng, VDI-MEG and FAO are delighted to invite you to their joint World Congress, which will be held from **3 to 7 September 2006** in **Bonn, Germany**. The World Congress will combine the "XVI CIGR World Congress" with "AgEng2006" and the "64th VDI-MEG International Conference Agricultural Engineering". As part of the congress, FAO will hold a workshop on "Agricultural Engineering Contributions to Solve Future Agricultural Problems" covering two half days. Moreover, a preconference on "Automation Technology for Off-road Equipment" will be held immediately before the World Congress.

The scientific sessions, posters, Technical Section meetings, and Special Interest Group meetings of the World Congress will deal with the latest developments in

agricultural engineering. Thus, the XVI CIGR World Congress will provide an excellent opportunity for agricultural engineering scientists and representatives of manufacturers of agricultural machinery to discuss current developments from many different points of view and to promote new ways of employing recent advancements in agricultural engineering in the service of the global agricultural situation.

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

Meetings will be held mainly in the main building of Bonn University, the former residence of the archbishops and

electors of Cologne, and at the "International Congress Centre - Bundeshaus Bonn", which incorporates the former parliament building of the Federal Republic of Germany.

The following topics and sub-topics will be discussed:

I. Land & Water Use and Environment

II. Power and Machinery

- Tractors
- Tillage & seeding
- Fertilising & plant protection
- Harvesting
- Automation technology

III. Information Systems and Precision Farming

IV. Livestock Technology

- Structures
- Environment
- Precision livestock farming

V. Processing & Post Harvest Technology and Logistics

VI. Energy and Non-Food Production Technology

VII. Systems Engineering and Management

- Emerging industrial products
- Marketing
- Service systems
- Traceability

- Work safety and ergonomics
 - Farm management, calculation and planning
- VIII. Fruit & Vegetable Cultivation Systems

- Protected cultivation

- Greenhouses

- Equipment for tree crops

IX. Global Issues

- Meeting needs of global markets for equipment

- Technologies to enable agri-food exports

Dates and deadlines:

Submission of abstracts 1 February 2006

Notification of acceptance 15 March 2006

List of Papers made available 15 April 2006

Submission of full papers 1 June 2006

Please note that abstracts and papers may only be submitted online. Instructions for abstract submission are available at <http://www.2006cigr.org/> under "authors". The direct URL is <http://www.2006cigr.org/authors.html>

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

NEWS FROM NATIONAL AND REGIONAL SOCIETIES

Actions to Mitigate Impacts of Climate Change on Rural Environment: A Joint ICID-EurAgEng Regional and World-wide Cooperation

Farming is a human activity that is intimately associated with climate. The broad patterns of agricultural growth over long time scales can be explained by a combination of climatic, ecological and economic factors. Modern agriculture has progressed by lessening the downside risk of these factors through irrigation, the use of pesticides and fertilizers, the substitution of human labour with energy intensive devices, and the manipulation of genetic resources.

A major concern in the understanding of the impact of climate change is the extent to which world agriculture will be affected. Thus, in the long term, climate change is an additional problem that agriculture has to face in meeting global and national food requirements. Uncertainties as to how the climate will change and how agriculture will have to adapt to these change are issues that engineers, planners and managers are compelled to address. If productivity and flexibility in agricultural systems are to be enhanced, these uncertainties call for continued attention and suitable actions on many fronts. In this context the effects of climate change will undoubtedly play an important role.



Prof. Daniele De Wrachien

Availability of reliable hydro-climatic data is an essential prerequisite of the rational planning, design and management of water resources. Irrigation and drainage systems were designed for a long life, on the assumption that climatic conditions would not change in the future. This will not be so in the years to come due to global warming and the greenhouse effect. Therefore, water systems designers need to systematically re-examine engineering design criteria, operating rules, contingency plans and water allocation policies. All the above factors and constraints compel decision makers to review the strengths and weaknesses of current trends in irrigation and drainage and rethink technology, institutional and financial patterns, research thrust and manpower policy so that service levels and system efficiency can be improved in a sustainable manner.

With regard to the environment, the risk of land degradation and desertification is already being felt under the present climatic regime and human activities in most arid and semiarid regions of the world, and the changing climate patterns outlined above are expected to lead to environmental conditions even more conducive to land degradation and desertification in these regions. The most significant aspect of desertification is the decline of soil fertility and soil structure and the consequent reduction of the land's carrying capacity for plants, animals and human beings. This leads to widespread poverty, overexploitation and, ultimately, destruction and abandonment of land. In combating desertification, priority should be given to preventive measures in drought-prone areas, the implementation of which requires participation of civil society, from local communities to governments along with international organisations.

To cope with these challenges ICID in 1990 made an urgent appeal to well-established international organisations such as the World Bank to respond to the need for promoting research in the environmental impacts of climate change on irrigation and drainage development. Since then many research programmes have been launched by different scientific, financial and professional institutions. In September 1995, during the meeting of the SIG on Soil and Water held in Rome within the 46th ICID International Executive Council, ICID and EurAgEng have committed themselves to working together in an endeavour to select priority issues that tackle the causes of the major problems encountered in the broad subject areas concerning the impact of climate change on:

- Water resources availability, planning and management
- Crop water requirements
- Irrigation and drainage development
- Soil erosion and land desertification.

The mission was to enhance the standards of research at both the European and world-wide levels, to examine the most up-to-date documents available, to organise international scientific events and to draw up conclusions and recommendations. The importance and role of research thrust, technology transfer, institutional strengthening, effective partnership between governmental and non-governmental organisations and sound financial frameworks were investigated. Finally, the challenges and benchmarks for future actions which the scientific community and planners have to face and deal with were also analysed.

The meet the above-mentioned challenges, the two organisations, besides their national Committees, created and improved a multilevel networking system with links and feedback among the different levels, able to collect, control, store and disseminate information concerning this field of knowledge. The aim was to create an updated inventory of the key-issues dealing with the impacts of climate change on the rural environment, which are investigated at both the European and world-wide levels, along with the financial and human resources involved, to the end of optimising the whole process and obtaining a better synergistic coordination of all the activities related to the subject. All this required an interdisciplinary, multi-sectoral approach, using system engineering methodology to recognize the necessary interrelationships.

The network at the European level, known as **European Water Network**, is nowadays managed by the European Regional Working Group (ERWG) of ICID, while, at world-wide level, the facility constitutes an integral part of the CIGR-FAO Global Network on Agricultural Engineering sponsored by EurAgEng.

This enterprise was formally recognised by a Memorandum of Understanding signed by the Presidents of the two Organisations, Prof. Bart Schultz on behalf of ICID and Prof. Daniele De Wrachien on behalf of EurAgEng, on 27 July 2002, during the 53rd IEC meeting and 18th ICID Congress in Montreal, Canada.

Important milestones of this cooperation are represented by five regional and world-wide investigations and by the proceedings of fourteen international Conferences and Workshops.

Bibliography of main outcomes and conclusions of regional

and world-wide investigations:

De Wrachien D. and Fasso C., "Conjunctive use of surface and groundwater: Overview and perspective" *Irrigation and Drainage*, Vol. 51.1, 2002, pg 1-15

De Wrachien D., Ragab R., and Giordano A., "Climate change impact on land degradation and desertification in the European Mediterranean region: The role of the international cooperation" Key-note lecture delivered at the International Conference on Drought Mitigation and Prevention of Land Desertification, Bled, Slovenia, April 2002

Schultz B. and De Wrachien D., "Irrigation and drainage systems: Research and development in the 21st century" *Irrigation and Drainage*, Vol. 51.4, 2002, pg 311-327

De Wrachien D. and Feddes R., "Global warming and drainage development: Perspective and challenges" *Irrigation and Drainage*, Vol. 53.4, 2003, pg 215-224

De Wrachien D., Feddes R., Ragab R. and Schultz B., "Agricultural development and food security under climate uncertainty" *New Medit N 3*, 2004, pg 12-19

Lists of the proceedings of joint ICID-EurAgEng conferences and workshops are available at www.icid.org and www.eurageng.net

Daniele De Wrachien
Past President of EurAgEng, Chairman of the Field of
Interest on Soil and Water
Costantino Fasso
Hon. Vice President of ICID, former Chairman of the
Permanent Committee for Technical Activities

Report on AESEE Round Table Meeting "Agricultural Engineering and its Role in the Development of Rural Areas"

The Association of Agricultural Engineering of Southeastern Europe (AESEE) held a round table meeting on "Agricultural Engineering and its Role in the Development of Rural Areas" in Izmir and Sirince, Turkey, from 25 to 27 September 2005. The meeting was organized by the Izmir branch of the Turkish Chamber of Agricultural Engineers. In recognition of the importance of rural development in the region and worldwide, Ten participants from five countries, fully supported by the presence of CIGR President Prof. Dr. Luis Santos Pereira, discussed the very topical problem of rural area retrogression.

