

News from EurAgEng

Autumn 2010



From the President

Peter Schulze Lammers, University of Bonn

Agricultural Engineering societies like EurAgEng have existed at a national level for more than a hundred years. EurAgEng is, in this context, an umbrella organisation founded by forward thinking Agricultural Engineers most of whom were from universities. The number of societies which have joined EurAgEng and the acceptance of the AgEng conferences around Europe, means that EurAgEng is recognized as an international organisation giving the national associations an international face. However the national societies do not make much use of this opportunity and see themselves more as financial contributors having to share their membership fees with the European organization. EurAgEng is rather more supported by individuals looking for a European platform to present their scientific activities.

These individuals are particularly interested in networking to become partners in collaborative research projects. Although the next step is uncertain as it was 18 years ago when EurAgEng was formed, there is a clear vision that EurAgEng must become a professional society for all parts of Europe - North, South, East and West.

In Eastern European countries, as a result of political changes, agricultural engineering societies are less well-known. EurAgEng should try to extend its range into south-east Europe to work with and support the national societies in those countries and include them in EurAgEng activities.

In taking on the leadership of EurAgEng for the next two years as President, I have a responsibility to maintain the vision. In this respect, I would like to remind members of the thoughts of Francis Sévila, the Founding President of EurAgEng in 1992 and 1993. In the Spring Newsletter of 1998 he reflected on the society after its early period. He

stated that the formation of the European society should not compete with the national societies but strengthen their visibility and influence. In order to make the national societies more visible in EurAgEng, we need to give our members more information about the national societies. The Newsletter is ideal for presenting and disseminating information about their structure, activities and objectives. I call on the representatives of the national societies to make use of this opportunity over the coming years.

Major initiatives have been started in recent years. One is the participation in EU Research programmes to open the door to our members for research funded by the European Commission. AET* is a promising group which has already launched effective lobbying in Brussels and brought necessary information into the community.

Successful participation in the EU Research programmes needs consortia from different countries. EurAgEng is the ideal organisation for networking and supporting people who are active in AET.

EurAgEng took a visionary decision to take part in the harmonization process of the academic education systems in Europe. In this way we help to develop our own profession for the future by preparing the basic skills and capabilities of our young professionals. EurAgEng members have continued to work towards this harmonization process and have contributed to the acknowledgement of engineering curricula in our discipline. This issue is a future key area of EurAgEng as there is still a strong demand for more coordinated curricula opening the door to international students. In this way European studies will attract students and keep our societies prepared for the future.



Finally I emphasize the role of EurAgEng in the world community. We can say that today EurAgEng is a strong member and supporting partner of CIGR**. We are proud that a member of our European society, Søren Pedersen, is the current president of CIGR. EurAgEng looks forward to the joint CIGR-EurAgEng meetings in 2012 and 2016 in Valencia, Spain and Aarhus, Denmark.

**AET is the Agricultural Engineering and Technologies sub-platform of the ManuFuture European Technology Platform, a body that encourages the EU to fund appropriate research in manufacturing processes. AET was started by former EurAgEng Vice President Ludger Frerichs when he was at Claas and the current chairman is Dr Peter Pickel of John Deere.*

***CIGR is the world body; Commission Internationale de Genie Rural / International Commission of Agricultural and Biosystems Engineering. All EurAgEng members are automatically members of CIGR and are entitled to discounts when attending CIGR Conferences.*

**EurAgEng is the European Network for
Engineering and Systems in the Rural Sector**

EurAgEng Awards 2010

EurAgEng Recognition Award

EurAgEng owes a debt of gratitude to the many people who have given time, energy and enthusiasm to the Society. The following people were awarded the EurAgEng Recognition Award at AgEng2010 to acknowledge their contributions over the years.

Professor Aad Jongebreur

Professor Jongebreur has been a committed member of EurAgEng, its council and executive for many years. He has regularly attended meetings and worked actively on behalf of the society even after his retirement from Wageningen University. He has been the Coordinator of the Working Groups for several years and has encouraged their activity between AgEng conferences. He was President of EurAgEng from 2006 until 2008 and has continued to serve as an active immediate past president since then, chairing the Innovation and Development Award Committee and serving on the Award of Merit committee and executive. He continues to represent the interests of EurAgEng in the EU with his involvement with MANUFUTURE and AET. It is therefore most fitting that Professor Jongebreur should receive the EurAgEng Recognition Award and the Society thanks him for his great commitment to EurAgEng.

