

71st International Conference on Agricultural Engineering

LAND-TECHNIK AgEng 2013

Components and Systems

For Better Solutions

Attend innovative presentations and participate in discussions with experts from the fields of engineering, product design, management and science:

- Electrification of Tractors, Machines and Implements
- Hydraulics and Drivetrain
- Robotics, Automation and Machine Control
- Innovative Product Development
- Data Processing and IT Technology
- Harvesting Technology

Time and venue:

November 8-9, 2013
Hannover, Germany
Exhibition Ground

Opening Event of



With plenary speeches by:



Jane Rickson,
IAgrE, Cranfield, United Kingdom



Cathrina Claas-Mühlhäuser,
CLAAS KGaA mbH, Harsewinkel, Germany



Wolfgang Runge,
Runge-Consult, Ravensburg, ehem. ZF Lenksysteme GmbH, Schwäbisch Gmünd, Germany

The most important event for the international community of agricultural engineers

Preface

The 71st conference "LAND.technik - AgEng 2013" will take place in Hannover on November 8th and 9th, according to the tradition of odd years. It is a prelude to AGRITECHNICA, the world's most important fair for agricultural machinery, which starts on November 10th with the preview days.

The conference is organized in cooperation with the "Max Eyth Society for Agricultural Engineering" (VDI-MEG), a technical division of the VDI, and the European Society of Agricultural Engineers (EurAgEng). This concept is successfully accepted nationally and internationally both by academia and industry. During recent years, the number of participants grew up to 850 in 2011, when visitors from more than 20 nations were registered. Therefore this conference is the most important event for the international community of agricultural engineers.

The conference is titled "Components and Systems for Better Solutions". The motto underlines the significance of future challenges regarding the production of food and bio-energy under different perspectives. Ecological and economical aims have to be fulfilled without negative outcomes to following generations. The productivity of machines and processes has to increase with less input of energy, better availability and extended machine life to enhance the customers benefit and total economic efficiency.

The conference will offer 72 technical presentations of the latest innovations, machine developments, and technical concepts and methods as a foretaste of the firework of impressions at AGRITECHNICA. The technical lectures will be framed by top-class plenary presentations, the award ceremony and a get-together dinner.

The conference will be an excellent meeting point to discuss the possibilities of addressing future global challenges together. You are invited and are very welcome to participate in THE international agricultural engineering community. We are looking forward to meeting you at LAND.technik - AgEng 2013 in Hannover, Germany!