The participants agreed that most rural areas worldwide are endangered from an economic, environmental, societal and demographic point of view. Many problems occur in cities and rural areas because rural poverty and a lack of perspective generate migration and a boom of poor suburban settlements. An extrapolation of present trends shows a vision of enormous environmental and societal disharmony.

The participants agreed that rural tourism was a good chance, but excessive development might harm both local cultures and the environment. Large-scale industrialization of rural areas has in some cases proved the wrong remedy. Local festivals based on cultural tradition etc. support the self-awareness of rural area inhabitants. Solving the problem of inadequate infrastructures is much more expensive in rural areas than in cities due to a much lower population density. Contemporary ICT tools, e.g. e-

commerce and communication technology, have proven useful in overcoming this problem. Introducing new contents might boost people's interest in rural areas and create employment opportunities for educated qualified persons.

In times of globalization, rural areas could be our last chance to rescue cultural diversity as the heritage of mankind and civilization.

The difficult situation in agriculture worldwide also influences the economy in rural areas. Local, regional or global policies should acknowledge the fact that agricultural production is multi-functional and has many non-economic effects.

How could agricultural engineering contribute? Most institutions in this field serve less than 10 % of the population in rural areas. Efforts are concentrated mainly on increasing the productivity of well-organized, profitable, large farms. Who will help the remaining 90 %, and how? Some of the options are: to restructure extension service, to develop inexpensive agro products and agro food safety and quality technique, to develop procedures and equipment for post-harvesting processing on farms, up to the level of producing shelf-ready commodities. This can be accompanied by the local production of machinery in small workshops. Another issue can be the use of renewable energy.

The main impression of the round table was that a comprehensive inventory of rural problems is still missing, especially for Southeastern Europe. Multidisciplinary research is required to develop priorities and programs.

The participants of the meeting from the AESEE member countries and the President of CIGR concluded that:

- The problems of rural areas in the region of Southeastern Europe and also worldwide are recognized. The most significant problems in the region are: (a) poverty, (b) migration to the cities, (c) lack of appropriate infrastructure, (d) size and fragmentation of farms.
- Society and the agricultural engineering profession should be aware of these welfare problems of rural area inhabitants and provide solutions in order to achieve living conditions comparable with those in cities.
- Agricultural engineers, besides their common professional activities, should also create an awareness of the rural area problems in society through educational process and media.
- Multi-functionality and non-economic values of agriculture should be recognized by the society, i.e. preventing desertification, preserving the environment and landscape.
- Continuation of rural life enables preservation of cultural heritage and contributes to cultural diversity.
- A working group on this issue should be set up in the frame of CIGR. A proposal for the creation of such a WG shall be sent to the CIGR Presidium for its initiation at time of the 2006 CIGR Congress.
- Agricultural engineering must support development of on-farm processing up to getting shelf-ready products especially of traditionally home made foods. Assurance and

control of safety and quality of this production is a special challenge for agricultural engineering.

- Extension services through any model of organization should be supported by any means, but reinforced in the quality, being able also to help solving other related needs of rural areas.

- Indigenous knowledge should also be respected and included in tools aimed in participatory rural development.

- A multi-disciplinary regional project is needed to state problems of rural areas more precisely, to define possible solutions and needed tools. Such a project should include expertise from the scientific fields of sociology, demography, economy, technology, etc., and to be drafted in the first half of 2006.

Implementation of renewable energies can be a good tool for development of rural areas through which local materials and human resources can be used. Prof. Dr. Milan Martinov is given the responsibility of searching for funds and drawing up a concept of a regional project on this topic.

*Prof. Kamil Sindir
Prof. Milan Martinov*

Report on the International Agricultural Engineering Conference held from 6 to 9 Dec 2005 in Bangkok, Thailand

Organized by the Asian Association of Agricultural Engineering (AAAE), the conference was attended by participants from 20 countries, and 120 papers were presented in three parallel sessions.

The following keynote speeches were given:

Prof. Reddy (USDA - United States Department of Agriculture) reported on Food Security and the Role of Crop Modeling. Modelling uses trends, signs and signatures from the earth to anticipate future conditions and to serve as a basis for decision-making. For example, an increase in vegetable consumption and the fact that 37 % of the world's crop land is affected by salinity were given as crucial constraints to sustainable crop production.

Prof. Park, Korea University, reported on nano technology. Future applications for the agricultural sector may be expected for self-cleaning glass-house coatings that might also enhance feed properties. At currently \$ 10,000 per gramme, the high price of nano material is still a major constraint.

Prof. Oida, Kyoto University, Japan, held another challenging keynote speech that dealt with microwaves for energy transmission. This technology is not as efficient yet as combustion or electrical DC engines, but if electronically optimised it might open new avenues for remote energy supply.

On occasion of the biannual conference, the president of AAAE, Prof. Salokhe from the Asian Institute of Technology (AIT), Thailand, handed over the office to Prof. Ito, Mie University/Japan for 2006 and 2007.

*Dec. 2005, P. Schulze Lammers
CIGR General Secretary*

NEWS FROM SECTIONS AND WORKING GROUPS

CIGR Section I Board Meeting on 1 July 2005 Arlington, Texas, USA

Opening and welcome

The Honorary Chairman of Section I, Prof. Dr. Hubert van Lier, welcomed all present members and observers to this public session and expressed the Board's gratitude to Pat D. Taylor for hosting the meeting. At this occasion he replaced the Chairman, Prof. Dr. Yohei Sato, who was not able to attend.

Inter-Regional Conferences "Environment-Water"

Beijing, China, 2004: The Honorary Chairman and all the Board Members regret that Prof. Dr. Guanhua Huang was not present to report about the 7th Conference held in Beijing, China, from 11-14 October 2004. The title of the Conference was "Land and Water Management: Decision Tools and Practice". 188 papers were submitted and 160 participants registered. Full versions of the technical papers were available to the participants both on a CD-ROM and in official proceedings. Prof. Dr. Guanhua Huang intended to start the procedure to select good quality papers presented in the ENVIROWATER 2004 in Beijing for the CIGR E-Journal.

Arlington, Texas, USA, 2005: Prof. Pat Taylor reported on the impending 8th Inter-Regional Conference, organized by the University of Texas at Arlington, Dallas/Ft. Worth, Texas, USA, from 2-5 July 2005, under the patronage of CIGR Section I "Land and Water Engineering" and Section VII "Information Systems". The title of the Conference is "Environmental Quality through Collaboration and Design". North Texas, the site of Envirowater 2005, is one of the most rapidly expanding urban areas in the USA. The conflicts arising over land and water use reflect many of the larger issues being experienced around the globe. Attendees will have the opportunity to examine first-hand sites of competing uses for land and water resources and to examine projects and plans aimed at resolving these competing uses for future generations. This conference aims to be a forum for engineers, hydrologists, planners, designers, architects, landscape architects and other professionals interested in land and water issues in the 21st century.

The main topics Conference were:

- Water resource development, urban and rural
- Soil and land use, urban and rural
- Environmental constraints in planning and design
- Collaboration among resource planners and designers
- Information and computer technology
- Competing uses for land and water resources

Delft, The Netherlands, 2006: Prof. Hubert van Lier, who is the main convener, reported on the preparations for the 9th Inter-Regional Conference to be held in Delft, The Netherlands, from 17-19 May 2006, under the patronage of CIGR Section I and ISOMUL (International Study Group

of Multiple Uses of Land). The title of the Conference is "Concepts for Water Management and Multifunctional Land-Uses in Lowlands". Lowlands and more specifically delta regions and floodplains are often among the most densely populated places on earth. They also are often among the most prosperous regions in the world, at least in a relative sense. However, the high population density, the intensity of land uses and the resulting physical changes, need new visions and approaches for the future of the lowlands. The Inter-Regional Conference ENVIROWATER-2006 aims to bring together both scientists and practitioners in the field of planning and designing the future lowlands and deltas. It therefore dedicates a first part of the conference to research projects and scientific presentations and discussions and a second part to the presentation and discussions of new concepts for the development of lowlands and deltas, including an one day field trip in the Rhine Delta. In doing so the conference aims to become a meeting forum for planners, scientists,



engineers and educators in multifunctional land-uses, water management and environmentalists, especially involved in lowlands and delta-regions. The topic includes all the knowledge, experiments, visions, concepts, research and experiences on what to do with the future of our lowlands and deltas.

