

Agricultural Engineering - Future Challenges and Expectations

Aleksander Szeptycki, IBMER Warsaw, Poland

An edited paper given at the Sixth Central and Eastern European Conference on Agricultural Engineering, Lithuania June 2009



Twelve years ago in Kaunas, Lithuania the first meeting of directors of agricultural engineering research institutes from Central and Eastern Europe was held. In June 2009 the sixth meeting was held. The first decade of the 21st century has brought rapid changes in the world economy and also in agriculture. In addition the current world financial crisis will certainly add to the speed of the changes.

I would like to draw your attention to what I consider to be the most important causes of these changes and also to possible future changes. These are my personal reflections, and my intention is to encourage discussion. As a result, I hope, we will be able to sketch the directions for our common and complementary research efforts.

I suggest the main causes of rapid change are:

- global climatic changes and their consequences
- the widespread trend toward sustainable development
- the energy crisis, stimulated in many cases by politics
- the global financial crisis
- the recent simultaneous use of agricultural land by the food and energy sectors.

The points above depend on one another and are also stimulated by one another. However they all stimulate technical progress which, if skillfully applied, may solve or at least mitigate emerging problems and tensions. Let us look closer at these causes of change.

Climate change

Caused by global warming which leads to

- The need to reduce CO₂ and other harmful gases emissions
- The need to reduce energy consumption from fossil sources
- The need to develop clean energy production

Sustainable development

This is defined in the Brundtland report, *Our Common Future*, 1987: "The strategy to meet the needs of the present without compromising the ability of future generations to achieve their own needs"

- Prevention of further global warming
- Protection of natural resources; including soils
- Protection of air and water - (special task for specialists in animal production)
- Working conditions for humans and living conditions for animals
- Economic effectiveness of agricultural production
- Ecological effectiveness of the proposed changes in production technologies
- Conservation of biodiversity

Energy crisis

- Saving energy by improving efficiency is almost always cheaper than producing and transmitting more, even if from a renewable source
- Development of renewable energy, at least as a partial remedy
- Renewable energy technologies of second and further generations as the way to more effective utilization of raw materials and to further reduce emissions
- Need to apply Life Cycle Assessment when investigating bio-energies
- Bio-energies as locally important energy sources and how to develop them.

Global financial crisis

Need to improve the economic effectiveness of agricultural production and also of the activities mentioned above.

Simultaneous use of land; food versus energy

- Be well nourished and walk, or hungry and drive a car. Is this a real dilemma?
- The growth of the world's population, with spreading areas of hunger, requires growth in crop yields
- Simultaneous production and balancing firstly agricultural land and water availability
- How to use marginal soils and other resources including GM crops, effectively
- Research and development should assess the net yield (GJ/ha) after having deducted all inputs.

Just listing all these problems shows that there is lot of work for agricultural engineering. But can we be engaged in all of them? Can the research institutes from the less rich countries afford to do so? Perhaps the institutes around the EU should cooperate and work on specific tasks? More questions like these may be posed. Institutes need to be involved in Scientific Networks and Technology Platforms in order to obtain finance from EU funds. Regional and technical seminars and conferences, such as the Central and Eastern European Conference, helps fill this need for networking and cooperation.

Note from Secretary-General:
EurAgEng will increasingly develop ways for providing information, for members to communicate and network. On the website there is the membership database to find people and news of events but once collaboration has been started, there is a good foundation to form bigger and better projects.

In this issue

| | |
|---------------------------------|---|
| AgEng Future Challenges | 1 |
| From the Secretary-General | 2 |
| AgEng2010 | 3 |
| Book reviews | 4 |
| Wrest side story | 5 |
| New from Biosystems Engineering | 5 |
| Events | 6 |
| Field robot event | 7 |
| AgEng2009 | 7 |
| New website | 8 |
| Archived photos & drawings | 8 |

From the Secretary-General

David Tinker



Land.Technik AgEng 2009 is getting close, 6-7 November in Hanover. Some of you will be reading this just before the conference starts, others will have picked it up at the conference. If you are reading this in time please think about coming along. Registration, the program and other details are at the website linked from EurAgEng Conferences/Events page www.eurageng.net/events.htm or

go straight to www.vdi-wissensforum.de/index.php?id=1277. Don't forget that this Conference on Agricultural Engineering Innovations to Meet Future Challenges is immediately before the major Agritechnica machinery exhibition and registered attendees of the Conference will be able to enter the Exhibition Ground.

