

# Josef Knüsel wins the EurAgEng Award of Merit

Innovation into Practice 2013 at Hannover



Sepp Knüsel standing by a Rigitrac at Agritechnica a couple of days after receiving the Award of Merit

Josef Knüsel, always known as Sepp Knüsel, has worked in hillside farming since childhood.

Working initially on his father's farm, he founded his own company in 1976 for selling, repairing and building farm machinery. He completed an apprenticeship as an agricultural mechanic between 1972 and 1976.

Confronted with a small market whose demands could not be fully satisfied, he began developing his own solutions early on. In 1983 he developed a front-mounted belt-type side rake for tractors which today is sold not only by him, but by other companies as well.

In 1986 he began manufacturing the 'Knüsel-Blitz' light front mower which quickly became a leader in the hillside-mower market. The development of a light rotary-drum mower allows high mowing quality even under difficult mowing conditions. The small, lightweight construction permits use with two-axle mowers.

Hillside farming demands more-powerful tractors paired with a low centre of gravity. Since such a tractor was not available on the market, Sepp Knüsel began building one and the first Rigitrac tractor was unveiled in 2003.

This tractor features a low centre of gravity, 4-wheel steering for tight turns in small fields, the latest-generation CAN-bus-controlled hydrostatic transmission, and central articulation of the frame for better following of the terrain by all wheels. These innovative



L-R: Sepp Knüsel presented with the Award of Merit by EurAgEng President Robert Kaufmann

features represented a major step forward for hillside-farm tractors.

In 2011 he was awarded a silver medal at Agritechnica for the first tractor, the EWD 120, with wheel-hub motors for full-electric-drive and built in partnership with the University of Dresden.

The range has been steadily developed with the smallest Rigitrac, the SKH 75, launched in 2012 to add to the larger SKH 95 and SKH 120.

Like a musician with perfect pitch, Sepp Knüsel has a perfect feel for engineering. In almost 10 years on the market, the Rigitrac has proved its high quality and perfect suitability for hillside farming. That Sepp Knüsel and his small team were able to produce such a tractor, with its unique features, is an outstanding achievement and EurAgEng is very proud to present its highest award, the Award of Merit-Innovation into Practice to Sepp Knüsel.

**Congratulations Sepp!**

# From the Secretary General

## Reflections on Agritechnica - DAVID TINKER

A big advantage of attending Land.Technik-AgEng is the chance to visit the Agritechnica show, with a discounted pre-view ticket for Sunday and Monday and free entrance again on Tuesday.



John Deere at Agritechnica 2013 - One of the larger tractor & machinery stands

Agritechnica 2013 demonstrated the growing global significance of agriculture and agricultural machinery and equipment. With 2,898 exhibitors and some 450,000 visitors (7% higher than in 2011), the fair has grown yet again. The mood among exhibitors and visitors was positive. Nearly 2,900 exhibitors from 47 countries showed a complete programme of modern agricultural machinery and equipment as well as following the

theme, the same as for the Conference, of Components and Systems. International exhibitors increased again with 1,500.

Agritechnica attracts machinery manufacturers to present their innovations. The solutions shown, especially in the fields of electronics, controls and instrumentation, as well as data management, provide farmers with a broad base of new opportunities for achieving necessary improvements in efficiency and for conserving resources.

The Innovations competition attracted 370 entries; with four winning Gold and 33 Silver. It is worth having a look at the winners, so check out

<http://www.agritechnica.com/innovations.html?&L=9> and download the 2013 Innovations Magazine to see what you should know about.

Currently, developments in electronics and sensor systems largely determine the degree of innovation of systems and machinery, especially those that make processes even more efficient, precise, environmentally compatible and cost-efficient. Progress was noted at Agritechnica particularly in the networking of the differing systems. The 'Smart Farming' section presented solutions, for instance, in the fields of data management, navigation and sensor technology, optimised hardware and

controls and instrumentation.

One in four visitors (112,000) were from outside Germany. Not surprisingly the largest contingents made their way from Switzerland (over 11,500 visitors), the Netherlands (10,000), Austria (8,700), France (7,500), Ireland (5,800), Denmark (5,200), the United Kingdom (5,000), Belgium (4,500), Finland (4,300) and Italy (3,700).