The main topics of the Conference are:

- Opportunities and threats
- Water and Climate Change
- Groundwater and salt water intrusion
- Water management–systems as steering instrument for planning
- Multifunctional land uses as approach to the problems of lowlands and deltas

Forthcoming Conferences

Prof. H. van Lier reported on the steps taken by the Chairman, Yohei Sato, for the 10th ENVIROWATER Conference to be held somewhere in Asia. After conversations with scientists from different countries, a decision has been made to nominate India, and the main convener of this Conference will be Prof. Dr. N.K. Tyagi. The Board agreed to try to organise the next Conferences occurring in CIGR World Congress years at the same time and at the same place as these, taking as model Beijing

2004. Thus the proposal for 2008 is Rio de Janeiro, Brazil. In order to alternate continents hosting the Conferences, the proposal for 2009 is somewhere in Africa. In 2010 the proposal is to coincide with the XVII CIGR World Congress in Quebec, Canada.

Sponsored and co-sponsored activities

The Secretary reported on activities that are being undertaken in 2005:

* International Conference on “Water, Land and Food Security in Arid and Semi-Arid Regions”, Bari, Italy, September 6 - 11, 2005.

* PAWEES 2005 International Conference on Management of Paddy and Water Environment for Sustainable Rice Production, Kyoto, JAPAN, September 7 – 8, 2005.

* IUSS Conference on Salinization to be held in September 19-22, 2005, Budapest, Hungary.

* XXXI CIOSTA-CIGR V Congress “Increasing Work Efficiency in Agriculture, Horticulture and Forestry”. The congress will take place in the University of Hohenheim, Stuttgart, Germany, September 19-21, 2005.

* III World Congress on Conservation Agriculture (WCCA), October 3-7 2005, in Nairobi, Kenya.

* International Congress on Irrigation and Drainage, CUBA-IRRIGATION 2005, to be held in October 25-28, 2005, at Havana, Cuba.

* International Seminar on Sustainable Access and Local Resource Solutions, organized by the World Road Association (PIARC), that will be held last week of November 2005 in Cambodia.

* International Symposium on Water and Land Management for Sustainable Irrigated Agriculture, Adana, Turkey, 4 - 8 April, 2006.

* Workshop on Maintenance of Rural Roads - Stakes and Perspectives -, to be held in Rabat, Morocco, April 20-21, 2006.

* III International Conference on Waste Management and the Environment, Malta, June 21-23, 2006.

* 17th Triennial Conference of the International Soil Tillage Research Organization (ISTRO), to be held in Kiel, Germany, from August 28 to September 3, 2006, on “Sustainability – its Impact on Soil Management and Environment”.

Specified topics for the Session on “Land and Water Engineering” in the XVI CIGR World Conference 2006, September 3-7, 2006, Bonn

The Board agreed to make the following proposal for the Land and Water Use and Environment plenary session of the 16th CIGR World Congress, to the coordinator, Guanhua Huang:

Title: Multifunctional Land Use and Water Management in Rural Areas

Sessions: Soil management improvements for different land uses (Soil erosion and conservation techniques, Soil improvement systems, Soil suitability analysis for different land uses), Water use planning and management (Water saving and productivity, Water uses and climatic changes, Irrigation and drainage modelling and systems), The environment related to land use and water management (Environmental criteria for land uses, Water management and water quality, Environmental water systems design), Landscapes and ecosystems (Landscape for historic values and recreational uses, Ecosystem analysis of rural systems,

Landscape planning for the future), Multifunctionality of rural roads (Rural traffic analysis and planning, Consequences for rural road design, Change in farm equipment related to future road construction).

New composition of Section I Board (to be approved by General Assembly in Bonn)

Hubert van Lier transmitted the Chairman’s proposal of a new structure for the Section I Board, following the CIGR Presidium’s instructions that each Technical Section must be managed by a Section Board formed by 3 Chairpersons - constituted by the Chair, one Vice-Chair, and one Secretary - and up to 13 regular members. Liaison members, representing other technical or scientific societies relative to similar or related fields of science and technology, may also be part of the Section Boards in addition to the regular members.

Prof. Dr. Yohei Sato’s proposal is to have five more regular members so that the total number of Board members will rise to 16, with the following regional balance: 5 from Europe, 4 from Asia and the Pacific region, 2 from Africa, 3 from North America, 2 from South America.

As regards to the liaison members (permanent observers): One liaison member each representing the European Society of Agricultural Engineers (EurAgEng), the ICID Committee on “Sustainable Use of Natural Resources for Crop Production”, the CIGR Working Group on “Water Management and Information Systems”, the European Society for Soil Conservation (ESSC), the US National Wastewater Recycling Association (NOWRA), the World Road Association (PIARC), the International Society of Paddy and Water Environment Engineering (PAWEES), and the Groupe des écoles inter-états de l’Ecole d’Ingénieurs de l’Équipement Rural (EIER) et Ecole des Techniciens Supérieurs de l’Hydraulique et de l’Équipement Rural (ETSHER).

Finally, the proposal for chairpersons for the 2007-2010 period is as follows: Chairman: José M. Tarjuelo (Spain), Vice-Chairman: Pat Taylor (USA), Secretary: Guanhua Huang (China)

Next Section-I Board Meeting

Since two important events are planned for 2006 in the fields of activity of Section I (ENVIROWATER 2006 in Delft, The Netherlands, May 17-19, and the XVI CIGR World Conference in Bonn, September 3-7), it was unanimously agreed that two Board Meetings will be held in 2006. The first one in Delft will be considered as a preparatory one. The official Board Meeting will be held in Bonn on 2 September.

Arlington, Texas, USA, July 1, 2005

*The Secretary,
Antonio Brasa*

**New Working Group on
“Animal Houses in Hot Climate”
established by CIGR Section II in
cooperation with EurAgEng**

In 2005 a new working group on Animal Houses in Hot Climate with Professor Krister Sällvik, Sweden, as chairman was established as a continuation of the former WG 13 on Climatization of Animal Houses. The first

meeting in the new WG was held in Catania, Italy, from 24 to 27 July 2005 with 19 participants primarily from Mediterranean areas.

During the work in WG 13 (reports 1984, 1989/92, 1994 and 2002) it was often noted that there was a lack of information on animal heat and moisture production in areas with a hot climate, because most of the available research results worldwide are from the temperate climate zone. At the CIGR Section II Meeting in 2004 in Évora, Portugal, it was finally decided to establish the new WG.

In the spring 2005 Prof. Vasco Cruz, Portugal, and Prof. Irenilza A. Nääs, Brazil, invited people who might be interested in this work, and Prof. Giovanni Gascone, Dipartimento di Ingegneria Agraria, Catania, hosted the group.

The main question for areas with hot climate is in which way it is possible to reduce animal heat stress, consequently reducing production losses and maintaining animal welfare, especially in seasons with high relative humidity.

The discussions showed clearly that the new working group will be concerned with the following three main topics:

I. Animal heat and moisture production at high ambient temperatures

II. Methods to define heat stress and "upper critical temperature"

III. Methods to reduce heat stress i.e. facilitate animal heat dissipation under exposure to high temperatures and high relative humidity.

Especially topics I and II are of great interest all over the world, while topic III is mostly of interest in areas with hot climate. Examples of possible sub-themes to be included in topic III are:

- Increased air velocity around the animals
- Reduced ambient temperature by water evaporation in the air and the use of wet pad cooling.
- Evaporative cooling of animals by water spraying on the body
- Mechanical air cooling in certain areas e.g. in milk centres
- Heat exchangers with or without heat pumps
- Air cooling via earth tubes
- Feeding the animals morning and evening to reduce the heat production in the daytime
- Using building materials with high heat capacity.

CIGR Section II extends a warm welcome to the new working group. The next meeting is planned to be held in 2006 in the Mediterranean area.

Søren Pedersen
Chairman of CIGR Section II

CIGR Section II: Farm buildings, Equipment, Structures and Environment

Short status report at the end of 2005

Once more, we can look back to an active CIGR Section II year. The main activities for Section II in 2005 were:

- "International Symposium on concrete in Agriculture", 5-8 June 2005. Contact: Professor Elvira Sánchez Espinosa, Universidad Politécnica de Madrid, Spain. This was a very well-organized symposium with 42 papers, held in El Escorial - a very nice town. Thanks to Elvira Sánchez!

- Working group meeting on "Animal housing in hot climate", Catania, Italy, 24-27 June 2005. With 19 participants, this working group meeting was the start of a new era, because up to now knowledge on climatization of animal houses in areas with hot climate has been lacking. Thanks to Prof. Vasco Fitas Cruz, Portugal, and Prof. Irenilza Nääs, Brazil, for the initial work in establishing the group. Many excellent papers were presented and collected in a draft report of the meeting chaired by Prof. Nääs. Thanks also to Paolo Zappavigna, Italy, for organizing the workshop in nice surroundings in Sicily. The next meeting is planned to be held in 2006 in the Mediterranean, possibly in Egypt.