For those who pick this up at the Conference please come along to the EurAgEng stand to find out who we are and what we offer.

AgEng2010 and Clermont-Ferrand.

Preparations for AgEng2010 (6-8 Sept 2010) in Clermont-Ferrand are also building up. Again the website can be accessed from the EurAgEng Conferences/Events page. Clermont-Ferrand and the nearby area is not only the home of Michelin



but also several research and development organisations, including many involved in agriculture such as CEMAGREF and INRA, have bases nearby.

The EurAgEng Executive met in Clermont-Ferrand in France late last year and visited not only the impressive Polydome Conference Centre but also the CEMAGREF Montoldre research centre near

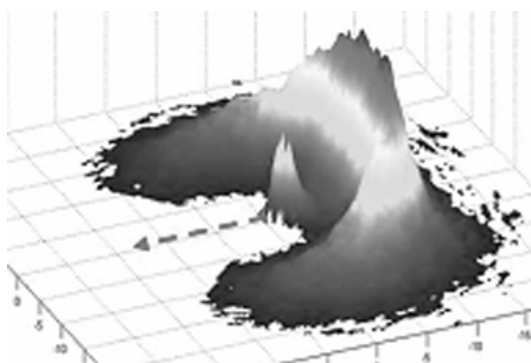
Clermont-Ferrand where it is planned to have part of the two symposia that will be held immediately before the Conference. The Conference theme is **Towards Environmental Technologies** and aims to help encourage the development of environmentally-friendly technologies for agriculture within a rural development framework. Given the pleasant scenery near Clermont-Ferrand it is not surprising that the environmental technologies should form the theme of the conference.



Two symposia will be held immediately before the Conference and are (1) *ECOTECHS: Ecodesign and Development of Methodologies for Eco-assessment and Eco-innovation of Spreading Equipment* and (2) *Robotics and Agriculture/Environment*.



The visit to Montoldre showed some of the new research and testing technology that CEMAGREF have. The new unique, patented, granular fertiliser test rig will, within one or two minutes, map the distribution of a granular material from a spreader and is capable of testing a spreading width of around 100m and quickly producing a distribution map as shown in the diagram.



There are research programmes running alongside this facility which are endeavouring to model the trajectory of the fertiliser granules. The rig is popular with manufacturers for quickly calibrating the spreaders while the research should lead to computer modelling which will enable the manufacturers to get the spread design right even quicker.

Even more impressive at Montoldre is a very large facility to determine the spreading characteristics of organic matter such as farmyard manure and sewage sludge. This facility is considered unique in the world and exceeds the European standards for analysing spreader performance. Fortunately on the day we were there, the material being used was dry and therefore not too smelly!

These two facilities show how rigorously CEMAGREF is taking the measurement of organic and artificial fertilisers so that excess dosage, and hence environmental harm, can be minimised.

Environmental concerns

We are all increasingly aware of the problems caused by climate change and other environmental impacts. The Secretary-General has seen that some conferences are promoting sustainable or recycled conference materials and others are trying to be carbon neutral. Those of you that read this newsletter and the emailed updates will also know that EurAgEng is encouraging agricultural engineering conferences

to submit the conference proceedings to **CABI** for inclusion in the on-line database and also in the Agricultural Engineering Abstracts. There has been very positive interest among the conference organisers that have been involved with EurAgEng and hopefully this will show that agricultural, and biosystems, engineers are very concerned with environmental issues.

David has recently applied to be a Chartered Environmentalist, a scheme to recognise the expertise and achievements of environmental professionals working throughout the UK and abroad. (see www.socenv.org.uk). He should be able to use the CEnv designation by the time this Newsletter is issued. The UK's national society, IAgRE, was one of the original organisations involved in establishing the Society for the Environment which operates the CEnv scheme.

Visits by the Secretary-General

Apart from the visit to CEMAGREF in Clermont-Ferrand the Secretary-General attended the Central and Eastern European Agricultural Engineering Conference in Lithuania and heard about the work of, and some of the issues facing, agricultural engineering research institutes throughout countries from the Baltic States to Russia and further south.