Professor George Papadakis

EurAgEng would like to recognise the work that Professor Papadakis did in planning and executing the last highly successful AgEng international conference in Crete in 2008. Over 500 delegates attended the conference set on the beautiful north Cretan coast. The outdoor Gala evening was a treat for all Northern Europeans. Plan B in case of inclement weather was to hold the evening on the beach! Professor Papadakis is Professor in the Department of Natural Resources and Agricultural Engineering at the University of Athens and has also coordinated the Working group on Energy Systems and Rural Electricity. He is actively involved in research into Renewable Energies. Unfortunately Professor Papadakis was unable to attend AgEng10 to receive his award, but he was thanked in his absence.

Hermann Auernhammer

Our third recognition award goes to Professor Hermann Auenhammer who retired from his post of Professor in Crop and Landscape Management at the University of Munich in 2007. Known as one of the pioneers of modern agricultural technology and precision farming, Professor Auernhammer has also been a good friend and supportive member of EurAgEng, encouraging young agricultural engineers along the way. We would like to wish him a long and happy retirement and thank him for the work he has done on behalf of the society.

Emmanuel Hugo

EurAgEng would also like to thank Emmanuel Hugo and his colleagues at CEMAGREF, Clermont-Ferrand, for the hard work that went into bringing together the AgEng10 conference in France. Emmanuel 'inherited' the job from Pierre Grenier who instigated AgEng2010 in 2006 but who then moved on to the Ministry of Agriculture. Emmanuel has done a sterling job organising meetings, getting a large and active Scientific Committee together and coordinating AgEng2010 as well as continuing his 'day job'. EurAgEng would like to show its appreciation by presenting Emmanuel with the Recognition Award.

Francis Sévila

Last but not least of the Recognition Awards, EurAgEng would like to recognise the contribution of Professor Francis Sévila who sadly passed away in July this year. He was a founder member of the society, served as the first president in 1992 and had been an active and enthusiastic supporter of EurAgEng ever since, including chairing the Scientific Committee for AgEng2010 until his death. As Francis's close friend and colleague over many years, Professor Florentino Juste received the award on behalf of Francis's family.

EurAgEng Award of Merit

This award is the highest honour that the Society bestows. It is made to leading individuals for their major contribution to the success of engineering for agriculture and the rural sector in Europe.

Jacques Burel

EurAgEng is very proud to award its most prestigious award, the Award of Merit, to Jacques Burel, of Sulky-Burel, one of the leading manufacturers of large width fertiliser spreaders based in France.

Jacques Burel has been head of the company, founded by his father Fabien, a blacksmith, in 1936, for many years, following his father's death when Jacques was just 20 years old. A born innovator, Jacques Burel encouraged his Research and Development team to present their ideas to the press, the profession and with great success at the Paris SIMA machinery shows. The company holds up to 40 international patents. With strong emphasis on research and development, Jacques encouraged collaboration with scientists outside of the company and as early as 1987 a SULKY spreader was chosen for the establishment of the first indoor test rig at CEMAGREF, Montoldre. Since then the collaboration has gone from strength to strength.

He has won several prizes at SIMA and in 2007, ECOVISION won the gold medal. ECOVISION was the first system to optimise fertilizer distribution on each field using spatial management. He is also a true believer in direct drilling techniques and conservation tillage. From an early age he demonstrated not only his innovative qualities but also his outstanding human qualities as a manager, with his attention to the working conditions of his employees and above all he has the greatest respect for his customers.

EurAgEng is delighted to present the Award of Merit to Jacques Burel.



Jacques Burel (right) receiving the award from the incoming president, Peter Schulze Lammers. The Award takes the form of a cast bronze replica statuette and is entitled Earth Man Tool and Sky. The original statue was made in oak and stood about 2.7m tall in the Mansion at Wrest Park, Silsoe, UK at the National Institute of Agricultural Engineering (NIAE) which was later to become Silsoe Research Institute (SRI).