2006

The big CIGR event in 2006 will be the World Congress in Bonn, Germany, on 3-7 Sep. 2006. The first job in 2006 will be to organize papers for oral and poster presentation. Hope to see you all in Bonn!

2007

At the board meeting in Évora in 2005, we discussed different possibilities for symposia in 2007. Both the Netherlands and Germany advocated a symposium on ammonia emission and airborne pollution. It was recommended that Gert-Jan Monteny, NL, and Eberhard Hartung, DE, should find out how such a symposium could be arranged. Recently I was informed that the symposium will be organized as a joint symposium in the Netherlands with CIGR Section II as co-sponsor. Called "First International Conference on Ammonia in Agriculture", the symposium will be held in "De Reehorst", Ede, the Netherlands, on 19-21 March 2007. We wish Gert-Jan and Eberhard good luck with the arrangements! More about the symposium at www.firstammoniaconference.wur.nl

CIGR e-journal

The CIGR e-journal has been active since 1998. Thanks to Prof. Bill Stout's enthusiasm, many reviewed papers have been published. Hopefully the CIGR e-journal will soon be included in ISI assessing system, because more universities and research institutes demand that researchers publish in ISI assessed journals.

2006 Board Meeting

The next board meeting will be held in Bonn during the World Congress, preferably on Sunday, 3 September. Please make a preliminary reservation in your agenda!

Finally I thank all members of the board for your contribution in 2005 and look forward to a fruitful 2006

Søren Pedersen
Chairman of CIGR Section II

CIGR Section V Board Meeting 18 September 2005 in Stuttgart- Hohenheim, Germany

Opening of meeting and approval of agenda

Tadeusz Juliszewski was excused from the meeting and Werner Luder opened the meeting at 19.30. He was pleased

to welcome the Board members to the meeting in Stuttgart-Hohenheim. The proposed agenda was approved.

Prof. Dr. S. Kleisinger reports on preparation of XXXI CIOSTA-CIGR V Congress in Stuttgart-Hohenheim

The preparation of the CIOSTA 2005 congress has been finalized and the congress will have 100 participants from 24 different countries. The topics of this congress have been somewhat narrowed in order to focus on work science, which may have excluded some people from submitting papers. However, there is general agreement among the Board members that focussed congress topics are an important prerequisite of good quality. Prof. Kleisinger and Dr. Krause were thanked for their substantial efforts in organizing the congress in a timely and effective way. The web site for the congress has been very informative and easy to navigate.

Participation of Section V in the World Congress 2006 in Bonn, Germany

The CIGR World Congress 2006 is being organised jointly with EurAgEng, VDI, etc. Section V has suggested two topics, namely: a) work safety and ergonomics and b) farm management, calculation and planning. Further suggestions of possible subject areas and issues to be covered in the individual Congress Divisions may be seen at: <http://www.2006cigr.org/>

Dr. Weiershäuser mentioned that the task force "Labour Management Basics" (Arbeitswirtschaftliche Grundlagen) of the KTBL (Association for Technology and Structures in Agriculture) intends to work out a publication about "Methods of Work Study and Calculation of Labour Requirements" (Methoden der Zeiterfassung und Kalkulation des Arbeitszeitbedarfs). The "work study" part would include the method study (1) i.e. the analysis of work systems and operational sequences being needed for (2), the time study for defined work time elements and for model-building for labour requirements from bottom-up. This paper is moreover intended to define for (1) a functional, hierarchical classification, bottom-up from motion elements (MTM, WF), through work time elements up to the total work in a production process and (2) a partial time, hierarchical classification according to the work objective from another bottom-up, too, from effective times via several auxiliary times, transport and preparation time to the total labour requirements of a work process, primarily for presenting results. Since this paper could be finished by May 2006, it might be possible to present it as a paper at the CIGR Congress in September 2006 in Bonn.

Collaboration of CIGR V/CIOSTA with AKAL – suggestions will be presented by Dr. Werner Luder (FAT – Switzerland)

The *Arbeitskreis Arbeitswissenschaften im Landbau* (AKAL - *study group for ergonomics in agriculture*) is an association which tries to promote the collaboration between institutions and individuals working in the area of agricultural work science. Seminars held within the context of AKAL should be coordinated with the topics of CIOSTA conferences. A specific theme for collaboration between CIGR V/CIOSTA and AKAL would be an agreement on and the documentation of terminology on work science. Also, there are intentions from the AKAL community to use English in the future in an attempt to broaden the scope of the association.

AKAL held a meeting on 19 Sep 2005 in Stuttgart-

Hohenheim, and Werner Luder invited all CIGR V Board members to attend the meeting. Prof. Kleisinger, as chairman of AKAL, promoted the idea of opening this originally German Arbeitskreis ("study group") to colleagues of other countries, who also speak English. The next Seminar of AKAL will be organised at the Agricultural University of Vienna by Dr. Elisabeth Quendler in March 2007. For this meeting papers in English can be submitted and published on the Homepage of AKAL - see www.vdi.de/Arbeitswissenschaften. This homepage could become an international platform for all work scientists. Prof. Kleisinger will hand over the chairmanship to Dr. Jürgen Frisch, KTBL Darmstadt in March 2006.

Cooperation with CIOSTA and other organizations

A possible contact to Prof. Landau, University of Darmstadt, is still up for consideration in order to promote a possible cooperation in the area of ergonomics (Luoma). Weiershäuser mentions a number of selected KTBL publications which deal with work data collection but also focus intensively on aspects of the working environment, e.g. dust.

Luder said that more attention should be paid to the aspects of the working environment. Weiershäuser informed that a KTBL conference on 'Air-borne Biological Loads and Infections at the Work-place "Stable"' was held in Nov 2004 in Hanover at the EUROTIER fair. The results are published in *KTBL Schrift* 436. The chairman of the KTBL task force of that conference, Prof. Dr. Jörg Hartung, Hanover, will present a paper on "Health Effects of Aerial Pollutants at Work Places in Farm Animal Houses" at this CIOSTA congress. There was a general consensus that it would be a good idea to focus more on the integration of work loads/working environment and traditional time budgets. For example, there has been a demand from insurance companies for tools to estimate work loads and time requirements. In that regard there might be a potential to cooperate with insurance companies.

Collaboration of Section V with the CIGR E-Journal

All authors from CIGR V are encouraged to send papers to the E-Journal of CIGR. Manuscripts should be sent to the coordinator, Prof. Bill A. Stout from Texas A&M University: stout@tamu.edu or bastout@cablone.net. The Board expressed their concern that the e-journal still has not been recognized in the ISI system, and it was agreed to continue pressing the matter to Prof. Stout.

Venue of XXXII Congress of CIOSTA/CIGR V and election of new CIOSTA President (2005-2007)

The venue of the XXXII CIOSTA Congress will be the Slovak University of Agriculture in Nitra, and President Prof. Ladislav Nozdrovicky has accepted to be the new President of CIOSTA and to organize the next conference in 2007.

The next Board meeting will be held in March 2006 in Nitra so that members can have a look at the facilities in view of the next CIOSTA-CIGR V Congress. The main discussion will include the identification of topics for the XXXII CIOSTA Congress in 2007. Also, the exact date of the conference will have to be set.

Prof. Kleisinger asked the Board members to mail suggestions for congress topics 2007 to him (kleising@uni-hohenheim.de). These topics should be delivered to the new

President in March 2006 together with all the documents of the CIOSTA President to help preparing the first call for papers.

Integration and activities for new Board members

It was pointed out that the CIGR-V Board consists of 14 members from countries all over the world. However, all the activities within the Board are carried out by a few persons from Europe and there is little interest among the majority of Board members to get involved.

Miscellaneous

Tarmo Luoma raised the question of evaluating the CIOSTA meeting in the same way as, for example, the AKAL meetings. Examples of evaluation schemes were reviewed and the proposal will be considered for future conferences. A formal resolution was taken by the CIGR V Board to contribute an amount of 1000 Euro to the Organisers of the XXI Congress CIOSTA - CIGR V.

October 2005

Werner Luder, Meeting Chair

Claus Grøn Sørensen, Section V Secretary

Report on the XXXI CIOSTA-CIGR V Congress "Increasing Work Efficiency in Agriculture, Horticulture and Forestry"

Organised by CIOSTA and CIGR V, this Congress was held jointly with EurAgEng and VDI-MEG (Max-Eyth-Society of Agricultural Engineering in the Association of German Engineers) at the University of Hohenheim in Stuttgart, Germany, from 19 to 21 September 2005 under the presidency of Prof. Dr. Siegfried Kleisinger.

The six main topics of this Congress were:

- Methods and modelling
- Process engineering and controlling
- Calculation and planning
- Farm management
- Ergonomics and work place design
- Work safety, prevention and risk analysis

The full papers of the 43 oral presentations and the 11 posters are published in the Congress Proceedings in English language on 383 pages.

