Call for papers

Agriculture & Engineering for a Healthier Life

INTERNATIONAL CONFERENCE OF AGRICULTURAL ENGINEERING
CIGR-Ageng2012
Valencia Conference Centre

Call for papers

http://cigr.ageng2012.org
WELCOME!

On behalf of the European Society of Agricultural Engineers (EurAgEng), the International Commission of Agricultural and Biosystems Engineering (CIGR), and the Spanish Society of Agroingeniería (SAEgIng), you are welcome to the International Conference of Agricultural Engineering CIGR-AgEng2012 that will be held in Valencia, Spain on July 8-12, 2012.

EurAgEng and CIGR celebrate this joint International Conference on Agricultural Engineering in 2012. In addition, a Special Parallel Conference on mechanisation and post-harvest technology in developing countries organized by UNIDO and FAO form a part of the Congress.

The Conference covers emerging research and new engineering solutions for food production and rural activities, as a means to enhance human well-being and promote social benefits. New concerns include methods of agricultural, livestock and forestry production, and the preservation of natural resources and landscape by applying modern engineering concepts. Healthier production systems need to encompass higher social and economic benefits.

The CIGR-AgEng2012 Conference is addressed to academia, industry, producers, manufacturers and service providers from all over the world for discussion about novel approaches to integrate agriculture and engineering for enhancing the quality and expectancy of life.

PhD students, Delegates of CIGR and EurAgEng, Representatives of Developing Countries and Industry are specially encouraged to participate in CIGR-AgEng 2012 Conference.

I am looking forward to meeting you next July for CIGR-AgEng2012 Conference in Valencia, Spain.

Florentino Juste
Past-President EurAgEng
President of CIGR-AgEng2012 Conference
## PROGRAMME

### SATURDAY JULY 7
- EurAgEng and CIGR meetings

### SUNDAY JULY 8
- Registration
- EurAgEng and CIGR meetings
- Welcome reception

### MONDAY JULY 9
- Registration
- Plenary Conference
- Oral and poster sessions
- Working groups meetings

### TUESDAY JULY 10
- Registration
- Plenary Lecture
- Oral and poster sessions
- Working groups meetings
- Conference dinner and awards

### WEDNESDAY JULY 11
- Registration
- Oral and poster sessions
- Working groups meetings
- Closing conference
- EurAgEng and CIGR meetings

### THURSDAY JULY 12
- Technical tours (optional)

### JULY 9-11
- Tourists tours for accompanying persons
CALL FOR PAPERS

MAIN THEME
The main theme of this Congress is “Agriculture & Engineering for a Healthier Life”, an ambitious idea that claims how Agricultural and Biosystems Engineering is an essential part of the solution for producing quality food while protecting the environment.

SESSION TYPES
The Conference will include both oral and poster sessions. Authors are encouraged to indicate their presentation preference. A review committee will approve the proposed abstracts and request the full papers for their inclusion in the conference proceedings.

RIGHTS
The authors transfer freely their rights non exclusively to the Conference for the time of the conference. All the conference proceedings (abstracts and full text) will be indexed in the CABI bibliographic database. It is up to the authors of the paper to take all necessary steps to respect the rights of any third parties in relation to parts of the text and/or the illustrations it contains. Any graphical element - photograph, drawing map, etc.- should be accompanied by the indication of the source. The authors shall sign a Copyright Licence Agreement.

SUBMISSION OF PAPERS
Authors are invited to present their abstract by December 1, 2011 via CIGR-AgEng2012 website. The abstracts should not exceed 500 words. An abstract is indicative of the final paper quality, and therefore authors are urged to prepare concise, clear and informative abstracts describing their work with emphasis on objectives and results.

Each abstract should include:
• Title of the paper
• Authors
• Preference for oral or poster presentation
• Preference for specific general conference area or special parallel conference

Based on the abstract, the Scientific Committee will decide on the acceptance of the papers as oral or poster presentation.

Selection criteria for paper acceptance will include full compliance with submission deadlines and procedures, relevance to conference topics, quality of the abstract, perceived completeness of the reported work, originality, and the number of proposals submitted.