Much of the discussion was to do with finances and the economies of course, but technical topics included a strong emphasis on renewable and bio-energy research. In this Newsletter we have included an edited presentation from Prof Aleksander Szeptycki of IBMER Warsaw, who said that as he has stepped down from being Director of the Institute, he has had some time to read and think about the challenges facing the world, agriculture and agricultural engineers. The conference proceedings have been sent to CABI so should be in the database and the Agricultural Engineering Abstracts before too long. David would like to thank all the people he met while in Lithuania. It was a pleasant and interesting visit and he wishes them good luck for the future.

David has also been to Brussels to be at the initiation of the *European Factories of the Future Research Association*, EFFRA. This body has spun out of the ManuFuture Technology Platform (and the Agricultural Engineering Technologies sub-group) and is aimed at improving research in the EU across all manufacturing aspects. David also went to a meeting in the UK discussing EU funding sources and routes and hopefully, when we have time to put strategies in place, EurAgEng will increasingly be involved in helping members and organisations to be involved in EU programmes.

AgEng2010 Clermont-Ferrand, France 6-8 September 2010

AgEng2010 is less than a year away. It will be hosted by Cemagref in Clermont-Ferrand, France on 6-8 September 2010 on behalf of EurAgEng, of the French Society of Engineers and Technicians in Mechanization and Agricultural Engineering, SitmAFGR, and of the French Association for Water resource, Irrigation and Drainage, AFEID.

The theme of AgEng2010 CF will be **Towards Environmental Technologies**. It will emphasise the advances in the design and the development of environmental technologies in agriculture in the context of rural development. It will examine how agricultural engineering technologies can make farming both environment-friendly and more competitive.

A new Objective of the European Commission called *European Territorial Cooperation*, emphasises the innovation and knowledge in areas such as eco-innovation, sustainable water and waste management, protection of biodiversity, preservation of natural heritage, and development of renewable energies. AgEng2010 will address all the topics of Biosystems Engineering usually covered by AgEng Conferences and will pay special attention to ways in which agricultural engineering technologies can be used as environmental technologies.

AgEng2010 will be preceded by two technical symposia organised in parallel on 3-4 September 2010: the symposium



ECOTECHS2010 (Equipment for Mineral and Organic Spreading) and the symposium ATOE2010 (Automation Technology for Off-road Equipment). Both symposia will take place at Cemagref technology platforms dedicated to spreading and off-road mobile robotics.

Timetable

- 1 December 2009: Submission of abstracts on-line via AgEng2010 website, www.ageng2010.org
- Spring 2010: Submission of full papers
- 20 May 2010: Final programme

Costs

€480 for early registration and for EurAgEng members, €530 for non-members. Special rates will be available for participants to ECOTECHS or Robotics and Agriculture/Environment with AgEng2010.

Details

For more details and registration information, see the conference website, www.ageng2010.org

Do you need staff?

If you look at the EurAgEng web site <www.eurageng.eu> 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.eu> if you are interested.

Book Reviews

We have had two books from the World Association of Soil and Water Conservation (WASWC). The first, *No-till Farming Systems*, has been reviewed by Brian Sims, an agricultural engineer with years of experience of reduced tillage systems in emerging countries.

The second, also by WASWC, *Soil and Water Assessment Tool (SWAT); Global Applications*, includes EurAgEng as a co-publisher. Details of its contents are given below.

Finally, we give brief details for *Dam-Break Problems, Solutions and Case Studies*.

No-till Farming Systems

Edited by Tom Goddard, Michael Zebisch, Yantai Gan, Wyn Ellis, Alex Watson and Samran Sombatpanit
540 pages and CD, World Association of Soil and Water Conservation (WASWC), ISBN 978-974-8391-60-1
Review by Brian Sims

Brian Sims welcomes this book for its solid contribution to the no-till message that can significantly contribute to climate change adaptation and mitigation whilst raising agricultural productivity and profitability. The book brings together a large number of eminent authors with a world-wide command of the practice of no-till and its implications for agriculture and our planet. We now have around 100 million hectares of no-till in the world and so we are not talking of a fad, but rather an established successful practice.