Thorsten Lang, Technical University, Braunschweig, Germany, Scientific Chairman

10:00	Registration			
12:00	Plenary Session I, Room 2			
13:00	Coffee Break			
	Room 2	Room 3A	Room 3B	Room 15/16
	Tractors - Energy and Positioning Marcus Geimer, Mobima - Chair of Mobile Machines, Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany	Power Train - Drives Ludger Frerichs, Chair of Institute of Mobile Machines and Commercial Vehicles, Technical University, Braunschweig, Germany	Agricultural Information - Control and Measurement Systems Thomas Engel, Manager Operations, John Deere GmbH & Co.KG, Kaiserslautern, Germany	Automation - Machinery Assessment Eldert J. van Henten, Farm Technology Group Wageningen UR/ Wageningen UR Greenhouse Horticulture, Netherlands
13:30	Electrification of Tractors - Challenges and Strategies Wolfgang Breu, Project Leader Electrification Tractors, Benno Pichlmaier, Andreas Szajek, AGCO GmbH, Marktobendorf, Germany	TerraPower - Power Shift Transmission at the Crossroads Stefan Igl, Development of Range Transmission and Rear Axles, Thomas Oberbuchner, Thomas Cappellaro, ZF Friedrichshafen AG, Passau, Germany	Steering-Control of a Agro-Hybrid-Vehicle with Single Wheel Drive Jürgen Karner, Senior Researcher, Josephinum Research, Wieselburg, Rafael Eder, LCM, Linz, Rhomas Holzer, Profiteam Holzer GmbH, Neuberg a.d. Mürz, Austria	New Methodology to Assess and Test the Durability of Agricultural Machinery Dimitris Paraforos, Hans-Werner Griepentrog, Institute of Agricultural Engineering, University Hohenheim, Werner Sturmfels, DLG-Test Center Technology and Farm Inputs, Groß-Umstadt, Germany
14:00	LIB-Off-Road Hybrid Tractor Vanessa Tröster, Communications Specialist, Philipp Münch, John Deere GmbH & Co. KG, Kaiserslautern, Barbara Böhm, John Deere GmbH & Co. KG, Mannheim, Germany	New Transmissions for the John Deere 7R and 8R Series Tractors Douglas Johnson, Project Engineer, John Deere Project Engineering Center, Waterloo, USA	Optimization Results from Simulation and Field Tests for the Lateral Distribution of Fertilizer Spreader under Influence of Wind and Stability Analysis of lateral Fertilizer Distributions Florian Rahe, Head of Sensorics and Mechatronics, Amazonen-Werke H. Dreyer GmbH & Co. KG, Hasbergen, Bernd Scheufler, University of Applied Science, Osnabrück, Germany	Dynamic Weighing with a Front Loader Frederic Ballaire, Steffen Müller, Institute of Mechatronics in Mechanical and Automotive, Technical University of Kaiserslautern, Germany
14:30	Ground Positioning System for John Deere Utility Tractors Stephen Upchurch, Andrew Smock, Thomas Knuth, Electrical Systems Engineering - Compact Utility Tractors, John Deere, Grovetown, USA	Co-Simulation Framework for the Development of Whole-Machine Integrated Distributed Electronic Control Massimo Martelli, Silvia Gessi, Emanuele Tonini, Institut for Agricultural and Earthmoving Machines of the Italian National Research Council, IMAMOTER - C.N.R., Ferrara, Italy	System and Software Design for a Modern Grape Harvesting Machine fulfilling State of the Art Functional Safety Requirements Erik Lautner, Manager of Dept. Mobile Systems and Electronic Controls, HYDAC International GmbH, Potsdam, Germany	Development of a Sensing System to Assess Automatic Steering Systems Hans W. Griepentrog, Head of Section Instrumentation and Test Engineering, Institute of Agricultural Engineering, University of Hohenheim, Stuttgart, Simon Groth, Grothhof, Willstätt, Jürgen Goldmann, DLG-Test Center, Groß-Umstadt, Germany
15:00	Work and Load Performance Profiles for Agricultural Field Machinery Scott Shearer, Professor and Chair Dept. of Food, Agricultural and Biological Engineering, Santosh Pitta, Ohio State University, Columbus, Joe Luck, University of Nebraska, Lincoln, USA	Development of a Real Time Hydrostatic Power Split Transmission Model and it's Usage in a Hardware-in-the-Loop (HIL) Environment Michael Merk, Engineer for system simulation, Jürgen Weinbuch, AGCO GmbH, Marktobendorf, Germany	Real-Time Identification of Vehicle Dynamics for Mobile Machines with Electrified Drive Trains Pavel Osinenko, Mike Geißler, Thomas Herlitzius, Dept. for agricultural systems and technology, Technical University, Dresden, Germany	Measurement and Analysis of Mechanical Vibrations Caused by Corn Head Clutch Slippage Robert McNaull, Matthew Darr, Agricultural and Biosystems Engineering, Iowa State University, Ames, USA
15:30	Coffee Break			
	Tractors -Concepts David Tinker, EurAgEng European Society of Agricultural Engineers, Bedford, United Kingdom	Soil protection - Machine-Soil Interaction Karlheinz Köller, Institute of Agricultural Engineering, University Hohenheim, Stuttgart, Germany	Harvesting Technology - Special Tools Thomas Barreilmeyer, Claas Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany	Automation - Robotics Rainer Hofmann, Director Engineering, Global Tractor EFG, AGCO GmbH, Marktobendorf, Germany
16:00	Concept Study of a Modular and Scalable Self-Propelled Implement System Thomas Herlitzius, Chair of Professorship, André Grosa, Jens Krzywinski, Chair Agricultural Systems and Technology, Technical University of Dresden, Germany	Partial Process-Analysis of Single-Seeder for Small Seeds Tobias Meinhold, Matthias Budde, Lutz Damerow, Institute of Agricultural Engineering, University of Bonn, Germany	Variable Speed Strawwalkers, a Way to Increase Productivity and Automation of Conventional Combines Geert Nerinckx, Product Manager Combines, Frank Duquesne, Bart Missotten, New Holland, Zedelgem, Belgium	A Modular Self-Propelled Semi-Autonomously Potato Harvester Johannes Sonnen, Head of Product Management, Andre Schweers, Grimme Landmaschinenfabrik GmbH & Co. KG, Damme, Germany
16:30	A Wide Span Tractor Concept Developed for Efficient and Environmental Friendly Farming Hans Henrik Pedersen, Frank Oudshoorn, Department of Engineering, Aarhus University, Tjele, Rasmus Meyer, ASA-Lift A/S, Soroe, Denmark	Terranimo® - a Web-Based Tool for Evaluating Soil Compaction Matthias Stettler, School of Agricultural, Forest and Food Science, University of Applied Science Bern Switzerland, Thomas Keller, Agroscope ART Reckenholz, Zürich, Switzerland, Per Schjønning, Aarhus University, Aarhus, Denmark	Cleaning Shoe Airflow Distribution Measurement Method Joseph Mark Biggerstaff, Senior Project Engineer, AGCO Corporation, Hesston, USA	Field-Robot-Based Agriculture: "RemoteFarming.1" and "BoniRob-Apps" Wolfram Strothmann, Arno Ruckelshausen, Competence of Applied Agricultural Engineering, University of Applied Sciences Osnabrück, Florian Rahe, Amazonen-Werke H. Dreyer GmbH & Co. KG, Germany
17:00	Swiveling Hitch for Soil Protective Crab Steering Rainer Selbach, System Developer, Christian Richard, Andreas Bentfeld, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany	Response of a Clay Loam Agricultural Soil to Mechanical Stress from Tractor Traffic with and without Slip Andrea Battiato, Agricultural System Engineering, Agroscope Reckenholz-Tänikon Research Station ART, Ettenhausen, Switzerland	Harvest of Short-Rotation Woody Crops with Small-to-Medium Capacity Pull-Type Forage Harvesters Philippe Savoie, Pierre Luc Hébert, François-Simon Robert, Agriculture and Agri-Food Canada Solis and Crops Research and Development Centre, Québec, Canada	Posture and Vibration Control of Boom Sprayer Yohsuke Nakanishi, Hokkaido research organization, Yukinori Kobayashi, Yohei Hoshino, Hokkaido University Sapporo, Japan
17:30	Break			
17:45	Plenary Session II, Room 2			
19:00	Get-together Dinner			

