EurAgEng

the european network for engineering and systems in the rural sector

Newsletter Summer 2008 - Conference Issue



Welcome to AgEng2008

AgEng2008 is the latest in a series of international conferences which began in 1984 with AgEng84 in Cambridge, UK. They have been held in different European countries since then at two year intervals, plus an extra one in Germany in 2007. Each conference is managed on behalf of EurAgEng by the host country, sometimes in conjunction with another conference and sometimes as a stand-alone event. Over the years, the AgEng conferences have grown in size and importance, and the next two (in 2010 and 2012) have already been awarded and planning has begun.

So what is EurAgEng? The strapline at the top of this page says that EurAgEng is the European network for engineering and systems in the rural sector. It exists to promote the profession of Agricultural and

Biosystems Engineering, and the people who serve it. The Society is made up mainly of members from the national societies of the individual countries. For instance, most of the German members have joined through the German national society, VDI-MEG, whilst the UK members have joined through IAgrE and so on. However, in addition to these 'en-bloc' members there are quite a few who have joined directly as individual members.

Many members have joined to take advantage of reduced prices for AgEng conferences and for the major reduction in the subscription rate for the journal *Biosystems Engineering*. If you are interested in joining, why not visit the EurAgEng stand at the AgEng2008 conference or pick up a leaflet from the stand and complete the application form?

The Next One

International Conference on Agricultural Engineering

Clermont-Ferrand, France September 6-8, 2010

Toward's Environmental Technologies

On behalf of EurAgEng, of the French Society of Engineers and Technicians in Mechanisation and Agricultural Engineering, SitmAFGR, and of the French Association for Water resource, Irrigation and Drainage, AFEID, Cemagref will host AgEng2010 in Clermont-Ferrand, France, on 6-8 September 2010.

A new Objective of the European Commission called European Territorial Cooperation, pushes ahead the innovation and the economy of knowledge in areas such as ecoinnovation, sustainable water and waste management, protection of biodiversity, preservation of natural heritage, and development of renewable energies.

In this context, AgEng2010 will address all the topics usually covered by AgEng Conferences

within the scope of Biosystems Engineering, with special attention paid to the approaches that can make agricultural engineering technologies to be considered as environmental technologies.

AgEng2010 will be preceded by two technical symposia organised in parallel on 3 and 4 September 2010: the symposium ECOTECHS2010 (Equipment for Mineral and Organic Spreading) and the symposium ATOE2010 (Automation Technology for Offroad Equipment). Both symposia will take place at Cemagref technology platforms dedicated to spreading and off-road mobile robotics.

Initially, the conference website will be at <www.ageng2010.org>, moving to <www.ageng2010.com> later.

Biosystems Engineering

EurAgEng is proud to have **Biosystems Engineering** as its official scientific journal.

Members of EurAgEng are eligible to subscribe to the journal for their own personal use at a much reduced rate. To discuss this or a future on-line subscription, please visit the EurAgEng stand or contact Dave Tinker <secgen@eurageng.net>

In this issue

III CIIIS ISSAC	
Welcome	1
AgEng2010	-1
Biosystems Engineering	-1
Keep up to date	2
AgEng2012	2
Open meeting	2
Outstanding paper awards	3
Technical articles wanted	3
Funding for research	4

Keeping up to date

Our EurAgEng Secretary-General, Dave Tinker, sends out monthly email newsletters to members updating them with information which may be of interest. The messages are short and informative, and members can be assured that no information will be passed to anyone who should not have it. Please would you make sure your email address is correct on the database by logging in as described below and making any corrections. If you do not wish to receive the updates, please send Dave a message to <secgen@eurageng.net> with Unsubscribe to Updates as the subject.

Logging in the Members' Area

To log in, enter the first four letters of your surname and your password. Initially your password is the same as your membership number, which is the 4 or 5 digit number on your address label. If you would like a reminder of your membership number, contact Dave Tinker on <secgen@eurageng.net>. Once you have logged in, you can change your password to any combination of up to ten letters and numbers.

Updating your own membership details

Enter any details which should be changed in the boxes. When you press the Submit button, a message containing the new information will be sent to the secretariat.

Finding members

To search for a particular member, enter the person's surname (or part of it), and/or the country (or part of it), and/or the field of interest. The more you enter, the closer the search will be. A list of members who fit the search criteria will then be displayed. Click on the surname of the required member to give fuller details. The search facility can also be used to find all the members in a particular field of interest or in a particular country.

Changing your password

Enter a new password up to 10 characters long. The new password will take effect immediately.

Joining a discussion forum

The discussion forum is there for members to air opinions, request information or generally grumble. There is a general forum for members' discussion but if you would like to create a forum for a new subject, please contact Mike Hurst on <web@eurageng.net>

Stay in touch! Go along to the EurAgEng stand at the conference and give Nicky or Dave Tinker your latest email address

Do you need staff?