Split into five main sections, the publication covers what is sometimes a somewhat eclectic collection of information, starting and finishing with Rolf Derpsch giving firstly a progress report and then a route map to wider adoption. In between there are parts on aspects of soil fertility (C sequestration and ecosystem services); policy issues (with especially valuable insights from John Landers in Brazil); and R&D (where CIMMYT's contribution to the problems for smallholders is particularly timely).

The volume has annexes with some useful summaries of other relevant books by well respected writers. These include: *No-tillage Seeding in Conservation Agriculture* (edited by Baker and Saxton); Carlos Crovetto's pioneering work on no-till in Chile; the Australian *Search for Sustainability for Dryland Agriculture* by No-Till Bill Crabtree; and other books from Italy and Brazil.

This is not a book to be read from cover to cover, rather, except for some overarching chapters on aspects of the state of the art, it is a valuable source of site-specific information from around the world. Case study sites encompass Europe, North and South America, Africa, Asia and Australia.

The editors conclude that the collection of papers provides a deeper and more comprehensive insight into no-till systems. I can agree with that conclusion and also with Edward Faulkner's still unchallenged comment in *Plowman's Folly* (1943) that: 'no one has ever advanced a scientific reason for plowing'.

The cost of *No-till Farming Systems* is US\$20 (excluding postage and packing) including a CD with a comprehensive collection of reference data and many multimedia presentations. Contact Prof Samran Sombatpanit of WASWC

sombatpanit@yahoo.com for more information or contact David Tinker on secgen@eurageng.eu for a list of suppliers in the EU.

Soil and Water Assessment Tool (SWAT); Global Applications.

Edited by Jeff Arnold, Raghavan Srinivasan, Susan Neitsch, Chris George, Karim Abbaspour, Philip Gassman, Fang Hua Hao, Ann van Griensven, Ashvin Gosain, Patrick Debels, Nam Won Kim, Hiroaki Somura, Victor Ella, Luis Leon, Attachai Jintrawet, Manuel Reyes, and Samran Sombatpanit.
DVD with SWAT software and reference library and a 415 page book, World Association of Soil and Water Conservation (WASWC).

Details compiled by David Tinker. To obtain a copy of the SWAT, please contact him at secgen@eurageng.eu. The cost is 20 euro including postage in the EU.

When WASWC asked EurAgEng to be a co-publisher I thought that this was a good, and cost effective, way for EurAgEng members to obtain a copy of the SWAT scientific modelling programme. The idea to produce the SWAT book and DVD was initiated by Prof Manuel R. Reyes of North Carolina Agricultural and Technical State University who had seen the *No-Till Farming Systems* book and thought it might be good to produce a similar one for those people in the global network of users of the Soil and Water Assessment Tool (SWAT).

When starting to produce the SWAT book, the editors decided to include the software needed for performing SWAT work on a DVD. The software for SWAT has been well engineered and tested for many years. With this book and DVD, and sponsors including USAID, it has become very affordable. Many people were involved in getting the chapters of the book written and with related software ready for 'burning' into a DVD.

SWAT is a river basin scale model developed to quantify the impact of land management practices in large, complex watersheds. It is a public domain model actively supported by the USDA Agricultural Research Service at the Grassland, Soil and Water Research Laboratory in Temple, Texas, USA and the Official SWAT website is found at www.brc.tamus.edu/swat/

The following is taken from this website and describes SWAT.

Model Objective

Predict the effect of management decisions on water, sediment, nutrient and pesticide yields with reasonable accuracy on large, ungaged river basins.

Model Components

Weather, surface runoff, return flow, percolation, ET, transmission losses, pond and reservoir storage, crop growth and irrigation, groundwater flow, reach routing, nutrient and pesticide loading, water transfer.

Model Operation

- Daily time step-long term simulations
- Basins subdivided to account for differences in soils, land use, crops, topography, weather, etc.

- Basins of several thousand square miles can be studied
- Soil profile can be divided into ten layers
- Basin subdivided into subbasins or grid cells
- Reach routing command language to route and add flows
- Hundreds of cells/subbasins can be simulated in spatially displayed outputs
- Groundwater flow model
- SWAT accepts output from EPIC
- SWAT accepts measured data and point sources
- Water can be transferred from channels and reservoirs
- Nutrients and pesticide input/output
- Windows Interface
- GRASS GIS links to automate inputs

The book and DVD were updated after a SWAT Workshop and Conference, and now include an e-Library on the DVD in addition to the main SWAT software with a large number of

articles and videos that involve soil and water conservation issues and all the information from the No-Till CD that accompanies the No-Till Farming Systems book has also become a part of the SWAT DVD.