AgEng2010

The latest in the series of successful Agricultural Engineering Conferences.

Clermont-Ferrand, France welcomed over 450 delegates from 34 different countries around the world to AgEng2010. They enjoyed an interesting and lively conference in the volcanic Auvergne region of France. In total 385 scientific papers were presented (241 oral and 144 posters) in 49 sessions. There were wide ranging presentations on 14 different topics. Power and Machinery, Soil and Water and Animal Production Technology attracted the largest numbers of participants but Information Technology, Crop Protection and Fertilization were also well supported.

Two symposia on Ecotechs and Robotics preceded the conference with practical workshops and demonstrations at Montoldre, CEMAGREF's experimental station. Both attracted over 70 participants, many of whom continued to share their experiences at AgEng2010.

The Conference was organised on behalf of the European Society of Agricultural Engineers (EurAgEng) and the French Society of Engineers and Technicians in Mechanization and Agricultural Engineering (SitmAFGR), by CEMAGREF on 6-8 September 2010. CEMAGREF is the public environmental science and technology research institute of France. There were three plenary sessions with keynote speakers from industry and policy makers discussing future demands on agricultural engineering both within Europe and the wider world.



The Conference Dinner, a gastronomic experience held at Vulcania, up in the mountains surrounding Clermont-Ferrand, was the occasion chosen by EurAgEng to honour its prize winners for 2010.

The prestigious Award of Merit went to M Jacques Burel, President of Sulky-Burel. Once again this Award has been given to an engineer who is incredibly enthusiastic about his work and an inspiration to all agricultural engineers. See the report on page 2 opposite.

The Innovation and Development Award, for a presentation on an innovative development and which must include commercial partners, went to E Piron, D Miclet, L Leveillé, D Clochard and S Villette. More details are given in the item below.

Three teams of authors collected an Outstanding Paper Award from the editors of Biosystems Engineering, the Official Scientific Journal of EurAgEng. They were chosen by the Editorial Board from a shortlist of ten papers.

The winners were T Grift and C Crespi, F. Dabbene, P Gayand N. Sacco and E S. Nadimi, H.T. Søgaaard and T. Bak. A full list of the ten papers appears on page 7.

Prof Aad Jongebreur from The Netherlands, Prof George Papadakis from Greece, Prof Hermann Auernhammer from Germany and the organiser of the French conference, Emmanuel Hugo, were all honoured with the Society's Recognition Award for their efforts in leading and promoting EurAgEng. The citations can be read on page 2 opposite.

There was also a tinge of sadness as Florentino Juste; outgoing President of EurAgEng collected a Recognition Award on behalf of his friend and colleague, Professor Francis Sevilla, who died in July. Francis had been an inaugural president of EurAgEng in 1992 and was Chairman of the Scientific Committee of AgEng2010 until his death.

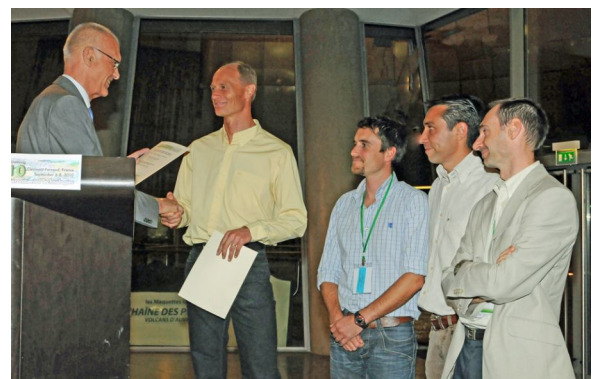
Looking to the future, EurAgEng was pleased to present the Field Robot Event with €500 sponsorship during AgEng2010. This event has grown year on year and the 2011 event will be held in Herning, Denmark. Visit their website for more details: www.fieldrobot.dk/index.php/fre2011.

Sincere thanks from EurAgEng members and others attending the conference, go to the organising team from CEMAGREF, who have worked so hard to achieve another memorable conference.