Selected authors shall send their full papers (maximum 6 pages including figures, tables and references) by April 30, 2012. Proposals must be submitted electronically following the procedure outlined at http://cigr.ageng2012.org.
TOPICS

General Conference

The conference will cover all the general topics included in the CIGR and EurAgEng societies, described in the following list.

**AP: ANIMAL PRODUCTION TECHNOLOGY**
- Animal production systems and techniques.
- Animal feeding strategies and impact on manure management.
- Optimisation of manure management systems.
- Air quality in livestock production systems.
- Traceability systems.
- Animal welfare.
- Automatic milking systems.
- Aquaculture.
- Recirculation of water systems in aquaculture.
- Aquaculture in greenhouses.

**ED: EDUCATION AND CURRICULA**
- Equipment for teaching.
- New trends on higher education agricultural engineering.
- Instructional activities for engaging students.
- Biosystems engineering.
- New challenges.

**EN: ENERGY, BIOMASS AND BIOLOGICAL RESIDUES**
- Energy crops, harvesting, handling and transport.
- Crop and biomass logistics.
- Heat and power generation using removable energy sources.
- Composting, combustion and biogas production systems. Bio fuels.
- Electrical technology.
- Biomass and emission trade.
- Biological residues: wastes from agricultural production and forestry, processing industries, and municipal sources (MSW).
- Bioenergy processes: fermentations, thermochemical conversions, liquid and gaseous fuels, and petrochemical substitutes.
- Bioenergy utilization: direct combustion, gasification, electricity production, chemical processes, and by-product remediation.
- Biomass and the environment: carbon cycle, the net energy efficiency of bioenergy systems, assessment of sustainability, and biodiversity issues.
- All other environmental, management and economic aspects of biomass and bioenergy.

**ES: ERGONOMICS, SAFETY AND HEALTH**
- Machine user’s safety.
- Ergonomics and safety constraints.
- Pesticide exposure.
- Operators protection.
- Monitoring methods and biomonitoring.
- Practical applications of ergonomic design and research.
- Work analysis and design.
- Work measurement.
- Work organization and ergonomics. Ergonomics in total quality management.

**IT: INFORMATION TECHNOLOGY, AUTOMATION AND PRECISION FARMING**

- Wireless sensor networks.
- Sensing and data interpretation in agriculture.
- Biosensors.
- Information, communication, and decision-making systems.
- Mechatronics, agricultural robotics, biorobotics, and control systems.
- GNSS applications, precision farming, remote sensing, and GIS.
- Machine vision, image analysis, and software design.
- Real-time sensing and control.
- Decision support and expert systems.

**PF: POST HARVEST, FOOD AND PROCESS ENGINEERING**

- No destructive methods for quality inspection and estimation.
- Physical properties of agricultural products.
- Quality and safety during storage and transport.
- Computing simulation.
- Postharvest treatments.
- Thermal processing.
- Peeling, cutting, chilling and freezing.
- Innovative packaging, active atmospheres and intelligent packages.
- Food safety and nutritional values.
- Functional foods.

**PM: POWER AND MACHINERY**

- Engine and tractor power.
- Soil tillage. Fertilizing and crop planting. Crop protection technology.
- Pruning and canopy management. Harvesting technology.
- Transport and logistics of agricultural materials.
- Machinery management and costs.
- Forest machinery.

**RD: RURAL DEVELOPMENT**

- New technologies in territorial management.
- Natural resources and biodiversity.
- Quality of local products and traceability.
- Management and maintenance of natural spaces, soil and water quality.
- Rural development in emerging countries.
- Agricultural mechanization in developing countries.
- Sustainable development.
SE: STRUCTURES AND ENVIRONMENTAL TECHNOLOGIES
- Agri-industrial facilities design.
- Innovative buildings.
- Advances in anaerobic digestion of agricultural by-products.
- Air quality in agricultural systems.
- Handling and treatment of agricultural wastes.
- Integrated environmental impact assessment of agricultural systems.
- Ecological engineering.
- Nanotechnologies for environment.
- Greenhouse design, construction and structures, new materials.
- Sensing and measuring plant growth, physiological state and product quality.
- Controlled environment technology. CFD.