Dam-Break Problems, Solutions and Case Studies, ISBN: 978-1-84564-142-9 Pages: apx 336 Published: 2009. More information www.witpress.com/978-1-84564-142-9.html

For those involved in the theoretical or practical aspects of dam failures, design of flood defence structures, prevention measures and other aspects related to dam breaks, former EurAgEng President Daniele De Wrachien and Stefano Mambretti have edited a book giving an up-to-date review on the problems related to dam failures. The book, *Dam-Break Problems, Solutions and Case Studies*, is recently published by the WIT Press at GBP128.00.

Wrest Side Story

Agricultural Engineering at Wrest Part 1924 - 2006

A book on the history of the work of the National Institute of Agricultural Engineering, which later became Silsoe Research Institute, is now available.

The first two chapters describe the origins of the Institute in Oxford in 1924 and its progress to Wrest Park in 1947-8 via Askham Bryan in Yorkshire during the war years. The remaining 12 chapters describe the agricultural engineering work undertaken, together with highlights and personal anecdotes from former staff.

The price per book including postage and packing is:
UK: GBP25
EU: GBP28
Rest of World: GBP30

For further details, or to order a copy please visit:
www.iagre.org/wrestparkbook.shtml
or contact IAgRE Secretariat on
+44 (0) 1525 861096

Agricultural Engineering; the Wrest Park Story 1924-2007
edited by Bill Day, Liz Field and Anne Jarvis.
Elsevier, 2009. 168pp



Agricultural Engineering - the Wrest Park Story

1924 - 2006



Edited by Bill Day, Liz Field & Anne Jarvis

New from Biosystems Engineering

Members of EurAgEng are already able to subscribe to Biosystems Engineering at a reduced rate. In 2009 personal subscriptions cost GBP229 + local value added tax (vat) for a hardcopy delivered by post.

However from January 2009 we have been able to offer a fantastic offer for a personal on-line subscription to Biosystems

Engineering for just €90 (euro) + vat. To qualify for this deal you must be a member of your National Society and a member of EurAgEng.

If you are interested in more details about this deal or a personal hardcopy version, please contact Nicky Tinker at secgen@eurageng.eu.

Sponsored Events

Full details on sponsorship of events and how to apply can be found at <www.eurageng.eu/events.htm>

28-30 September 2009

5th National Conference and 2nd Iberian Conference

"AgroIngeniería 2009"

Organiser: Spanish Society of AgroEngineering

Venue: Lugo, Spain

Web: www.aging2009.org

Tel: +34 982 285 900

Fax: +34 982 285 926

6-7 November 2009

Conference LAND. TECHNIK

AgEng 2009 "Innovations to meet future challenges"

Organiser: VDI Wissensforum and EurAgEng

Venue: Hanover, Germany

Tel: +49 (0) 211 62 14-4 48

Fax: +49 (0) 211 62 14-1 29

Web: www.vdi.de/landtechnik-ageng

Email: wissensforum@vdi.de

22-26 February 2010

38th International Symposium

'Actual tasks on Agricultural Engineering'

Venue: Grand hotel "Adriatic",

Opatija, Croatia

Organiser: University of Zagreb,

Faculty of Agriculture, Department of Agricultural Engineering

Web: <http://atae.agr.hr>

Email: skosutic@agr.hr

9-11 March 2010

2nd International Conference on Machine Control and Guidance

Organiser: University of Bonn

Venue: Bonn Campus Poppelsdorf

Web: www.mcg.uni-bonn.de

Email: mcg@uni-bonn.de

Tel: +49/228/73-2620

25-27 May 2010

2nd International Conference FRIAR 2010 on Flood Recovery, Innovation and Response

Organiser: University & Polytechnic of Milan, Wessex Institute of Technology and University of Wolverhampton, UK