EurAgEng Innovation & Development Award

The EurAgEng Innovation & Development Award is awarded at AgEng conferences for the best quality paper on Innovation and Development from industry, or a combination of industry and academia. AgEng conferences have always been well attended by researchers and academics, and have built up a good reputation for quality and diversity. This Award is intended to widen the appeal of the conferences to engineers from industry.

Companies present papers on research and development leading to innovative products likely to be marketed commercially. The papers are judged by a distinguished team from EurAgEng and the winners are presented with the Innovation and Development Award. This year the Innovation and Development Award, went to E Piron, D Miclet, L Leveillé, D Clochard and S Villette for their work on *Mineral spreader eco-design: method and real application examples*. This was a collaboration between Sulky-Burel and colleagues from CEMAGREF, France.



Chairman of the Innovation and Development Award panel, Professor Aad Jongebreur presents the team from Sulky-Burel and CEMAGREF with their award.

EurAgEng Working Groups – the future

AgEng2010 is now over but the EurAgEng Working Group activity is about to begin. One of the aims of the society is to provide a networking mechanism for engineers with similar interests around Europe to communicate with each other. One way of doing this is through the Working Groups. A full list of these groups and how to contact them can be found on the website at www.eurageng.eu/workgroups.

The Working Groups cover topics ranging from Information Technology, Soil and Water, Waste Engineering, Greenhouse System Design to Innovative Technologies for Dairy Farming. Each group is coordinated by a chairman. Many of the groups met in Clermont-Ferrand to discuss how best to communicate with members, move forward and encourage young agricultural and biosystems engineers. One of their main tasks is to work with the Scientific and Organizing committees of the AgEng series of conferences to organize and chair the conference sessions. The next AgEng conference will be in cooperation with CIGR at Valencia, Spain 8-12 July 2012. The Executive Board of EurAgEng supports activities of the Working groups.

The working groups are also in an excellent position to report or review particular topics and to collaborate with other groups working in a particular area.

It is hoped that with the improved website and easier communication members will be able to conduct meaningful discussions in between the AgEng conferences.

For many years Professor Aad Jongebreur has coordinated the activities of the Working Groups but has now decided to stand down from this position. EurAgEng is very grateful to him for the time and effort that he has put into this task. Victor Alchanatis is willing to take over this role and will work with the Chairman of ENGAGE and member of Executive Board, Reiner Brunsch to encourage Working

Group Chairmen to keep their group active and moving forward.

If you would like any more information about a particular working group please contact the chairman via email or contact the Secretary General at secgen@eurageng.eu

The Working Groups and their Chairmen

- Intelligent Automation - Victor Alchanatis
- Aquaculture - Prof Sofronios Papoutsoglou
- Innovative technologies for dairy farming - Dr Jan Harms
- Information technology - Gilbert Grenier
- Precision agriculture - Prof Stefan Böttinger
- Post-harvest technology - Dr Pilar Barreiro
- Environmentally safe plant protection systems - Prof Paolo Balsari
- Fruit & vegetable production engineering - Prof Giulio Lorenzini
- Energy systems & rural electricity - Prof George Papadakis
- Agricultural engineering in transitional & developing countries
- Education & communication - Prof Pier Luigi Febo
- Engineering in European Rural Development - Ir Antti Peltola
- Air quality in animal houses - Prof Gösta Gustafsson
- Farm building structures & environment - Prof Panos Panagakis
- Greenhouse system design - Prof Demetres Briassoulis
- Wastes engineering - Fabrice Béline
- Rural buildings & landscape - Prof Francisco Ayuga
- Soil & Water - Prof Nunzio Romano

Keeping Up to Date

From time to time, our Secretary-General, Dave Tinker, sends email messages to members updating them with information which may be of interest. The messages are short and informative, and no information is 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 a message to secgen@eurageng.eu with Unsubscribe to Updates as the subject heading.

Logging in to the Members' Area

First, go to www.eurageng.eu click on **Members' Login** and enter your membership number and password. Initially your password is the first four letters of your surname, but you can change your password if you wish. If you would like a reminder of your membership number, contact Dave Tinker on secgen@eurageng.eu.