Practically all agricultural engineers will have had a quick trip through the tractors and major machinery suppliers to see what's new. There was plenty to see on those large stands but of course the smaller components and systems developers also have plenty to see, much of which will be novel and new.

Will these innovations be state-of-the art at Agritechnica 2015? Will the reforms for the 2014-2020 CAP have settled down? How big will Agritechnica (and Land.Technik-AgEng) have grown to in 2015? We will have to wait and see, but be certain that many of us will meet again at Land.Technik-AgEng2015 for a taste of the engineering behind the new innovations that will be at Agritechnica.

David Tinker



## Field Robot Event

Another successful chapter in the Field Robot Event took place at the Czech University of Life Sciences in Prague at the end of June.

More teams with more young engineers attended than ever before. The competition is a series of tasks made all the harder in 2013 by using sunflowers with floppy leaves hiding the stems.

There were 21 teams with TU Kaiserslautern (Germany), coming first overall after 5 tasks, Bullseye (Wageningen University, the Netherlands) second and FlowerPower (Technical University of Denmark) third.

Full results, tasks, 'playground' and photos are published on the website <http://katedry.czu.cz/en/kzs/home-1>. You can see some of the videoed action on YouTube (follow links on the website). EurAgEng is proud to have provided some small sponsorship and would like to thank the Ministry of Agriculture of the Czech

Republic and all the other sponsors, especially Claas Stiftung, for helping these students get such valuable learning and training experience in a hands-on project. Most thanks go to CULS for hosting the FRE, at their excellent facilities, and to Milan Kroulik, and his team at the Department of Agricultural Machines, for organising it all.

Please keep an eye on the EurAgEng email Updates to find out more on FRE 2014 or contact [Info@FieldRobot.nl](mailto:Info@FieldRobot.nl). If you, or your organisation, would like to help, then contact the teams directly or if, like Claas Stiftung and EurAgEng, you'd like to help the organisation then please contact Eldert van Henten at [eldert.vanhenten@wur.nl](mailto:eldert.vanhenten@wur.nl)

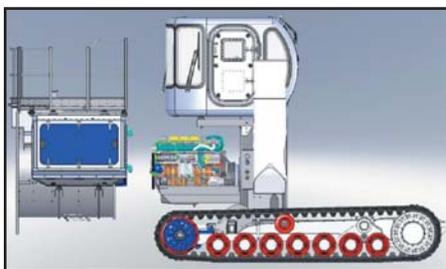
FRE 2014 will be located at the 'DLG-feldtage' 17 - 19 June 2014 in Bernburg-Strenfeld (Germany).



The Royal National Lifeboat Institution (RNLI) is a UK charity which provides a 24-hour lifeboat search and rescue service around the shores. It is continuously looking for ways to improve its service and has brought in a new, faster lifeboat.

However in some places the coast is too sandy or the tide is too great for an easy launch from a jetty. In those places a special launching and recovery system (L&RS) is needed to take the 18 tonne lifeboats into the sea, at up to 15kph, and to collect them later even when the weather is stormy with 16m waves!

As only about 20 of these units are being built the high development cost will be spread over a 50 year life. The launcher needs to be able to drive into the sea, up to 2.4m, to launch and recover the lifeboat. BUT if it should get stuck it has to stay while the high tide covers it with 9m of sea water. Quick-acting seals on the engine bay and cab keep the water out!



CAD view with engine cover, walkway and cooling units shown slid forward of the tractor's chassis



## A tractor and trailer but not as you know them!

Not surprisingly nine years of development were needed to put the L&RS into production. It is based on an automated hydraulic tractor and carriage to carry the 18 tonne lifeboat and to turn it around ready for relaunch within about five minutes.

These very specific requirements needed some inventive engineering by specialist vehicle builder Supacat. Hydraulic motors power all four tracks but, because of the articulation, a complex system controls the speed of the tracks as they each follow different radii. The carriage is permanently connected by a pivoting swan neck to the tractor for fast turn-arounds.

The rotating cradle, enabling the boat to launch and return bow first, minimises the boat's recovery time and needs just two people (including the driver) for launching and recovery. The boat is winched into a balanced position and spun around in mid-air, safely, while the crew and potential casualties are still on board. The vehicle undercarriage also 'kneels' allowing good ground clearance on

the beach but low overall height when entering a small boat house.