Compared with the previous congress in Turin, this event was focused on a more limited subject area representing current problems as expressed in the congress theme. The intention to put more emphasis on work safety, prevention and risk analysis was very successful.

During the opening session, which was chaired by Prof. Siegfried Kleisinger as CIOSTA President, Rector of the University of Hohenheim host of the congress, Prof. Liebig,

as well as Prof. Schulze Lammers, Secretary-General of CIGR, addressed greetings to the conference. The session was attended by Prof. Piccarolo (CIOSTA Past President), Prof. Juliszewsky (Chair of CIGR-Section V) and Prof. Haapala (EurAgEng Vice President). The address of Peter Hauk, Minister of Nutrition and Rural Areas of Baden-Württemberg, had to be transferred to the congress dinner because of the Bundestag elections held on the day before. Two plenary presentations were focused to the history of CIOSTA and on present-day work related problems of vegetable production in Europe. Prof. Gustafson presented an extract of the CIOSTA Story, an extraordinary work covering the history of CIOSTA from the beginnings down to the present. Rudolf Behr, one of the most important vegetable growers in Germany and Europe, described the situation of vegetable production and defined future demands in a growing Europe with a focus on the labour situation.

During the three days of the conference, 103 participants from 27 countries attended presentations in two parallel sessions. The schedule provided sufficient room for discussion of the predominantly excellent presentations, most of which fit entirely into the given congress topics. Three technical tours for agriculture, horticulture and forestry, a demonstration on safety in forest work, and two guided tours on an animal experimental farm and the research facilities of the Agricultural Engineering Institute gave plenty of room for scientific exchange.

In the evening of 18 September, CIGR Section V held a board meeting. The agenda included the participation of Section V in the CIGR World Congress in Bonn (2006), the collaboration of CIGR V and CIOSTA with AKAL (VDI-MEG committee for ergonomics in agriculture), the role of Section V with regard to the CIGR E-Journal, and the integration of new board members of Section V.

17 countries were represented at the CIOSTA Board meeting on 20 September. The main topics on the agenda were activities of the cooperating organisations, the future course of CIOSTA, and the election of the coming CIOSTA President. The next CIOSTA Congress will be held at the Slovak University of Agriculture in Nitra in September 2007 under the presidency of Prof. Ladislav Nozdrovitzky, the head of the Dept of Machines and Production Systems.

The Congress Proceedings are available as a printed volume and/or on CD for € 25. For further information contact Dr. Monika Krause, E-mail : krause@uni-hohenheim.de, Phone: +49(0)711/459-3231, Fax: +49(0)711/459-4307.

Prof. Dr. S. Kleisinger



Prof. Dr. S. Kleisinger

CIGR – SPONSORED ACTIVITIES

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

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

International Seminar “Maintenance of Rural Roads – Stakes and Perspectives”

On **20 and 21 April 2006**, the Moroccan Permanent Association for Roads Congress (AMPCR) and the National Association for Land Reclamation, Irrigation and Drainage (ANAFID) will hold an international seminar on “Maintenance of Rural Roads-Stakes and Perspectives” in **Rabat, Morocco**. Organized in collaboration with CIGR and the World Road Association (PIARC), the seminar will offer an insight into the state of the art in management, funding and techniques related to rural roads maintenance.

It will deal with four main topics:

- Role of rural roads and their maintenance
- Maintenance techniques for rural roads
- Management and financing of rural roads
- Integrated development project and rural roads

The seminar languages will be English and French. Simultaneous translation will be provided.

For further information contact: ANAFID, 1 Rue Haroune Errachid Agdal-Rabat, Morocco. Fax: (+212)37670303 Email: h.bartali@iav.ac.ma Further information can be found at www.piarc.org and www.anafid.org

2nd CIGR Section VI International Symposium “The Future of Food Engineering”

In order to better fulfill its missions, CIGR Section VI is organizing the 2nd International Symposium on physical properties of food, raw materials and semi products as well as bioproducts processing and food safety in **Warsaw, Poland** from **26 to 28 April 2006**. This symposium will include a series of presentations and discussions in plenary, scientific and poster sessions, and informal gatherings to highlight the most recent developments in food processing technologies as well as sustainability in food production. The full proceedings of the Symposium will be published on CD-ROM and provided to all participants at the registration desk during the Symposium.

The Symposium is jointly organized by Lublin Agricultural University and Warsaw Agricultural University.

For further information, please consult the Symposium web page at <http://www.cigr.pl> or contact the Conference Secretaries: Dr Agnieszka WIERZBICKA, Dr Andrzej POLTORAK and Dr Wojciech GOLIS, Warsaw Agricultural University, at ul. Nowoursynowska 159c, 02-776 Warsaw, Poland. E-mail: cigr2006@cigr.pl or info@cigr.pl

CIGR Section I: Inter-Regional Conference on Environment-Water 2006

“Concepts for Water Management and Multifunctional Land Uses in Lowlands”

The 2006 Inter-Regional Conference on Environment and Water will be held at the Unesco IHE (International Institute for Infrastructural, Hydraulic and Environmental Engineering) at **Delft, the Netherlands**, from **17 to 19 May 2006**. Held under the patronage of CIGR Section I and of ISOMUL (International Studygroup on Multiple Uses of Land), the conference is organized by the NWP (Netherlands Water Partnership), and the Land Use Planning Group of WUR (Wageningen University and Research Centre) at Wageningen, the Netherlands.

The Inter-Regional Conference Envirowater 2006 is dedicated in part to research projects and scientific presentations and discussions and in part to presentations and discussions of new concepts for the development of lowlands and deltas, including a one-day field trip in the Rhine Delta. Bringing together all the knowledge, experiments, visions, concepts, research and experiences on what to do with the future of our lowlands and deltas, the conference also addresses the need to integrate all these aspects for a comprehensive planning approach in delta-regions.

Oral presentations and poster sessions will deal with the following subjects:

I Opportunities and threats

- Exploitation of natural resources
- Changing land uses and societal impacts

II. Water and Climate change

- Climate change and impacts on water resources
- Climate change and sea level rise

III. Groundwater and salt water intrusion

- Changes in quantity and quality of groundwater
- Salt water intrusion and adaptive responses

IV. Water management systems as steering instrument for planning

- Potentials and constraints of water management for land uses

- New concepts in water management for land uses

V. Multifunctional land uses as approach to the problems of lowlands and deltas

- Multifunctional land and water uses

- New concepts, visions and examples in multifunctional land and water uses

The conference language will be English. Facilities will be provided for technical presentations including video and LCD projections for PC. Scientific papers will be published

in proceedings (on CD-ROM). A study tour may be held at the end of the conference. Private companies will be invited to present their latest equipment in a technical exhibition in relation to several topics of the conference.

Important dates and deadlines:

Author instructions (paper/poster): 15 March 2006
Covering all technical and social sessions (welcome reception, conference dinner and technical tour), the registration fees will be approximately 300/250 Euros for regular participants, 250/300 Euros for students, and 50/60 Euros for accompanying persons (before/after 1 January 2006). A reduction of 20% in fees will apply to participants from Eastern Europe, Africa, Asia and Latin America.

For further information visit the conference website at: <http://www.wau.nl/rpv/isomul/envirowater2006/> or contact the conference secretariat: Isomul, Land Use Planning Group, Wageningen University and Research Centre (WUR), Generaal Foulkesweg 13 6703 BJ, Wageningen, The Netherlands. Tel: +31(0)317-483849 Fax: +31(0)317-482166 Email: Envirowater2006@wur.nl

International Conference "Energy Efficiency and Agricultural Engineering 2006"

Organised by the Bulgarian National Society of Agricultural Engineers with the support of CIGR Section IV, EurAgEng SIG 23, AESEE, the Union of Scientists Rouse, the Federation of the Scientific Technical Unions Rouse, and the Angel Kunchev University of Rouse, this conference will be held from **7-9 June 2006** in **Rouse, Bulgaria**.

The main objectives of the Conference are to promote exchange of research results, scientific ideas and their practical implementation concerning Energy Efficiency and Education in Agriculture and to assist personal contacts between scientists, professors and specialists, especially agricultural engineers from South-Eastern Europe, as well

as from the developing countries. Students and young scientists will be encouraged to participate in the Conference.

The conference will address the following topics:

- Efficient use of energy sources in agriculture
- Renewable energy sources
- Plant and animal production engineering
- Land, water and agro-processing engineering
- Computer systems and technologies in agriculture
- Information systems and precision farming
- Higher education and training
- Socio-economic and cultural impacts of energy efficiency

The official language will be English. All proposals and abstracts should be presented in English.