Finding members

Once you have logged in, to search for a particular member, click on **Find a Member** then enter the person's surname (or part of it), or the country (or part of it), or the field of interest. 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 field of interest or in a particular country.

Updating your own membership details

Once you have logged in, click on **Update your membership details** and 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.

Joining a discussion forum

There is a general forum for members' discussion but if you would like to create a discussion forum for a new subject, please contact Dave Tinker on secgen@eurageng.eu.

Controlled traffic farming and minimum tillage in the framework of small scale farming

Thomas Anken, Agroscope ART, Tänikon

Twenty-five people were curious to see why a small grassland country like Switzerland is dealing with questions like no-till and controlled traffic farming (CTF). Switzerland is certainly known for its chocolate and cheese but not for crops. Apart from 1 million hectares of grassland, 300,000 hectares are covered by crops. The annual amount of rainfall of 800-1200mm means that under such moist situations soil erosion and compaction are challenging issues.



Peter Weisskopf explained the spade test of trafficked and untrafficked locations of the CTF trial in Tänikon

In the 1970s the first no-till trials were started. Nowadays about 15,000 hectares are under no-till, 4,000 hectares are strip tilled maize but about 60% of the surface is still ploughed. Decreasing yields are one main reason why minimum and no-tillage still have a way to go before reaching their full potential to be exploited in Switzerland.

Soil compaction, which leads to unsatisfactory plant emergence and yield losses, was the reason to first start trials with CTF. For the last two years a trial has been located in Tänikon and this was visited by the participants of the workshop. The actual results are not spectacular, but the soil structure of untrafficked areas seems to be improving slowly.



Dölf Steinmann, a no-till contractor presented his fields which haven't seen a tillage tool for more than 10 years

Technically the trial is based on a system with 4.5m working width leading to 63% of untrafficked soil, 27% medium traffic soil (seeder, combine) and 10% intensively trafficked soil (seeder, fertilizer, sprayer, combine). Apart from Switzerland, several other CTF trials have been started in Great Britain, Denmark, Germany, Slovakia, Czech Republic, Sweden and

Holland. Details of some of these were reported in short presentations. CTF has reached Europe – and is now slowly and, hopefully, steadily expanding! Another meeting of the CTF working group is likely to be held in southern Germany in 2011.

Sponsored Events (see www.eurageng.eu/events for a full list)

14-18 February 2011

46th Croatian and 6th International Symposium on Agriculture

Venue: Opatija, Croatia

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

22-25 February 2011

39th International Symposium "Actual Tasks on Agricultural Engineering"

Venue: Opatija, Croatia

Organiser: University of Zagreb

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

18-20 April 2011

6th International Symposium of CIGR Section VI "Towards a Sustainable Food Chain"

Venue: Nantes, France

Web: <http://impascience.eu/CIGR/>

5-7 September 2011

VI Iberian Congress of Agricultural Engineering

Venue: Évora, Portugal

Organiser: Rural Engineering Dept, University of Évora, Spanish Society of Agriculture Engineering, Portuguese Section of Rural Engineering

21-23 September 2011

11th International Congress on Mechanisation and Energy in Agriculture

Venue: Istanbul, Turkey

Organiser: Namik Kemal University

Web: <http://trakageng2011.nku.edu.tr/>

11-12 November 2011

LAND. TECHNIK AgEng 2011

Venue: Hannover, Germany in conjunction with Agritechnica 2011 (Preview days 13 and 14 November 2011)

Web: www.agritechnica.com/home-en.html

Deadline submission of abstracts, 02 March 2011

8-12 July 2012

CIGR-AgEng2012 International Conference of Agricultural Engineering "Agriculture & Engineering for a Healthier Life"

Valencia, Spain

Web: www.ageng2012.org

Other Events (see www.eurageng.eu/events for a full list)

20-24 February 2011

SIMA 2011

Venue: Paris Nord Villepinte Exhibition

Web: www.planet-agri.com/en/sima

5-10 June 2011

Greensys2011 - "Advanced technologies & management towards sustainable greenhouse ecosystems"