But perhaps the biggest issue was adapting it for the marine environment, withstanding pounding waves and complete submersion. Water has to be kept out of part of it while other components need to work when wet. Off-the-shelf agricultural style rubber tracks proved that the prototype would work with the 50-tonne weight of the fully loaded vehicle but were modified for low maintenance use in a marine environment for the production version.

Changing the tractor's cab from steel to composite avoids corrosion and gives much better visibility. There is a 331kW Scania engine in a neat installation, easily accessible for maintenance.

Overall this was an example of a project that sounds as if it is 'almost agricultural engineering' but was an unusually difficult design, but was also really rather exciting.

Anyone fancy being a volunteer 'tractor' driver for the RNLI?

This article is adapted from one by Stephen Harris in 'The Engineer' which can be found at [www.theengineer.co.uk/in-depth/analysis/supacat-provides-rescue-remedy/1012580.article#ixzz2lrmxykj0](http://www.theengineer.co.uk/in-depth/analysis/supacat-provides-rescue-remedy/1012580.article#ixzz2lrmxykj0) There is also more information at [www.supacat.com](http://www.supacat.com) and at [www.rnli.org](http://www.rnli.org)

Technische Universität Berlin - Faculty V - Mechanical Engineering and Transport Systems - Institute of Engineering Design, Micro and Medical Technology announce in cooperation with the Leibniz Institute for Agricultural Engineering Potsdam-Bornim (ATB) an open position



### University professor - salary grade W 2

(Head of Department of 'Engineering for Crop Production' of the ATB)  
in the field of 'Agro Mechatronics - sensorbased process control in agriculture'.

Reference Number: V-467/13 (to be filled for 5 years; with the option for further continuation after a positive evaluation)



**Responsibilities:** Research and teaching in the field of 'Agro Mechatronics - sensor-based process control in agriculture'. Research should be on fundamentals for the development of processes and technical solutions for machine systems, especially for an information-based crop production. Significant contributions to a resource efficient plant production should be achieved by the design of sensors and their integration into the production process. In particular site-specific crop production should be addressed regarding spatio-temporal variability of soil and plant parameters including plant diseases. Furthermore, the candidate should improve data and information management as a key for resource efficient process design.

The task as head of the department 'Engineering for Crop Production' of the Leibniz-Institute for Agricultural Engineering Potsdam-Bornim (ATB) includes the coordination of scientific research studies, the identification of strategic scientific research objectives within the general research agenda of the ATB. He / she is responsible for the development of human resources (four scientists and nine technical staff on permanent positions and further project based staff) and infrastructure within the department.

**Requirements:** Candidates should have a profound scientific knowledge in the aforementioned appointment area. In addition, we expect a high degree of willingness to cooperate. The candidate should have experiences with leading positions. Additionally teaching experience and involvement in basic research projects in the field of agro mechatronics are desirable.

The management position at the Leibniz Institute for Agricultural Engineering (ATB) is linked with the responsibility for the scientific and technical employees. Competence as manager is expected to promote the department by a motivating management style.

The prerequisites of the appointment are a university degree in a discipline related to agro mechatronics, a doctorate and a habilitation or an equivalent scientific achievement, as well as pedagogical skills (according to § 100 of the Berlin University Act, BerlHG).

Non-German speaking applicants require good English skills and the willingness to learn German. We provide language support by the department's secretary and the offering of language courses.

For further questions do not hesitate to contact Prof. Dr. Reiner Brunsch, Scientific Director of ATB,  
e-mail: [rbrunsch@atb-potsdam.de](mailto:rbrunsch@atb-potsdam.de), phone: +49 (0)331 5699 100.

Please send your written application by 31 January 2014 with the job reference number, with appropriate documentation (CV, letter of application, list of publications, certificates) to:

Technische Universität Berlin - Der Präsident -, Dekan der Fakultät V, Sekr. H 11, Straße des 17. Juni 135, 10623 Berlin.

Please send copies only. Original documents will not be returned.

The vacancy is also available on the internet at <http://www.personalabteilung.tu-berlin.de/menue/jobs/>.