The participation fee will be 65 Euro, 55 Euro for CIGR and EurAgEng members, 35 Euro for participants from developing countries and former socialist countries, 25 Euro for students and young scientists (until 25 February 2006). Add 10 Euro after 25 February. The participation fee authorises attendance of the Sessions and receipt of the documentation. It includes also the cost of the welcome party. Papers should be submitted no later than 30 March 2006, in maximum 8 pages.

Dates and deadlines:

Reduced participation fees: 25 February 2006

Full paper submission: 30 March 2006

Additional information is available at

<http://octus.ru.acad.bg/baer/EE&AE-2006/conference.htm> or from the Conference Secretariat of ERA: 8 Studentska street, "Angel Kunchev" University of Rouse, 7017 Rouse, Bulgaria. E-mail: mivanova2001@yahoo.com or mivanova2001@ecs.ru.acad.bg Phone: +359 82 845 536 Fax: +359 82 845 708

ACTIVITIES BY CIGR REGIONAL SOCIETIES

Agricultural Equipment Technology Conference

February 2006 marks the 10th anniversary of the Agricultural Equipment Technology Conference (AETC). From **12 to 14 February 2006**, ASABE professionals and pre-professionals will gather in **Louisville, Kentucky, USA**, to share the most recent technological advances in agriculture and related industries and develop ASABE industry and safety standards. The dates of AETC 2006 have been set for February 12th-14th to precede the National Farm Machinery Show in Louisville, KY where more than 800 exhibitors will showcase their skills, products, and technologies.

For conference and exhibit information, contact: Sharon McKnight, ASABE Meetings and Conferences, 2950 Niles Road, St. Joseph, Michigan 49085 Phone: (269) 428-6333 Fax: (269) 429-3852 E-mail: mcknight@asabe.org

Annual International Meeting of ASABE

The 2006 Annual International Meeting of the American Society of Agricultural and Biological Engineers will be held from **9 to 12 July 2006** at the Oregon Convention Center at **Portland, Oregon, USA**. The meeting will include both Lecture Sessions and Poster Sessions in the following divisions:

- Biological Engineering
- Ergonomics, Safety & Health
- Food & Process Engineering
- Information & Electrical Technologies
- International & Education
- Power & Machinery
- Soil & Water
- Structures & Environment
- Other

Dates and deadlines:

Presenter registration deadline 17 May 2006
 Full papers due 17 May 2006
 For further information look up
<http://www.asabe.org/meetings/aim2006/index.htm> or

contact Sharon McKnight, ASABE Meetings and Conferences, 2950 Niles Road, St. Joseph, Michigan 49085, Phone: (269) 428 6333 Fax: (269) 429-3852 E-mail: mcknight@asabe.org

CIGR CO-SPONSORED ACTIVITIES

34th International Symposium

"Actual Tasks on Agricultural Engineering"

Co-sponsored by CIGR, this symposium will be held from **21 to 24 February 2006** in **Opatija, Croatia**. The symposia "Actual Tasks on Agricultural Engineering" have been organised for 33 years now. In recent years they have achieved greater international standing thanks to the co-sponsoring by EurAgEng, CIGR, AAAE and AESEE. The aim of this series of symposia is to present the latest scientific results on all aspects of research, design and development work in the various disciplines of agricultural engineering. The main topics to be covered by this symposium are:

- Farm mechanisation
- Power and machinery
- Ergonomics
- Energy in agriculture
- Soil and water
- Pre-harvest technology
- Crop harvesting
- Post-harvest technology
- Livestock buildings and equipment

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

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

For further information look up <http://www.agr.hr/aed/index.htm> or contact the Symposium Secretariat: Faculty of Agriculture, Agricultural Engineering Department, Svetosimunska 25, HR-10000 Zagreb, Croatia. Tel.: +385 1 2393819 Fax: +385 1 2393724 E-mail: skosutic@agr.hr

International Symposium on "Water and Land Management for Sustainable Irrigated Agriculture"

This symposium will be held at the Mithat Ozsan Conference Hall of Cukurova University in **Adana, Turkey** from **4 to 8 April 2006**. Organised by Cukurova University and co-sponsored by CIGR along with CIHEAM/Mediterranean Agronomic Institute of Bari and Kahramanmaraş University, the Turkish Scientific Research Council, the Turkish Society of Agricultural Engineers and RIHN (Research Institute for Humanity and Nature, Kyoto), the symposium will be dedicated to the memory of Prof. Osman Tekinel (1936-2004), a pioneer of agricultural water management in Turkey and the founder

of Cukurova University and Kahramanmaraş University.

The language of the symposium will be English. Participants and contributors to the symposium are invited to submit presentations/papers dealing with the following topics:

- Integrated water and land management
- On-farm water and soil management
- Performance evaluation and integrated management of irrigation and drainage systems
- Irrigation efficiency and associated economics
- Irrigation: poverty alleviation and food security improvement
- Demand water management in irrigation sector
- Water valuation in the irrigation sector, cost coverage, tariff system and rate level: opportunities and constraints
- Water scarcity, water harvesting
- Conjunctive use of water to optimize food production
- Virtual water concept and food security
- Policy options for water saving in irrigation
- Management transfer and participatory irrigation and drainage management
- Application of information technology in irrigation and drainage management
- Water quality/salinity management
- Role of irrigation in environmental fate of nutrients (N and P)
- Unconventional water use and environmental impacts
- Impacts of climate change on hydrological regimes and water resources
- Legal and institutional challenges
- Capacity building in water and land management
- Gender issues in water and land management

Abstracts should be limited to 400 words. During the Sessions, there will be oral presentations by invited keynote speakers. The program in its final form will be provided in due time. Poster presentations on all the themes will also be organized. Registration fees are 200 US Dollars (150 Euros) for participants from developed countries, 100 US Dollars (75 Euros) for participants from developing countries, and 50 US Dollars (35 Euros) for young professionals (under 35 years of age).

For further information please contact the Secretariat: Dr. Attila YAZAR, Cukurova University, Irrigation and Agricultural Structures Department, 01130 Adana, Turkey. Tel.: +90 322 3386515, Fax: +90 322 3386386, E-mail: symp2006@cu.edu.tr

International Conference on "Advances in Agricultural Technologies and Their Economic and Ecological Impacts"

On **8-10 May 2006** (instead of 9-11 May, as originally announced) the Israeli Society of Agricultural Engineers will hold its Annual Meeting and an International Conference in **Tel Aviv, Israel**. Co-sponsored by CIGR, the International Conference will be held in Cooperation with - and in the same location as - the "Agritech 2006" Exhibition.

The topics are:

1. Advanced technologies in field and greenhouse crops and their postharvest processing
 - Precision agriculture
 - Energy savings in greenhouses
 - New sensors for improvement of quality and safety of agricultural products
2. New agricultural technologies for reduction of environmental damage
 - Recycling and purification of irrigation and sewage water
 - Applications of GIS for agricultural and environmental tasks
 - Environment-friendly spray application

You are invited to submit proposals for papers to be presented at the conference. For further information contact Dr. Samuel Gan-mor, President, The Israeli Society of Agricultural Engineers, Institute of Agricultural Engineering ARO, P.O. Box 6, Bet Dagan 50250 ISRAEL. Email: ganmor@agri.gov.il Tel.: +972 3 9683303 or +972 506 220649
<http://www.agritech.org.il/events/event.php?oid=5>

V CIACH: The Agricultural Engineering Specialization in a Globalized World

Co-sponsored by CIGR and organised by the Agricultural Engineering School of the University of Concepción and the National Agricultural Research Institute, the 5th International Congress of Agricultural Engineering will be held from **10 to 12 May 2006**, at the University of Concepción, **Chillán Campus, Chile**. The main topics to be covered in oral or poster presentations are:

- Computer aids and automation in agriculture
- Agricultural mechanization
- Energy in agriculture
- Water resources in agriculture
- Food engineering
- Post-harvesting processing
- Civil work for agricultural use
- Sustainable agriculture and environment
- Biological system engineering
- Teaching on agricultural engineering

Important date:

The conference fees are US \$ 160 and US \$ 50 for students. For further information please contact: "V Congreso Internacional de Ingenierría Agrícola", Av. Vicente Méndez 595, Casilla 537, Chillán, Chile. Tel.: + 56 42 208709 Fax: +56 42 275303 Email: ciach@udec.cl
<http://www.udec.cl/ciach>

1st International Conference on Monitoring, Simulation, Prevention and Remediation of Dense and Debris Flows

This conference, organised by the Wessex Institute of Technology and co-sponsored by CIGR and EurAgEng, will be held from **7 to 9 June 2006** in **Rhodes, Greece**.