Venue: Milan, Italy

Web: www.wessex.ac.uk/conferences

26-28 May 2010

3rd International Conference DEBRIS FLOW 2010

Organiser: University of Milan, Italy and the Wessex Inst of Technology

Venue: Milan, Italy

Web: www.wessex.ac.uk/conferences

16-18 June 2010

Sustainable Rural Life - Engineering Solutions for Neo-Rural Areas

Organiser: EurAgEng WGp RD27

Venue: HAMK University of Applied Sciences, Hämeenlinna, Finland

Web: www.hamk.fi/sustainablerurallife

6-8 September 2010

AgEng2010 CF - International Conference on Agricultural Engineering "Towards Environmental Technologies"

Venue: Clermont-Ferrand, France

Organiser: Cemagref, SitmaAFGR and AFEID

Web: www.ageng2010.org

Email: info@ageng2010.fr

Other Events

30 September -2 October 2009

'Suprofruit2009' - 10th Workshop on Sustainable Plant Protection Techniques in Fruit Growing

Venue: Congrescentre Hof van

Wageningen, The Netherlands

Web: <http://www.suprofruit2009.wur.nl>

Email: suprofruit2009@wur.nl

15-17 October 2009

5th Balkan Region Conference on Engineering Education with 2nd International Conference on Engineering and Business Education

Venue: University of Sibiu, Romania

<http://conferences.ulbsibiu.ro/conf.brcee>

9-11 November 2009

12th Inter Regional Enviro Water Conference

Venue: Marrakech, Morocco

Organisers: ANAFIDE, CIGR & 2IE

Web: www.anafid.org, www.cigr.org

19-20 November 2009

4th International Symposium "Farm Machinery and Process Management in Sustainable Agriculture"

Venue: Lublin, Poland

Organisers: University of Life

Sciences, Lublin/Poland & Wallon

Agricultural Research Centre,

Gembloux/Belgium

Web: www.kemiz.up.lublin.pl/index.php?id=konferencje

10-13 December 2009

7th Sifel Morocco: International Fruit & Vegetables Trade Show

Venue: Agadir, Morocco

Web: www.sifelmorocco.com

24-25 February 2010

30th GIL 2010 convention

Venue: Stuttgart-Hohenheim

Organiser: German Association for Informatics in Agriculture, Forestry, and the Food Sector (GIL e.V.)

Web: www.uni-hohenheim.de/pflanzenbau

18-21 July 2010

10th International Conference on Precision Agriculture (ICPA)

Denver, Colorado, USA

Web: www.icpaonline.org/

15-19 September 2010

IBS2010 - 14th International Biotechnology Symposium and Exhibition

Venue: Rimini, Italy

Web: www.ibs2010.org

Are you getting it?

Over 900 members do not have a current contact email address on our database and so are unable to receive the latest monthly updates with news, conference notices and job adverts. Please check your contact details via the members' page on the website, inform us of any changes, and make sure you are not missing out on the latest information. The address is <www.eurageng.eu> then click on Members' Login.

Field Robot Event at the Joint International Agricultural Conference (JIAC) Wageningen, The Netherlands

Wageningen University invites university and school teams to enter its annual international open-air field robot contest. The contest allows unlimited creativity: no restrictions apply to the robot design and construction. As seen during the previous Field Robot Events, the participants certainly know how to be creative!

As many as fourteen teams entered The Wageningen Field Robot Event which took place at Wageningen University at the same time as the Joint International Conference (JIAC) on 6-8 July 2009. Delegates from the conference made a special visit to the Robot Event to see the robots perform in the field. After anxious moments about the weather, the winners were Eyesonic 2009, Helios and EasyWheels. The Free



Field Robot navigating maize

Style was won by Kopi's Farmer, second was EasyWheels and third was Hielke 2.

The Field Robot Event shows a vision of the future of modern precision



agriculture. A small revolution is taking place with a new breed of robots soon being able to carry out a variety of tasks in row crops such as weeding, spraying and disease monitoring. These agricultural robots will be able to work in a field completely autonomously and the Field Robot Event shows this to be possible!

The Field Robot Event includes a contest, of course, but exchanging experiences and networking are an important part of the event too. Everyone who is interested in robots is welcome to come along. For information, including the venue for 2010, please visit the website www.fieldrobot.nl. Sponsors for the event are always welcome. Please contact the Secretary-General (secgen@eurageng.eu) if you can help.