If you look at the EurAgEng web site
www.eurageng.net> you will see a section
Jobs. We have had several advertisements on the site, generating income for the Society. Next time you are recruiting staff, please consider placing an advertisement with us on the web. It does not cost much and it reaches a very wide and appropriate audience. Also, it can be arranged very quickly. Contact Mike Hurst at
web@eurageng.net> if you are interested.

AgEng2012 - Valencia

It might seem a long time to 2012 but planning for AgEng2012 has already begun. The conference has been awarded to IVIA and Universidad Politécnica de Valencia in Spain under the chairmanship of Dr Florentino luste. The bid



Florentino Juste

from Valencia was strongly supported by the Spanish Society of Agricultural Engineering (Sociedad Española de Agroingeniería). The conference will take place either in July or September 2012 and the focus will be Engineering for a Healthier Life.

Don't miss the Open Meeting

Everyone is invited to attend the relatively informal **EurAgEng Open Meeting** on Monday 23 June at 18.30. The outgoing President, Aad Jongebreur, will briefly review the last two years of EurAgEng before handing over to the new President, Florentino Juste. There will also be a short presentation on the finances of the Society.

All the speakers have promised to be brief and the meeting will enable EurAgEng to go forward for the next couple of years until AgEng2010 in Clermont-Ferrand. Do come along.

EurAgeng Outstanding Paper Award

Bill Day



Publishing high quality papers in peer-reviewed journals is a vital component in research, and EurAgEng recognised this by adopting **Biosystems Engineering** as its Official Scientific Journal back in 1994. This year, for the first time, some of the best papers published in the journal are being recognised through the EurAgEng Outstanding Paper Award.

The winners of the Awards will be announced during the AgEng2008 conference, but we already know the shortlist from which they will be chosen. Bill Day, Editor-in-Chief of the Journal (and Immediate Past President of the Society), says "The exercise of choosing the short list from more than 300 papers published during the last two years proved a real challenge, but we have twelve strong papers from which the Journal's Editorial Board have been asked to choose Award winners. I am pleased that these Awards can demonstrate to the research community the value we place on their work".

The Awards are sponsored by IAgrE, the UK Society and owner of the Journal, and will now be a feature of the biennial AgEng conferences. They will be given to authors of outstanding papers published in Biosystems Engineering in the previous two calendar years, so it is papers published in 2006 and 2007 that have been considered for the 2008 Awards.

The short listed papers are:

- I H. Fatnassi, T. Boulard, C. Poncet and M. Chave, Optimisation of Greenhouse Insect Screening with Computational Fluid Dynamics. Volume 93, Issue 3, March 2006, 301-312
- O. Hamza, A.G. Bengough, M.F. Bransby, M.C.R. Davies and P.D. Hallett, Biomechanics of Plant Roots: estimating Localised Deformation with Particle Image Velocimetry. Volume 94, Issue 1, May 2006, 119-132

- 3 G. Guo, K. Araya, H. Jia, Z. Zhang, K. Ohomiya and J. Matsuda, Improvement of Salt-affected Soils, Part 1: Interception of Capillarity. Volume 94, Issue 1, May 2006. 139-150
- 4 Rodrigo Castaneda-Miranda, Eusebio Ventura-Ramos, Jr., Rebeca del Rocio Peniche-Vera and Gilberto Herrera-Ruiz, Fuzzy Greenhouse Climate Control System based on a Field Programmable Gate Array. Volume 94, Issue 2, June 2006, 165-177
- Marques da Silva, Analysis of the Spatial and Temporal Variability of Irrigated Maize Yield. Volume 94, Issue 3, July 2006, 337-349
- 6 Martijn H. Dirkse, Wilko K.P. van Loon, Tom van der Walle, Sebastiaan L. Speetjens and Gerard P.A. Bot, A Computational Fluid Dynamics Model for Designing Heat Exchangers based on Natural Convection. Volume 94, Issue 3, July 2006, 443-452
- 7 N.D. Tillett and T. Hague, Increasing Work Rate in Vision Guided Precision Banded Operations. Volume 94, Issue 4, August 2006, 487-494
- 8 S.A. Cryer and D.E. Barnekow, Estimating Outside Air Concentrations surrounding Fumigated Grain Mills. Volume 94, Issue 4, August 2006, 557-572
- 9 J. Kaihilahti, A. Suokannas and S. Raussi, Observation of Cow Behaviour in an Automatic Milking System using Web-based Video Recording Technology. Volume 96, Issue 1, January 2007, 91-97
- 10 V.T. Thanh, A. Van Brecht, E. Vranken and D. Berckmans, Modelling of Three-dimensional Air Temperature Distributions in Porous Media. Volume 96, Issue 3, March 2007, 345-360
- II S. Gebregziabher, A.M. Mouazen, H. Van Brussel, H. Ramon, F. Meresa, H. Verplancke, J. Nyssen, M. Behailu, J. Deckers and J. De Baerdemaeker, Design of the Ethiopian ard plough using structural analysis validated with finite element analysis. Volume 97, Issue I, May 2007, 27-39
- 12 C.P. Riden and A.F. Bollen, Agricultural supply system traceability, Part II: Implications of packhouse processing transformations. Volume 98, Issue 4, December 2007, 401-410