SW: SOIL AND WATER ENGINEERING
- Surface and ground water resources.
- Water management with limited availability technologies.
- Water quality and environmental safety.
- Waste water management.
- Socio-economic, institutional and policy issues in water management.
- Management and planning of multifunctional land and water use.

Special Parallel Conferences

CIGR-AgEng2012 is designed as a large umbrella for eight simultaneous thematic conferences with the goal of promoting the interaction between CIGR and EurAgEng Working Groups.

SPC-01: ENVIROWATER’2012 - 15 TH INTER REGIONAL ENVIRO WATER: SOIL WATER AND ENVIRONMENT MANAGEMENT (CIGR SECTION I: LAND AND WATER ENGINEERING)
Chair: Jose Mª. Tarjuelo
Co-Chair: Guanhua Huang

SPC-02: FIRST INTERNATIONAL SYMPOSIUM ON COMPUTATIONAL FLUID DYNAMICS (CFD) APPLICATIONS IN AGRICULTURE (ISHS WORKING GROUP ON CFD, CIGR TECHNICAL SECTION II and ASABE COMMITTEE SE-303)
Chair: Ricardo Suay
Co-Chairs: In-Bok Lee, Thomas Banhazi and Murat Kacira

SPC-03: IV INTERNATIONAL WORKSHOP ON COMPUTER IMAGE ANALYSIS IN AGRICULTURE (CIGR WORKING GROUP ON IMAGE ANALYSIS FOR AGRICULTURAL PRODUCTS AND PROCESSES)
Chair: Jose Blasco
Co-Chairs: Victor Alchanatis and Manuela Zude
SPC-04: 5TH AUTOMATION TECHNOLOGY FOR OFF-ROAD EQUIPMENT CONFERENCE
Chair: Francisco Rovira-Más
Co-Chair: Qin Zhang

SPC-05: THE NINTH INTERNATIONAL LIVESTOCK ENVIRONMENT SYMPOSIUM (ILES IX)
Chairs: Richard Gates and Maria Cambra-Lopez
Co-Chairs: Tami Brown-Brandl and Daniela Jorge de Moura

SPC-06: APPLICATIONS OF SMART SENSORS AND WIRELESS SENSOR NETWORKS (WSN) IN PLF (PRECISION LIVESTOCK FARMING) AND PA (PRECISION AGRICULTURE)
Chair: Pilar Barreiro
Co-Chair: Esmaeil Nadimi

SPC-07: SILOS AND GRANULAR MATERIALS (SIGMA)
Chair: Francisco Ayuga
Co-Chair: Jørgen Nielsen

SPC-08: CREATING A COMPETITIVE EDGE THROUGH AGRICULTURAL MECHANIZATION AND POST-HARVEST TECHNOLOGY IN DEVELOPING COUNTRIES
Chairs: Chakib Jenane and Josef Kienzle
Co-Chair: Antonio Torregrosa
GENERAL INFORMATION

Deadlines
December 1, 2011: Submission of abstracts on-line via CIGR-AgEng2012 website
February, 2012: Notification of acceptance
April 30, 2012: Submission of full papers
May 20, 2012: Final programme

Web site
http://cigr.ageng2012.org
On the website you can also find more information about the congress, registration and booking form, and abstracts submitted form.

Registration

<table>
<thead>
<tr>
<th>Registration fees</th>
<th>Early rate closes April 30, 2012</th>
<th>Regular rate closes July 1, 2012</th>
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<tr>
<td>Members (EurAgEng, CIGR, ASABE, ISHS)</td>
<td>530 €</td>
<td>580 €</td>
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<td>One-day admission 3</td>
<td></td>
<td></td>
<td>300 €</td>
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<tr>
<td>Conference Dinner</td>
<td>30€</td>
<td>30€</td>
<td>30€</td>
</tr>
</tbody>
</table>

1 The latest day for on-line registration is July 1, 2012. Registrations received after this date will not be considered on-line and will have to be resubmitted at the Conference registration desk, from July 8, 2012.
2 The list of low income and low-middle income countries is taken from The World Bank.
3 One-day admissions will only be sold the same day at the registration desk.