•Attendees of VI Symposium 'Farm machinery and processes management in sustainable agriculture', Lublin2013 on the technical tour at PZL Swidnik an AgustaWestland Company. The 45 papers will be in CABI's Agricultural Engineering Abstracts shortly.



# Agricultural engineering abstracts



The complete online agricultural engineering information service that covers soils, crops, waste, energy and livestock.

EurAgEng teamed up with CABI to offer all national society members FREE access to 'Agricultural Engineering Abstracts'.

This is a fully searchable abstracts database of internationally published research on agricultural engineering, from properties of soil, crops and materials to soil and crop management, storage of processed products and treatment of the wastes produced, and alternative energy sources.

Each week Agricultural Engineering Abstracts delivers all the new highly-targeted, searchable summaries covering key English and non-English language journal articles, reports, conferences and books about topics in agricultural engineering.

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It is an essential resource for anyone working, researching or studying agricultural engineering.

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Subjects covered are:

- aquaculture
- building construction and materials
- cleaning, waste treatment, disposal and utilisation
- crop handling and transport
- crop harvesting and threshing
- land improvement
- livestock buildings and equipment
- mechanical power

- precision agriculture, models, instruments
- pre-harvest technology
- postharvest technology
- protected cultivation

How to get access to CABI's Agricultural Engineering Abstracts?

On the EurAgEng website select "Members' Login" follow instructions for Username and Password (contact [SecGen@EurAgEng.eu](mailto:SecGen@EurAgEng.eu) if you've forgotten your password) Login and then choose "Log in to the CABI site" click "CABI" button and start searching the 222 000 entries! Good luck and enjoy seeing what is available.

Finally, to help cover all of the agricultural engineering research work from Europe please send electronic copies of your reports, seminars and conference proceedings to CABI at:

**Attention Dr. Vera L. Barbosa  
Content Editor, Environmental  
Science Team,  
CABI Head Office, Nosworthy Way  
Wallingford, Oxfordshire**

## BIOLOGICAL AND AGRICULTURAL ENGINEERING / FOOD SCIENCE AND TECHNOLOGY FACULTY POSITION UNIVERSITY OF CALIFORNIA, DAVIS



Food Process Engineer, Assistant Professor (9-month tenure track). The candidate will hold appointments in the departments of Biological and Agricultural Engineering and Food Science and Technology and address research at the interface of agricultural production and food processing with emphasis on product quality, food safety and traceability, sustainability, systems modeling and resource utilization. The candidate will assist with lower and upper division undergraduate teaching in engineering and technology, and develop graduate level course work in their research area. Candidates must have a strong documented engineering background with a PhD in engineering or a BS in engineering with a PhD in a scientific field. They must have the ability to conduct both independent and cooperative research, and the ability to teach engineering courses to undergraduate and graduate students, with special reference to food process engineering.

For more information and to apply, go to <https://recruit.ucdavis.edu>. Please contact Dr. Ken Giles, Search Committee Chair, Department of Biological and Agricultural Engineering, University of California, Davis, CA 95616-5294. Tel: (530)752-0687. Fax: (530)752-2640. E-mail: [dkgiles@ucdavis.edu](mailto:dkgiles@ucdavis.edu). Open until filled, but to assure consideration, applications must be received by December 15, 2013.

The University of California, Davis is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty and staff. UC Davis is an NSF ADVANCE institution committed to equality and inclusion.

# CO<sub>2</sub> in agricultural process chains:

## The strategy of the machinery manufacturers to support efforts to reduce it

The agricultural machinery industry sees the growing world population, climate change and exhaustion of resources as major challenges for the future.

Securing the supply of high quality food, increasing the production of renewable materials and energy and designing and maintaining rural areas are the major responses of agriculture to these challenges. The role of the agricultural machinery industry is to support their customers by providing intelligent and more efficient machines and production processes.

During the last few years many efforts have been made by manufacturers of engines, and by the agricultural machinery industry itself, because of the ambitious emissions legislation. By the introduction of Stage IV the emissions of nitrogen oxides (NOx) and fine particles were reduced to 96% compared to Stage I in 2001.

In June 2010 the European Commission published the 'Europe 2020' strategy. One of the five key objectives is to reduce the emission of Greenhouse Gases. The targets are defined to reduce the emissions by 20%, increase the use of renewable energy sources by 20% and increase the energy efficiency by 20%, with respect to the levels of 1990.