Halkidiki, Greece

Web: www.greensys2011.com

27-29 June 2011

7th Conference of GCHERA Universities of Agriculture and Life Sciences: "Entrepreneurs for sustainable rural development"

Venue: Institut Polytechnique LaSalle Beauvais, France

Web: www.gchera.com/gchera-2011-beauvais-france/

29 June to 1 July 2011

XXXIV CIOSTA & CIGR Section V Conference

Venue: Vienna, Austria

Web: www.nas.boku.ac.at/ciosta2011.html

10-14 July 2011

8ECPA 8th European Conference on Precision Agriculture and 5th ECPLF Conference on Precision Livestock Farming

Venue: Prague, Czech Republic

Web: www.ecpa2011.cz or www.ecplf2011.cz

Rural landscape protection

Francisco Ayuga, Professor, BIPREE research group, Universidad Politécnica de Madrid

Chairman of Rural buildings & Landscape Working Group

Ana I. García, Associate Professor, BIPREE research group, Universidad Politécnica de Madrid

In the more rural areas of Europe, old constructions have been abandoned while new elements have been added to meet the growing economic demands using inadequate building methods and with no respect for the traditional building style. Over the past few years, legislation has tried to order these aspects but several problems persist, especially those related to haphazard construction beyond population centres. The appropriate conservation of many historic buildings of architectural and cultural interest existing both in highly populated and rural areas, is yet another problem that needs to be addressed. [1]

Several social movements have recently been established to protect our landscapes and public administration bodies also seem to be more aware of their real value. Rural tourism has boosted the economy of many zones especially in Southern Europe. Today, there are thousands of country holiday homes and this number continues to increase. Enjoying the rural landscape, culture and customs is the main attraction of this type of accommodation, and this activity has also promoted an increased understanding and awareness of the need to protect the landscape, also transforming it into an important source of income. The design of these rural homes is not always, however, harmonious with the surrounding environment.

From a rational point of view, landscape maintenance, conservation and management should be assisted by the assessment techniques generally used in engineering projects. So Agricultural, Biological or Biosystems Engineers play an important role in landscape protection due to their background knowledge.

Before approving any intervention that could affect the landscape, a technical study should be undertaken, including a diagnosis of the situation and a definition of landscape quality to the extent possible. This assessment should also compare the consequences in the future of not performing or performing the intervention. It should also include a SWOT (strengths, weaknesses, opportunities, threats) matrix in which the project's conditions are established.

Once the diagnosis has been made, the alternatives possible should be determined and evaluated in a technical manner to select the most appropriate. The approach used to evaluate the alternatives should be multifactorial, considering all aspects relevant to the project such as applied technology, cost-effectiveness, social concerns etc. Among the criteria to be considered, all possible effects on landscape should always be included. Obviously, given this aspect is not determined by a

single criterion, the issue may or may not be decisive for selecting the best solution. However, a project that fails to consider these factors should never be approved. [2]

Many actions that will affect a particular landscape can be the subject of improvement using the technical tools available today. Among these are a group of tools based on Geographical Information Systems (GIS) which are designed to address issues related to the location, visibility and setting of the project or actions in rural zones. Often, the integration of the project's works within a landscape will depend more upon the adequate choice of the site of action than on any other factor. [3] A further set of tools is based on infography and considers aspects related to the design and selection of the visible elements of new interventions. With this second type of tool, it is possible to perfectly predict the situation after the project has been conducted and evaluate its results before any actions are actually taken. [4]

Considering alternative projects is not, however, the only way to address problems of repercussions on the landscape. A further option is the use of techniques of restoration, concealment, diffusion etc. All these techniques share the



Rural landscape in Portugal

feature that measures are taken at the work site to reduce impacts by means of outside elements. An example would be planting or seeding foothill slopes or embankments to improve the visual integration of transport routes or planting trees in the surroundings of a large silo to reduce the sensation of height it produces. These techniques are often based on the use of vegetation but this is not the only element that can be applied and structures such as screens made of different materials, mounds of soil, artificial lakes etc have been used for similar purposes. [2]