Many of you will have prepared a conference paper that could lead to a short article to go in a future issue of this Newsletter published in the autumn and spring. We are always looking for articles that EurAgEng members will find interesting or thought provoking or show unusual aspects of agricultural engineers at work. Have a word with Dave or Nicky Tinker on the EurAgEng stand at AgEng2008 or send them a message on <secgen@eurageng.net>. A typical article would have 250-350 words and one or two photographs, but the length is less important than the interest.

Funding from FP7 for your research?

Prof Peter Pickel, Frank Knecht, Jens Fehrmann, Dave Tinker

The European agricultural engineering industry, along with the scientific society of agricultural engineering and technology, formed the Agricultural Engineering and Technologies (AET) as part of the MANUFUTURE European Technology Platform (www.manufuture.org). The objective of MANUFUTURE (which represents the whole sector of mechanical engineering) and of AET is to ensure that the current research framework programme (FP7) of the European Union recognises the needs of technology, development and research.

Documents necessary for forming a Technology Platform, and including Vision 2020, Strategic Research Agenda (SRA) and the First Implementation Plan were prepared for the steering committee of the VDMA (the German Engineering Federation), the High-Level-Group (HLG) of MANUFUTURE and for the European Commission (EC) as well as the AET community.

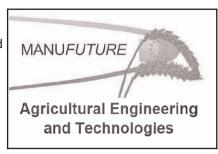
A workshop was held in Brussels on 7 June 2007 which included several other Technology Platforms (TPs) and this was followed by a national conference of MANUFUTURE, held in September 2007 in Berlin. Research topics from the AET initiative were included (published in VDI Nachrichten) and the meeting launched an objective of ensuring that agricultural engineering topics would be in future calls of FP7.

A European conference of MANUFUTURE took place in December 2007 in Porto, Portugal, where Dr Ludger Frerichs (of VDI-MEG and EurAgEng) gave a presentation on the need for financial support of R&D activities.

The German agricultural engineering society, VDI-MEG, and VDMA are the driving forces behind AET. Industry involvement in the initiative is high, as indicated by the inclusion of Prof Peter Pickel of John Deere Mannheim, who represents AET in the MANUFUTURE High Level Group. Frank Knecht of the VDMA European Office in Brussels, is the representative on site with Jens Fehrmann (TU Dresden) coordinating the AET activities. VDMA and its members are kindly supporting Mr Fehrmann's activities.

Within AET there are four groups that, since early in 2008, have been working on the second Implementation Plan for completion by mid 2008.

At a meeting of all Technology Platforms engaged in agricultural topics (Knowledge Based Bio-Economy, KBBE, oriented TPs) with the



appropriate EC-Directorate in January 2008, it was agreed that AET will be incorporated into a Coordination and Support Action (CSA) proposal of KBBE platforms. The outcome is that it is highly likely that AET will become a recipient of FP7 funding.

Furthermore, at a MANUFUTURE HLG meeting in March 2008 in Athens, discussions were held on MANUFUTURE applying for Joint Technology Initiative status. Basically JTIs are Private-Public Partnerships that will support large-scale multinational research activities. AET (and therefore VDI-MEG) as well as the VDMA would support such an initiative within MANUFUTURE. A first discussion with the EC has been held. Forming a JTI from 2010 is a possibility, but there will be strong competition from other TPs.

In the meantime AET is very optimistic that the EC will fund specific AET projects within FP7. At the suggestion of the EC Directorate responsible for industrial research, AET will organise a conference in Brussels with the objective of developing further AET topics within FP7. This conference will serve as a first stage for the formation of project consortia. The results of that conference will determine trends for the future development of the agricultural engineering and technology sector within MANUFUTURE ETP. The whole AET community, including VDI-MEG and VDMA, are expecting strong encouragement for the European agricultural engineering sector and for research in that area.

EurAgEng thanks the VDMA and VDI-MEG team for their efforts in promoting agricultural engineering within FP7 and EurAgEng asks its members to check the regular electronic newsletter for updates.



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