Just as other sectors, the Agricultural Machinery Manufacturers have accepted their responsibilities also for the protection of the climate and are willing to contribute to achieve these European objectives.

Currently, the fuel consumption in agriculture contributes only 3.9% to the total fuel consumption of the European transport sector. The CO<sub>2</sub> emission of tractors and agricultural machines can be reduced continuously by more and more efficient engines and vehicles, by more effective and efficient processes and equipment, by educated drivers and by the use of biofuels. The agricultural machinery industry has a direct influence on such technical factors.

### The approach of a voluntary commitment

The German Engineering Federation, VDMA and CEMA - European Agricultural Machinery, have organised some of their member agricultural machinery manufacturers and they have agreed to use their know-how, as technology leaders and major worldwide agricultural technology exporters, to protect the climate and to reduce CO<sub>2</sub> emissions. Therefore, and on their own initiative, a concept project is being developed to quantify the present, and future, contribution of agricultural engineering to climate protection. This concept project will also make these services understandable and capable of being monitored and quantified.

The objectives of this project are to develop the concept of a voluntary commitment of the agricultural machinery sector to identify the potential reduction of CO<sub>2</sub> emissions as well as to understand, and to implement, the corresponding measures. Furthermore, procedures will be established for ongoing monitoring.



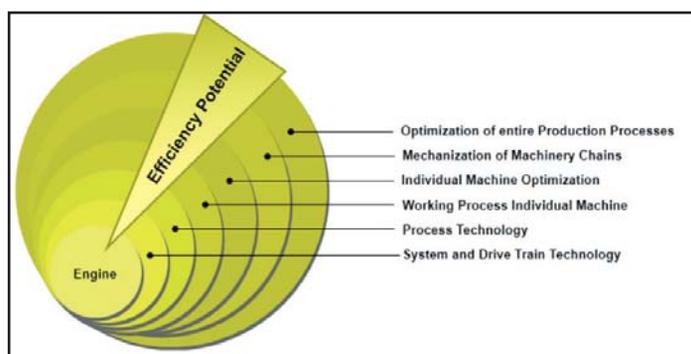
The agricultural machinery industry defined the following key points together with organisations from agriculture, consultancy, research, and training:

1. Emphasise the responsibility of the agricultural machinery industry
2. Determine how agricultural engineering can produce a sustainable contribution to climate change and resource protection
3. Use a comprehensive and result oriented approach
4. Create benefits for society and agriculture
5. Focus on the CO<sub>2</sub> emission of agri-technology products and processes

An integrated (holistic) approach is essential to exploit the potential CO<sub>2</sub> reduction of agricultural production processes and therefore consider the interdependencies between individual parts, or stages, of the process chains. In this way, the project will ensure that the overall balance is optimised. Considering just the engine efficiency with respect to CO<sub>2</sub> emissions, in isolation, is therefore neither useful nor sufficient

#### For more information please contact:

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Procedures will be established for ongoing monitoring

### You know the benefits of being a member of EurAgEng but how can your colleagues join EurAgEng?

- A National Society and its members can become part of EurAgEng for 250Euros plus 15Euros per member (7Euros for members under 35) per year. See [www.eurageng.eu](http://www.eurageng.eu) 'Links' tab for links to most National Societies. If already a member of a National Society ask to be a member of EurAgEng otherwise join the National Society (and ask to be a member of EurAgEng). Contact [secgen@eurageng.eu](mailto:secgen@eurageng.eu) if there is no National Society or contact details for your country.
- Affiliate membership is for organisations that may be in countries without a National Society. The fee depends on the size of the agricultural engineering part of the organisation but can be as little as 150Euros per year. Contact [secgen@euragen.eu](mailto:secgen@euragen.eu)

CEMA - Agricultural Machinery in Europe recently ran a Summit and Forum in conjunction with CECE -Committee for European Construction Equipment.