Finally, there are some less conventional yet highly effective and promising ways of diminishing effects on landscape. One such method is known as re-utilization and implies that before embarking on an intervention, we first consider the use of an abandoned structure. The application of re-utilization is most evident for buildings and given the present large numbers of abandoned constructions in rural settings, it is not difficult to find one that could be of use. Using this procedure, we can simultaneously avoid two factors that alter the landscape, new constructions and building ruins. Buildings are not the only elements that can be reused. Many abandoned railway lines are used as walking trails and old quarries as artificial lakes. A further well-known example is the re-use of abandoned villages; the possibilities are endless. [5]

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EurAgEng Outstanding Papers Awards 2010

Three papers published in Biosystems Engineering, the official scientific journal of EurAgEng, received this award at AgEng2010 in Clermont-Ferrand, France. They were selected by the Biosystems Engineering Editorial Board from a shortlist of ten (see below). The award is sponsored by IAgRE, the UK national society, and recognises outstanding papers published in Biosystems Engineering in the calendar years 2008 and 2009. Authors receive a modest cash prize.

Editors Bill Day and Steve Parkin congratulated the winners. They commented on the high standards achieved by all the authors who publish their work in the journal and particularly by these authors.

Biosystems Engineering continues to go from strength to strength and this year achieved its highest impact factor to date at 1.102. On-line submission and review has shortened the time between submission and publication significantly. Of course, many papers are now read on-line through Science Direct, Scopus or other similar databases but special rate subscriptions to either a hard copy or on-line access can still be arranged through EurAgEng.

Contact secgen@eurageng.eu for details.

Papers considered for the EurAgEng Outstanding Papers Awards 2010

Winners

- **Estimating mean particle diameter in free-fall granular particle flow using a Poisson model in space**
Tony E. Grift and C.M. Crespi
Biosystems Engineering, Volume 101, Issue 1, September 2008, Pages 28-35
- **Optimisation of fresh-food supply chains in uncertain environments, Part II: A case study**
F. Dabbene, Paolo Gay and N. Sacco
Biosystems Engineering, Volume 99, Issue 3, March 2008, Pages 360-371
- **ZigBee-based wireless sensor networks for classifying the behaviour of a herd of animals using classification trees**
Esmaeili S. Nadimi, H.T. Sogaard and T. Bak
Biosystems Engineering, Volume 100, Issue 2, June 2008, Pages 167-176

... and the others on the shortlist

- **Centrifugal spreading of fertiliser: Deducing three-dimensional velocities from horizontal outlet angles using computer vision**
S. Villette, E. Piron, F. Cointault and B. Chopinet
Biosystems Engineering, Volume 99, Issue 4, April 2008, Pages 496-507
- **A decision support model for travelling gun irrigation machines**
R.J. Smith, M.H. Gillies, G. Newell and J.P. Foley
Biosystems Engineering, Volume 100, Issue 1, May 2008, Pages 126-136
- **Mathematical modelling of wheat kernel drying with input from moisture movement studies using magnetic resonance imaging (MRI), Part I: Model development and comparison with MRI observations**
P.K. Ghosh, D.S. Jayas, E.A. Smith, M.L.H. Gruwel, N.D.G. White and P.A. Zhilkin
Biosystems Engineering, Volume 100, Issue 3, July 2008, Pages 389-400
- **Minimising the non-working distance travelled by machines operating in a headland field pattern**
D.D. Bochtis and S.G. Vougioukas
Biosystems Engineering, Volume 101, Issue 1, September 2008, Pages 1-12
- **Effects of cover diffusive properties on the components of greenhouse solar radiation**
F.J. Cabrera, A. Baille, J.C. López, M.M. González-Real and J. Pérez-Parra
Biosystems Engineering, Volume 103, Issue 3, July 2009, Pages 344-356
- **Analysis of the role of sidewall vents on buoyancy-driven natural ventilation in parral-type greenhouses with and without insect screens using computational fluid dynamics**
E.J. Baeza, J.J. Pérez-Parra, J.I. Montero, B.J. Bailey, J.C. López and J.C. Gázquez
Biosystems Engineering, Volume 104, Issue 1, September 2009, Pages 86-96
- **Classification of cereal grains using wavelet, morphological, colour, and textural features of non-touching kernel images**
R. Choudhary, J. Paliwal and D.S. Jayas
Biosystems Engineering, Volume 99, Issue 3, March 2008, Pages 330-337