THE REGISTRATION FEE FOR PARTICIPANTS INCLUDES
· Welcome Reception on July 8, 2012
· Attendance to all Scientific Sessions and Conference Documentation
· Coffee-breaks.
· Lunches on Monday, Tuesday and Wednesday
· Certificate of attendance
· One copy of the abstract volumes and a CD with the complete papers

THE REGISTRATION FEE DOES NOT INCLUDE
Conference Dinner on Tuesday

THE REGISTRATION FEE FOR ACCOMPANYING PERSON(S) INCLUDES
Welcome Reception on July 8, 2012
Half-Day Valencia City Tour on July 9, 2012

THE REGISTRATION FEE FOR ACCOMPANYING PERSON(S) DOES NOT INCLUDE
Conference Dinner on Tuesday

Please note that only fully registered participants will be admitted to the scientific sessions!
THE REGISTRATION FEE FOR STUDENTS
Student registrations are only accepted with a copy of a student card. Students' registration fees includes all benefits granted to regular participants.

ONE-DAY ADMISSIONS
One-day admissions will only be sold the same day at the Conference registration desk. Participants will benefit from all Conference activities taking place at the registered day. One-day participants will receive the complete Conference documentation.

PAYMENT
Registrations will not be processed without payment. Full payment in Euros should be received before the corresponding deadline; otherwise, the preferential rate will not be granted.
Credit Card: Payment by credit card is preferred. For online registration please log on the website.
Bank transfer
Bank account details: IBAN ES33 2100 0842 3302 0058 2724
SWIFT: CAIXESBBXXX
La Caixa
C/ Aragón, 176
08011 Barcelona - Spain
Participants paying by bank transfer are requested to send a copy of the bank transfer to the organizing secretariat by fax or by e-mail.

CONFIRMATION OF REGISTRATION
A confirmation e-mail will be sent to each participant once full payment of the registration fee has been received in the congress bank account.

REPLACEMENTS (NAME CHANGES)
Replacements of confirmed registrations are subjected to an administrative fee of 75 € per participant.

CANCELLATIONS
Cancellations of confirmed registrations will result in a 100 € cancellation fee per participant as long as it is received by July 1, 2012. Refunds by credit card or bank transfer will be made after the conference. For cancellations received after July 1, 2012, no refunds will be made.

REGISTRATION CONDITIONS

MAXIMUM PRESENTATIONS PER REGISTRANT
If you will be making an oral presentation or bringing a poster, you must indicate the abstract numbers assigned. Each registrant for the full three-day programme can be responsible for up to two presentations or posters. A one-day registrant CANNOT be responsible for any presentation. Indicate your abstract number(s) at the end of the online registration process or on the pdf registration form.
Orphan abstracts (i.e. without a responsible registrant) will be removed from the oral or poster program after April 30, 2012.

LIABILITY AND INSURANCE
Participants are advised to make their own personal travel and health insurance arrangements. Neither the Local Organizing Committee nor the Congress Organizers assume any responsibility for damage or injury to persons or property during the congress.

CHANGES
The Local Organizing Committee reserves the right to make changes to the program as deemed necessary.
CIGR-AGENG2012 VENUE

Valencia is the third largest city in Spain with a population of one million people.

A modern transportation network, including the Manises International Airport, an extensive system of motorways and trains, and one of the best ports in Europe provides easy access to the city from any part of the globe. Its privileged location in the Mediterranean coast, and a dynamic economy and cultural life, allows the city to enjoy a prominent position among other European cities.

In the vicinity of Valencia you can discover pretty towns and beautiful natural landscapes, practice a wide variety of sports, or enjoy over one hundred kilometres of magnificent beaches that stretch from the city itself along the coast.

As the sun sets, the nightlife of Valencia has something for everyone; in fact, this is one of the hottest night spots along the Mediterranean sea.

The Conference will be held in the Valencia Conference Centre which provides a unique atmosphere to hold conferences, conventions and large audience events. The main auditorium has a capacity to seat 1481 people and, when connected to auditoria 2 and 3 through video and sound, can host a total audience of 2250 participants.

GENERAL INFORMATION ABOUT VALENCIA
www.turisvalencia.es
www.palcongres-vlc.com

CONTACTS

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ORGANIZERS

SUPPORT

SUPPORTING ORGANIZATIONS