The CEMA Economic Forum brought together economic experts from the European agricultural machinery industry including the CAP and recent trends in mechanisation. The presentations can be found at [www.cema-agri.org/news/2013-cema-economic-forum](http://www.cema-agri.org/news/2013-cema-economic-forum) but below is a summary of one paper (the full paper is on the EurAgEng website):

**Agricultural Development and Mechanisation in 2013; A Comparative Survey at a Global Level**

*By Stefan Böttinger, Reiner Doluschitz, & Johannes Klaus of University of Hohenheim and Chakib Jenane & Namal Samarakoon of UNIDO.*

"UNIDO in partnership with researchers from the University of Hohenheim, carried out a study on the global trends and evolution of agricultural mechanisation.

The authors analysed the factors driving the future demand for agricultural mechanisation at global level; the changes in the structure of domestic demand, imports and exports of agricultural machinery over the next 10-20 years; and what would be the

future market penetration of selected high-tech innovative agricultural machinery.

The findings of this study are based upon a review of available industry data for agricultural mechanisation and a survey targeting major Associations of Agricultural Machinery Manufacturers. The survey investigated questions related to: (i) General development tendencies likely to affect the future demand of agricultural mechanisation; (ii) main field operations for the production of staple crops; (iii) Trade related to agricultural machinery - including implements, tractors and combines; (iv) the impact that selected issues (irrigation, organic production, and growth in the bio-fuel/bio-products markets) will have on the demand for agricultural mechanisation; and (v) the technological trends for the sector over the next 10-20 years.

The need for further mechanisation to improve productivity in agriculture and to feed the world is undisputable in particular in the light of expected demographic developments. According to the survey results the mechanisation level in agriculture still depends on the overall level of industrial development. In developed countries mechanisation is far advanced and further demand exists mainly for advanced technologies.

The use of precision farming will become standard in the short to the mid-term range, but also the use of control and automation systems will become common and offer new growth opportunities for the corresponding branches. The political conditions and also expected socio-development factors seem to be very favourable for investments in agricultural mechanisation. Nevertheless, the quantitative saturation of domestic markets with a large number of different agricultural implements will force the industry to open potentials abroad. In fact at present, the developing industry in emerging economies is often dominated by branches and joint ventures of companies from the USA, the EU and Japan.

The emerging countries such as India, China and South-Africa are seeing significant economic growth with associated technology transfer and progress in agricultural production. They are becoming important players on the world markets for agricultural machinery and also represent promising markets with high demands for further mechanisation.

The most challenging region for agricultural mechanisation development remains Africa. While only limited progress has been achieved in terms of increased number of machines and market expansion, the predictions over the next ten years are positive."



**FACULTY POSITION IN AGRICULTURAL SYSTEMS MANAGEMENT OR AGRICULTURAL ENGINEERING**

**POSITION:** Assistant Professor of Agricultural and Biological Engineering

**RESPONSIBILITIES:** This is an academic year, tenure track, teaching and research position. Development of a strong, externally funded program resulting in internationally-recognized, high impact scholarship is expected. The candidate will develop an innovative teaching program for undergraduates and graduates in Agricultural Systems Management & / or Agricultural Engineering which might include topics of crop production equipment, off-road equipment components and systems, facilities planning and management, and capstone experiences which include project planning, management, and design.

Possible areas of research specialisation include: sensors, automation, and robotic controls for improving production and sustainability of row-crop, biomass, and/or horticultural crops; integration of remote sensing and spatial data with other farm information and management tools; field machinery and implement automation and control; precision agriculture technologies; material application technologies; development of protocols to help ensure optimal operational efficiency during production, transport, storage, and processing; and the application of information technology for machine and facilities optimisation.

**QUALIFICATIONS:** Applicants must have a Ph.D. in Agricultural Systems Management, Agricultural and Biological Engineering, or a related discipline. Excellent oral and written communication skills are a must; teaching and research experience and experience in production agriculture or industry are highly desirable. Eligibility to be licensed as a professional engineer preferred.

**APPLICATION MATERIALS:** Letter of interest, resume, official academic transcripts, statement of teaching and research philosophies, and names, addresses and phone numbers of three references. Applications should be submitted electronically to [abejob@ecn.purdue.edu](mailto:abejob@ecn.purdue.edu). A background check is required for employment in this position.