Use the link below to find out more about Biosystems Engineering, to contact the editors or to submit your work.

www.elsevier.com/wps/find/journaldescription.cws_home/622795/description#description

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Conclusions

Europe's landscapes are rich and varied. They are, however, subjected to intense pressures that are causing their degradation, especially in rural zones with development perspectives. However, it is also true that due to the expanding practice of rural tourism, the public is becoming increasingly aware of these landscapes and increasingly sensitive to their conservation needs. Today, there are several engineering tools available to help improve and plan future actions in the rural setting through well-designed project options and the search for solutions that will duly respect the landscapes and culture of rural Europe.

References

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3. Hernández-Blanco, J.; García-Moruno, L.; Ayuga, F. (2004). Integration methodologies for visual impact assessment of rural buildings by Geographic Information Systems. Biosystems Engineering. Vol. 88 (2): 255-263
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Job Opportunity

Standards & Compliance Engineer at Agricultural Engineers' Association (AEA)

The UK's AEA is seeking to enhance its portfolio for its members by appointing an Engineer to contribute to the Standards and Legislation programme. The EU commission is currently reviewing the standardisation system and intends to strengthen the process in line with National standards bodies (BSI-British Standards Institute).

The role involves detailed technical appreciation of the agricultural and garden equipment industry and the ability to extrapolate information for member machinery matters. It includes participation in and preparation of documents for international standards committees on behalf of the UK industry in conjunction with governmental partners. The role would also include participation and problem solving of technical issues in trade association project teams within the remit of our European partners, and may also include research on related subject matter in Brussels.

New technology knowledge transfer ability including an appreciation of emissions, energy efficiency, life cycle design and environmental aspects would be an advantage. Communication skills are key with a systematic approach critical to enable delivery of the technical information to the membership is also deemed essential.

Located primarily in Peterborough, UK the post is a staff position with relevant benefits and remuneration. Please forward your CV to the Technical and Standards Director via email to standardsfe@aea.uk.com

For further information about the AEA, please visit www.aea.uk.com

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SecGen's thoughts

David Tinker

Firstly from Nicky and myself it was good to meet many of you in Clermont-Ferrand. Time flies so fast that it will soon be time to be off to SIMA in Paris in February and then to prepare for Land.Technik AgEng2011 in Hannover next November. Then it's another look around Agritechnica - an agricultural engineer's dream!

Two things that have occupied my thoughts over the past few months: the reforms likely to the Common Agriculture Policy and EU FP7 research proposals.

So firstly how will the reformed Common Agricultural Policy from 2013 affect agricultural machinery use, sales and design? Not easily answered, especially as no-one knows yet how the CAP reforms will be put in place, particularly in each of the EU's 27 member states. If you are staring into the future, whether by using a crystal ball or looking at the various opinions on the internet, then I wish you the best of luck and perhaps we can meet up in the months to come and see how much we got right!

Secondly the frantic season of submitting EU proposals is here again. Those who are lucky enough to have a proposal accepted will think that Santa Claus did bring what they wanted (at least until the contract negotiations with the EU start!). For those of you still thinking about proposals in future years can I suggest that you sign up as an evaluator?

<https://cordis.europa.eu/emmf7/index.cfm?fuseaction=wel.RegForm>
This will give you an understanding of FP7 projects before you prepare your own, and an insight into what makes a better proposal.

EurAgEng has been lucky enough to have had discussions with five consortia about proposals, although we may not be included in all. We still have things lots to learn so that we can "tick all the boxes" quickly but we have made a start. The Executive and I, as well as many members, will hope that policy makers and EU research funders will recognize that agricultural and biosystems engineers understand how to turn basic research results into practical systems that farmers can use for greater productivity without spoiling the environment!

If you are successful with an EU FP7 project then your New Year should be prosperous (but busy). May I, on behalf of President Peter Schulze Lammers, the members of Executive and the Council, wish all our members a happy Christmas and New Year!