The scientific programme of Debris Flow 2006 will include an opening session, parallel oral sessions, and poster sessions on the following topics:

- Mass wasting and solid transport
- Slope failure and landslides
- Sediment, slurry and granular flows
- Solid transport within a streamflow
- Hyper-concentrated flows
- Debris-flow phenomenology and rheology
- Debris-flow triggering and mobilisation mechanisms
- Debris flow modelling
- Debris flow disaster mitigation (structural and non-structural measures)
- Case studies
- Computer models
- Rock falling problems
- Mechanics of solid-liquid-flows

The language of the conference will be English. As part of the conference a Special Session will be held on "Sediment discharge and hyper-concentrated and debris flows: monitoring, modelling, hazard assessment, design of mitigation measures and case studies".

For further information please look up www.wessex.ac.uk/conferences/2006/debris06/index.html or contact the chairmen of the conference: Lorenzini G., Alma Mater Studiorum-University of Bologna, Italy; Brebbia C.A., Wessex Institute of Technology, Southampton, UK; Emmanouloudis D., Technical Education Institute of Kavala, Greece; or contact the Chairman of the Special Session: Daniele De Wrachien, Department of Agricultural Hydraulics, State University of Milan, Italy, e-mail: daniele.dewrachien@unimi.it

WCCA 2006 – World Congress on Computers in Agriculture

The 4th World Congress of Computers in Agriculture and Natural Resources will be held in **Orlando, Florida, USA** from **24 to 26 July 2006**. A collaborative effort sponsored by ASABE and supported by CIGR, AFITA, EFITA, IAALD, and PanAFITA, this congress will provide a forum for agriculture related professionals to exchange information on applications and developments in the use of Information Technologies.

Topics include but are not limited to:

- Adoption and extension
- Decision support systems
- Education/training, distance learning and professional accreditation
- e-agbusiness and production chain management
- Field data acquisition and recording
- Food safety control/tracking-tracing
- GIS
- Grid applications

- Information systems and databases
 - Instrumentation and control
 - Web services, portals and internet applications
 - Library science and knowledge representation
 - Modeling and simulation
 - Packaging science and technology
 - Portable and nomadic computing
 - Precision agriculture
 - Rural and environmental development and policy
 - Wireless and sensor networks
- Authors are encouraged to submit an abstract before 30 January 2006.

Dates and deadlines:

Abstracts submission deadline: 30 January 2006
 Notification of acceptance: 27 February 2006
 Camera-ready full paper submission: 12 June 2006
 Registration deadline for authors: 12 June 2006
 Final program announcement: 15 June 2006
 For questions related to this conference please e-mail Fedro S. Zazueta at fsz@ufl.edu and look up <http://www.wcca2006.org>

First International Conference on Ammonia in Agriculture

From **19 to 21 March 2007**, Wageningen UR and the University of Kiel will hold the "First International Conference on Ammonia in Agriculture: Policy, Science, Control and Implementation" at the Congress Centre "De Reehorst" in **Ede, The Netherlands**.

Sponsored by CIGR, EurAgEng, KTBL (Germany), NVTL (The Netherlands), and the Dutch Ministry of Agriculture, Nature and Food Quality, it will address the role of ammonia in agriculture in a broad sense; from the policy on ammonia inventory and abatement in different EU-states to measuring methods and mitigation strategies. Non-CO₂ greenhouse gases, odour and Particulate matter (PM) will also be addressed, in satellite workshops.

Objectives of the Conference are:

- to bring together scientists, policy makers and other relevant stakeholders around the subject of NH₃ emissions from agricultural operations and its reduction options, to facilitate exchange of visions and knowledge,
- to offer a basis for international harmonization on various NH₃ emission related topics (e.g. national emission inventories, measurement techniques and strategies, data on emissions and reductions),
- to provide an update of science concerning NH₃ and related environmental issues.

The focus is on NH₃ emissions from various agricultural

sources (grazing, animal housing, manure storage, land application of manures), and the options for their reduction. Environmental impact of NH₃ is briefly addressed.

Important dates:

Abstract submission deadline: 15 March 2006
 Paper/poster acceptance notification: 1 May 2006
 full paper submission: 1 September 2006
 Comments from scientific committee: 1 November 2006
 Submission of revised manuscript: 1 December 2006
 For further information, please look up <http://www.firstammoniaconference.wur.nl/> or contact: Marry van den Top, Wageningen UR, PO Box 17, 6700 AA Wageningen, The Netherlands. Tel: +31 317 476453 Fax: +31 317 475347 E-mail: NH3Conference@wur.nl

22nd European Regional Conference of ICID

Sub-titled "Water Resources Management and Irrigation and Drainage Systems Development in the European Environment", this conference will be held by ICID from **3 to 10 September 2007** at the University of **Pavia, Italy**. The event will be sponsored by the Lombardia Region, with the patronage and scientific support of CIGR, EurAgEng and WWC.

The scientific programme will include an opening session parallel oral sessions and poster sessions on the following topics:

- Impacts of extreme hydrological events on irrigation and drainage systems
- Energy saving technology in advanced irrigation systems
- Conjunctive use of surface and groundwater
- Participatory management and economic policies for irrigation and drainage development.

Post-conference study tours will also be organized. The official languages of the Conference will be English and Italian, with simultaneous translation during the opening session.

Dates and deadlines

Submission of abstracts 31 May 2006
 Notification of acceptance 1 October 2006
 Submission of full papers 31 May 2007

For further information, please contact the Secretariat: Prof Elisa Scarascia Mugnozza, ITAL-ICID, Via Sallustiana, 10 Rome, Italy. Tel. and Fax: +39 06 488 4728 e-mail: me.scarascia@politicheagricole.it or the Vice Chairman: Prof. Daniele De Wrachien, Department of Agricultural Hydraulics, State University of Milan, Italy e-mail: daniele.dewrachien@unimi.it

OTHER ACTIVITIES

XII PIARC International Winter Road Congress

This Congress will be held in **Torino-Sestriere, Italy** from **27 to 30 March 2006**.

The main subjects will be:

- Strategies, levels of service and standards

- Performance and financing
- Safety and mobility in winter, social aspects
- Environment
- Winter maintenance managements systems
- Snow and ice removal technology

Dates and deadlines:

Hotel reservation: 30 January 2006
 For additional information please look up
<http://www.aipcr2006.it/> or contact: International Congress
 Torino, Via Cervino 60, 10155 Torino, Italy.

2nd International Training Workshop "Towards the Integration of Biosaline Irrigated Agriculture"

This workshop will be held from **18-22 May 2006** at the Desert Research Centre, Matareya, **Cairo, Egypt**, in collaboration with the Centre of Excellence in Water Resources Engineering, Lahore, Pakistan.

Topics:

- Saline water resources management and utilization
- Saline soil reclamation and management
- Plant production under stress conditions
- Saline soil-water-plant relationships
- Animal production in saline environment
- Socio-economy in Biosaline agriculture systems
- Salinity issues and technological advancement

Further information is available from: BioSaline Workshop Secretariate, Dr. Salah A Attia-Ismail or Dr. Samir Abu El Ezz, Desert Research Centre (DRC), P.O. Box 11753, Matareya, Cairo, Egypt, Tel.: +20106046244 Fax: +2026357858 E-mail: saai54@hotmail.com; samirabouelezz@hotmail.com <http://www.drc-egypt.com/> OR BioSaline Workshop Co-Secretariate, Dr. Sajid Mahmood (Azeemi), Coordinator, Centre of Excellence in Water Resources Engineering (CEWRE-UET), Lahore, Pakistan. Tel.: +923006607290 Fax: +92426822024 E-mail: drsajid_pk@yahoo.com; drsajid_pk@hotmail.com <http://www.cewre.edu.pk>

2006 CSBE-SCGAB Annual Meeting

Under the motto "Seeing I to I: Integrity and Integration in Bioengineering," the 2006 CSBE-SCGAB Annual Meeting will take place from 16 to 19 July 2006 in Edmonton, Alberta, Canada. You are invited to submit a proposal related to one of the following subjects:

- Food and bio-products
- Agricultural production
- Machinery systems
- Soil, water and air
- Building systems
- Animal welfare
- Information technology
- Waste management and bio-residuals
- Renewable energy and biofuels
- Emerging technologies and issues

Dates and deadlines:

Submission of proposals: 15 March 2006
 Confirmation of proposal acceptance: 3 April 2006
 Electronic submission of full papers: 26 June 2006

For further information including a downloadable call for papers with a registration form look up <http://www.bioeng.ca/Events/Edm2006/>

ISTRO-17th Triennial Conference on "Sustainability – Its Impact on Soil Management and Environment"

This conference will be held from **28 August to 3 September 2006** at the Christian Albrecht University of **Kiel, Germany**. The conference will comprise 5 days of sessions, including working groups, tours and displays. The official conference language will be English. The conference registration fee will be around 300 EUR, with discounts for ISTRO members and students. The conference will deal with the following topics:

- Soil dynamics and traction
- Traffic, tillage, and soil deformation
- Conservation farming and forestry landuse systems and environmental quality
- Soil biological quality and health
- Soil amendments
- Precision agriculture; mapping of soil properties and soil functions in agriculture and forestry
- Soil erosion and its control
- Economical aspects
- Soil management induced global change effects
- Sustainable landscape management
- Soil reclamation

Dates and deadlines:

final announcement 30 March 2006

Abstracts should be submitted as a Microsoft Word file sent as an attachment via email to b.vogt@soils.uni-kiel.de Please use your surname and first name to name the document. For further information contact: Istro 2006 Conference Secretariat, Olhausenstr. 40, D-24118 Kiel, Germany. Tel.: +49 431 8802573, Fax: +49 431 8802940 Email: b.vogt@soils.uni-kiel.de or look up <http://www.soils.uni-kiel.de/istro.htm>

2006 TSAE Annual Scientific Conference and General Meeting

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

The main theme of the conference will be "The Role of Engineers in Creating an Environmentally Sustainable Future: Challenges and Prospects for the Developing Countries."