**CONTACT:** Dr. Dennis Buckmaster, Search Committee Chair; Email: [abejob@ecn.purdue.edu](mailto:abejob@ecn.purdue.edu) or phone (765) 494-1162. Before applying, please read the full position description located here: <https://engineering.purdue.edu/ABE/InfoFor/ProspectiveFaculty>

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# LAND.TECHNIK - AgEng 2013

## Yet another record attendance

Held just a few weeks ago in Hanover this conference attracted around 1000 agricultural engineers from all around the world.

The topics focussed on looking at technical solutions for more efficient agricultural production. Increasing efficiency and productivity and lowering energy consumption are the main goals of modern agriculture. These aims produce various challenges for the development of agricultural technology.

With the motto 'Components and Systems for Better Solutions' the 71st international conference looked at the current technical developments of individual components, machines and production systems.

This conference is the warm-up event for AGRITECHNICA, and because of this exhibition many experts are attracted from industry and discussed the significance of the cooperation between suppliers and producers along the entire agricultural production chain.

### Lectures



In an introductory lecture, Jane Rickson (left) from the National Soil Resources Institute, Cranfield, UK, emphasised the significance of agricultural technology for feeding the world's population in the coming years.

The plenary lecture by Wolfgang Runge, Runge-Consult, focussed on innovative

electronics in automotive engineering; and gave a hint of what more can still be developed for agricultural engineering applications.

In her keynote lecture, Cathrina Claas-Mühlhäuser looked back on 100 years of successful agricultural engineering development in the Claas family company.

There were 75 contributions, in four parallel sessions, from the industry and research partners covering current developments and research on chassis, hydraulic and diesel-electric applications in tractors and agricultural machinery as well as electronics and data

management. There were also presentations on new technical solutions for working with soils, planting seeds and harvesting produce and which applications can be automated with the help of sensors and field robots and the possibilities of managing farms more efficiently.

### Awards

With the support of the sponsorship of the VDI Max Eyth Society for Agricultural Engineering (VDI-MEG) and the European Society of Agricultural Engineers (EurAgEng), the conference has developed into a leading international event in the agricultural technology calendar.

With so many agricultural engineers in one place it is a fitting time to make awards to our colleagues.

Dipl.-Ing. Peter Jerome and Dipl.-Ing. Rainer Hofmann were awarded a Max Eyth commemorative medal by VDI-MEG President Professor Stefan Bötttinger. Both engineers are very involved with the electronic aspects. Peter Jerome was honoured for his contributions to electronic systems and functions in harvesting machines and his participation in relevant standardisation bodies. Rainer Hofmann was recognised in particular for his commitment to implementing electronic systems and functions in tractors and for his successful work in the Agricultural Industry Electronic Foundation (AEF).

Apart from the presentation of the Award of Merit (see front cover) EurAgEng President Robert Kaufmann also gave the Recognition Award to Jannes Hoenderken from Wageningen, the Netherlands. Many attending would have recognised Jannes as he has been a regular visitor to Landtechnik conferences, particularly in his role as a member of the editorial staff of



Plenary session audience

Landbouwmechanisatie, the Dutch professional magazine. Therefore it was appropriate that he was presented with his EurAgEng Recognition Award at the Conference.

As well as being active in the Dutch association of agricultural engineers, NVTL, as a working group expert since 1975 and as Treasurer since 2006, he has also been a fantastic National Society representative for EurAgEng. He has encouraged new members and organisations to join and kept members and the Secretariat up to date with the Dutch society.

For this efficiency and commitment EurAgEng wished to thank Jannes and presented him with the Recognition Award.



Jannes Hoenderken and Robert Kaufmann

### AgEng 2014

Within the AgEng 2014 conference we are planning a technical tour to the Sepp Knüsel Landmaschinen factory and see the manufacturing of the "Rigitrac". From there we will also be able to catch a glimpse of the Rigi mountain, the mountain the tractor is named after.



Presidents Robert Kaufmann and Stefan Bötttinger with VDI Wissenforum representative Ulrich Herpers and David Tinker (EurAgEng Secretary General)

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Cranfield, Bedford, MK43 0GH,  
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International Conference of Agricultural Engineering

**AgEng 2014 Zurich 6-10 July**

“Engineering for improving resource efficiency”

If you missed submitting an abstract for Land.Technik-AgEng 2013 then be ready for AgEng 2014 as the **call for abstracts is open until 15 December 2013**.