AgEng2009 / LAND.technik / AGRITECHNICA Agricultural Engineering International Conference and Fair 6-14 November 2009

This year, the conference AgEng2009 will be held jointly with the 67th International Conference LAND.technik, which will take place in Hannover on 6-7 November 2009. The theme will be **Innovations to Meet Future Challenges**, and the focus will be on providing the growing global population with food and energy derived from biomass.

The conference, which will be a prelude to the AGRITECHNICA trade fair for agricultural machinery, is organized by VDI Wissensforum under the auspices of the Max Eyth Society for Agricultural Engineering of the VDI (VDI-MEG) and the European Society of Agricultural Engineers (EurAgEng).

The programme, which will include 84 presentations by speakers from industry and research, will highlight the latest developments in tractors, mobile power trains, mobile hydraulics, electronics, software engineering and automation technology. Other topics will cover navigation, tillage, crop protection and harvesting technology, as well as the logistics and engineering aspects of the utilisation of biomass for bioenergy. Presentations are planned at the plenary session by Carl-Albrecht Bartmer, President of the German Agricultural Society (DLG), Martin Richenhagen, President and CEO of the AGCO Corporation, USA; and Stefan Schulz from the German Federal Ministry of Food, Agriculture and Consumer Protection, Bonn.

The conference language will be English.

Registration and programme details can be found at www.vdi.de/landtechnik-ageng or VDI Wissensforum Kundenzentrum Postfach 10 11 39 40002 Duesseldorf Germany Email: wissensforum@vdi.de Tel: +49 (0) 211 62 14-201, Fax: -154.

Agritechnica

The exhibition which follows the conference, AGRITECHNICA, will be attended by most of the world's agricultural machinery companies. At AGRITECHNICA in 2007 some

2,188 companies and organisations from all over the world took part. This year, AGRITECHNICA will be devoting special attention to the topic of soil and water which are two key production factors in agriculture with great influence on yields. For more information and the complete exhibition programme visit www.agritechnica.com.



Soon the EurAgEng website will look very different. It is undergoing a complete redesign to freshen up the appearance and introduce new facilities. The site will continue to be a source of information about the Society, and there will be a new section of introductory information about the Agricultural and Biological Engineering profession for outsiders to read.

Members will still be able to log in to use the membership database to find other members, to update their own details, to contribute to discussion forums and pay for subscriptions to Biosystems Engineering. Logging in will be slightly different to be more secure. Details on how to log in will be on the login page itself.

New features will allow more interactivity with members. For instance, Working Group chairmen will be able to update their Working Group pages, and there may even be a Secretary-General's blog! The Secretary-General will be able to use a web browser to update information on the site without having to involve the Webmaster.



The site, which uses the content management system Drupal, is in the final stages of development and testing. It will soon be moved to the address www.eurageng.eu where over the following months, new facilities will be added. The Secretary-General would welcome feedback and suggestions for the new site from members.

Combined fundraising for charity



A new world record was set on 15 August 2009 with 175 combine harvesters from all over Ireland gathering at Platin, Duleek, Co Meath, Ireland. They worked simultaneously in a 110 acre field to harvest the wheat crop in 15 minutes. The event was supervised by Guinness World Records and raised money for charity. It broke the previous record of 56 combine harvesters working in one field set in Australia in 2002.

Picture by profi international

Fancy a free tractor?

Tyrell in the UK is a business that produces packets of crisps (or chips if you prefer) and they are proud of their agricultural background. They always print on the packet the variety of potato that the crisps are made from, but at the moment they have a competition to win a tractor, a Massey Ferguson 5455. However the winner can choose to have the cash! (www.winatractor.co.uk).

Archived Photos and Drawings

From time to time, the secretariat receives messages expressing thanks for the email updates and occasionally members suggest information that other members might like to know about. Prof Hermann Auernhammer has pointed us in the direction of archived photos and drawings relating to agricultural engineering at the **AgEngineering Slide Collection** in mediaTUM (Technical University of Munich). Currently only in German, it is certainly worth a view.

The web address is

<http://mediatum2.ub.tum.de/?cunfolde=11274&dir=11274&id=11274>



A picture from 1955 at Landtechnik / Technische Universität München archive



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