The following sub-themes will be discussed:

- Safety and health in the agricultural sector
- Safety and health in engineering design (ergonomics)
- Safety and health in agricultural industrial processes
- Safety and health in industrial exploitation of forests
- Laws, regulations, and policies
- Education and training
- Environmental issues
- Gender issues
- Role of the private sector
- Renewable energy sources

- Labour saving technologies
- Conservation agriculture
- Entrepreneurship and job creation
- Water supply and sanitation
- ICTs

Members of TSAE, the Institution of Engineers Tanzania (IET), and the general public within and outside Tanzania are invited to submit papers on any of the sub-themes listed above to the below address.

Dates and deadlines:

Abstract submission: 31 May 2006

Full paper submission: 31 August 2006

For further information please look up <http://eng.suanet.ac.tz/> and contact: The Honorary Secretary, Tanzania Society of Agricultural Engineers (TSAE), P.O. Box 3003, CHUO KIKUU, MOROGORO, TANZANIA. Tel: +255 23 2604216; +255 23 2603511-4 Ext. 4433; Fax: +255 23 2603718, Mobile: +255 (0) 745 753233 E-mail: tsae@suanet.ac.tz OR tsae1973@yahoo.co.uk

3rd ISMAB

The 3rd International Symposium on Machinery and Mechatronics for Agricultural and Biosystems Engineering (ISMAB) will be held at COEX in **Seoul, Korea** on **23-25 November 2006**. This time, the biennial symposium is organized by the Korean Society for Agricultural Machinery and co-sponsored by the Japanese Society of Agricultural Machinery and the Chinese Institute of Agricultural Machinery.

Papers for either oral or poster presentations are called for the following subjects:

- Agricultural informations
- Bioenergy and alternative energy
- Biological engineering
- Biomechanics
- Farm power and machinery
- Food engineering
- Postharvest technology
- Precision farming
- Sensor technology
- Structure and environmental technology
- Robotics in agriculture
- Others

The official language of the 3rd ISMAB will be English.

Deadlines:

Submission of abstract: 28 February 2006

Submission of Paper: 30 September 2006

Registration: 30 September 2006

For further information look up <http://www.ksam76.or.kr/> or contact: Prof. Chang Hyun Choi, General Secretary, Major in Biomechatronic Eng., Faculty of Life Science and Technology, Sungkyunkwan University, Suwon, 440-746 Korea. E-mail: chchoi@skku.ac.kr

4th Asian Regional Conference & 10th International Seminar on Participatory Irrigation Management

The 4th Asian Regional Conference & 10th International Seminar on Participatory Irrigation Management (PIM) will be held in **Tehran** from **2-5 May 2007** by the Iranian National Committee on Irrigation and Drainage (IRNCID), ICID & INPIM. The World Bank and IWMI will support this conference as well. Everybody interested in participating is invited to submit papers on the following topics:

1. A review on participatory measures in irrigation
 - Implemented and proposed processes (frameworks, methods and indices)
 - Success stories on implemented projects
2. Required grounds and facilities for PIM formation
 - Organizational reforms
 - Cultural, social and political grounds
 - Legal frameworks and norms
3. Support system for PIM sustainability
 - Policies and strategies
 - Capacity building, training and extension
 - Monitoring and evaluation

Dates and Deadlines:

Submission of abstracts: 15 February 2006

Notification of abstract acceptance: 15 May 2006

Submission of full papers: 15 November 2006

Notification of paper acceptance: 15 January 2007

Further information can be obtained from the Iranian National Committee on Irrigation & Drainage (IRNCID) No. 24 Shahrzad Alley, Kargozar St., Zafar (Dastgerdi) St., Tehran, Iran 19198-34453. Phone: +9821-2225-7348 Fax: +9821-2227-2285, E-mail: irncid@neda.net.ir or info@irncid.org URL: <http://www.pim2007.org>

PUBLICATIONS

CIGR E-Journal: Agricultural Engineering International
<http://cigr-ejournal.tamu.edu/>

Yearbook Agricultural Engineering 17 (2005)

Volume 17 (2005) of the *Jahrbuch Agrartechnik / Yearbook Agricultural Engineering*, edited by F. Meier and H.-H. Harms, is now available. Contributions appear in English as well as German. The publication is available for

50.50 Euros from the publisher: Landwirtschaftsverlag Münster-Hiltrup, Germany. Tel.: +49 (0) 2501 80 13 00, Fax: +49 (0) 2501 80 13 51, E-Mail: Service@lv-h.de. Purchase order number 75065. ISBN 3-7843-3345-10

International Commission of Agricultural Engineering: Framework of Organization, State and Perspectives

This publication, in Russian, gives an overview of the organisational structure of CIGR and it lists useful addresses of people active in CIGR. Published by Rosinformagrotex, Moscow, 2004, 140pp. ISBN: 5-94600-011-X

CIGR Handbook of Agricultural Engineering

Edited by CIGR and published by ASAE. Five volumes, 2,400 pages, 110 authors. The books are available in CD-ROM and individual hardcover book format. Further information: ASAE; Dept. 1661, 2950 Niles Road, St. Joseph, MI 49085-9659; USA, Tel: 616-428-6324; Fax: 616-429-3852 E-mail: martin@asae.org

CIGR E-Journal ISSN 1682-1130

The *CIGR E-Journal* is now in its eighth year of publication. It has grown from a modest beginning and is now attracting many quality manuscripts. All of the published papers are available free of charge on the website <http://cigr-ejournal.tamu.edu/>.

There is no cost to publish or to access and print papers. The website has all the details regarding manuscript format,

submission instructions, etc. If you have any questions, please send me email to stout@tamu.edu
The following is an overview of the articles so far published in Vol. VIII (2006):

Peer Reviewed Original Research Articles

- 1.) P. Tassinari and D. Torreggiani. Visual Impact Assessment Methodologies for Rural Building Design. Manuscript BC 05 009. Vol. VIII. January, 2006.
- 2.) S. Das and V. Tewari. Mechanization of Tea Leaf Handling in Trough Withering System. Manuscript FP 05 010. Vol. VIII. January, 2006.
- 3.) S. Das. Further Increasing the Capacity of Tea Leaf Withering Troughs. Manuscript FP 05 012. Vol. VIII. January, 2006.
- 4.) N. Cao Don, N. Thi Minh Hang, H. Araki, H. Yamanishi, and K. Koga. Effect of Groundwater Pumping on Saltwater Intrusion in a Coastal Plain. Manuscript LW 05 003. Vol. VIII. January, 2006.

Invited Overview Articles

- 1.) B. Setiawan, A. Tambunan, W. Hermawan, Desrial, and Gardjito. Agricultural Engineering Education in Indonesia. Invited Overview. Vol. VIII. January, 2006.
- 2.) B. Sivaraman, T. Burks, and J. Schueller. Using Modern Robot Synthesis and Analysis Tools for the Design of Agricultural Manipulators. Invited Overview. Vol. VIII. January, 2006.

**This is the last CIGR newsletter to be published
by the CIGR General Secretariat in Bonn.**

**The staff of the Secretariat would like to take this opportunity
to express their gratitude to all contributors and readers
of the CIGR Newsletter for their interest, their patience,
and their cooperation.**

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

CIGR GENERAL SECRETARIAT

**Prof. Takaaki Maekawa, University of Tsukuba
Doctor's Program Life & Environmental Sciences
Tennoudai 1-1-1, Tsukuba, Ibaraki, 3005-8572, Japan,
T.: +81 298 53 6989 F.: +81 298 53 7496 E-mail:
biopro@sakura.cc.tsukuba.ac.jp**

The Deadline for CIGR Newsletter N^o 74 is 15 March 2006

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