The website is: [www.ageng2014.ch](http://www.ageng2014.ch) and there is already a lot of detailed information for this important conference. For any technical question regarding the registration please contact: [ageng2014@geyseco.es](mailto:ageng2014@geyseco.es)

**Conference topics**

1. Energy, emissions and resource efficiency
2. Biomass and renewable energy
3. Soil, tillage and controlled traffic farming
4. ICT and automation
5. Power and machinery
6. Animal husbandry, welfare and rural buildings
7. Work science, ergonomics and safety
8. Grassland, land management and landscapes
9. Fertiliser application, irrigation and plant protection
10. Post-harvest technology



We are looking forward to your interesting contributions!

**Technical Tours**

- Applied Research on sustainability, agricultural engineering, precision farming and energy
- Technology for hillside farming
- Grassland-based milk production

**Venue**

The conference will be held at the Swiss Federal Institute of Technology Zurich, well known as ETH (Eidgenössische Technische Hochschule). We

have reserved some reasonable priced hotel rooms. To make your reservation follow the link under 'Hotels' on our webpage.

For students and low budget guests we have made a reservation for cheap accommodation in a youth hostel (about 45Euros per night). The earlier you book the better it is. For reservations please contact: [jacqueline.gabriel@agroscope.admin.ch](mailto:jacqueline.gabriel@agroscope.admin.ch).

# EVENTS

**EURAGENG EVENTS**

JULY 2014

6-10 **AgEng2014 Engineering for Improving Resource Efficiency Zurich, Switzerland**  
[www.ageng2014.ch](http://www.ageng2014.ch)

NOVEMBER 2015

6-7 **Land.Technik AgEng 2015 Hannover, Germany**  
[www.vdi.de/landtechnik-ageng](http://www.vdi.de/landtechnik-ageng)

JUNE 2016

26-29 **4th CIGR International - AgEng Conference 2016 - Robotics, Environment and Food Safety Aarhus, Denmark**

**SPONSORED EVENTS**

FEBRUARY 2014

16-21 **49th Croatian and 9th International Symposium on Agriculture Dubrovnik, Croatia**

25-28 **42nd Actual Tasks on Agricultural Engineering Opatija, Croatia**  
<http://atae.agr.hr/>

MARCH 2014

18-20 **4th International Conference on Machine Control and Guidance Braunschweig, Germany**  
[www.mcg2014.de](http://www.mcg2014.de)

JUNE 2014

17-19 **Field Robot Event at DLG-Feldtage Bernbrug-Strenfeld, Germany**

SEPTEMBER 2014

3-6 **ADAGENG 2014 International Congress on Agricultural Mechanisation and Energy Nevsehir Turkey**  
[www.adageng2014.com](http://www.adageng2014.com)

**OTHER EVENTS**

FEBRUARY 2014

3-5 **Global Forum for Innovations in Agriculture ADNEC, Abu Dhabi**  
[www.innovationsinagriculture.com](http://www.innovationsinagriculture.com)

MAY 2014

21-23 **RHEA-2014 Robotics and associated high-technologies and equipment for agriculture and forestry Madrid, Spain**  
[www.rhea-conference.eu/2014/](http://www.rhea-conference.eu/2014/)

JULY 2014

13-16 **Canadian Society of Biosystems Engineers CSBE Joint International Meeting with ASABE Montreal, Canada**  
[www.asabemeetings.org/](http://www.asabemeetings.org/)

SEPTEMBER 2014

3-6 **12th International Congress on Mechanization & Energy in Agriculture Cappadocia, Turkey**  
[www.adageng2014.com/](http://www.adageng2014.com/)

14-16 **22nd ICID Congress and 65th IEC Meeting Kwangju, Korea**  
[www.icid.org/conf\\_congress.html](http://www.icid.org/conf_congress.html)

16-19 **The XVIII CIGR World Congress 2014 on Agricultural & Biosystems Engineering - Upgrading Our Quality of Life Beijing, China**  
[Email:cigrwc2014@yahoo.cn](mailto:cigrwc2014@yahoo.cn)

JULY 2015

12-16 **10th ECPA meeting 'Precision agriculture for efficient resources management under changing global conditions' ARO Volcani Centre, Israel**  
[www.ispag.org/Events/9thECPA/](http://www.ispag.org/Events/9thECPA/)