Plenary Session I

Friday, 8 November 2013
Room 2

12:00 **Welcoming Address and Opening Remarks**

Stefan Böttinger, President of Max Eyth Society for Agricultural Engineering (VDI-MEG) Stuttgart, Germany

Robert Kaufmann, President of European Society of Agricultural Engineering (EurAgEng), Ettenhausen, Switzerland

12:20 **Plenary Lecture Agricultural Engineering: A Key Discipline Enabling Agriculture to Deliver Global Food Security**

Jane Rickson, Professor of Soil Erosion and Conservation, National Soil Resources Institute, Dept. of Environmental Science and Technology, School of Applied Science, Cranfield University, Cranfield, United Kingdom


13:00 **Coffee Break**

13:30 **Technical Lectures**

Plenary Session II

Room 2

Evening Event with Tributes

17:45 **Keynote Address 100 Years CLAAS**

Catharina Claas-Mühlhäuser, Chairman of the Supervisory Board, CLAAS KGaA mbH, Harsewinkel, Germany

18:15 **Awarding of the VDI-MEG Prizes Awarding of the EurAgEng Award of Merit**

19:00 **Get-together Dinner**

Program Committee

Heinz Böhler, AGCO GmbH, Marktoberdorf, Germany
Stefan Böttinger, Universität Hohenheim, Stuttgart, Germany
Hermann Buitkamp, DLG e.V., Groß-Umstadt, Germany
Herbert Coenen, Uniparts India Ltd., Königswinter, Germany
Franz Handler, BLT Wieselburg, Austria
Andreas Herrmann, Verein Deutscher Ingenieure e.V., Düsseldorf, Germany
Peter Hieronymus, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany
Thomas Hoffmann, Leibniz-Institut für Agrartechnik Potsdam-Bornim e.V., Potsdam, Germany
Aad A. Jongebreur, Wageningen University, The Netherlands
Karlheinz Köller, Universität Hohenheim, Stuttgart, Germany
Thorsten Lang, Technische Universität Braunschweig, Germany
Henning Meyer, Technische Universität Berlin, Germany
Axel Munack, Johann Heinrich von Thünen-Institut, Braunschweig, Germany
Peter Pickel, John Deere European Technology Innovation Center, Kaiserslautern, Germany
Peter Schulze Lammers, Universität Bonn, Germany
Peter-Michael Synek, VDMA e.V., Frankfurt/M., Germany

Scientific Chairman

Thorsten Lang, Technical University, Braunschweig, Germany

Technical Chair

Max Eyth Society for Agricultural Engineering (VDI-MEG)
 European Society of Agricultural Engineers (EurAgEng)

The Conference is Supported by

Deutsche Landwirtschaft-Gesellschaft (DLG), Frankfurt/M., Germany
 Deutsche Messe AG, Hannover, Germany

In Cooperation with



Official Conference Language

The official language of the conference will be English. Simultaneous translation will not be available.

	Room 2	Room 3a	Room 3B	Room 15/16
	Power Train - Electric Drives Franz Handler , Head of Department Process Technology, BLT Wieselburg, Austria	Agricultural Information - Increasing Machine Efficiency Peter Hieronymus , Head of Systems Engineering Software, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany	Harvesting Technology - Combine Harvester Harald Großjohann , Engineering Manager Combine Harvester, John Deere GmbH & Co. KG, Zweibrücken, Germany	Agricultural Information - Information Technologies for Farming Emmanuel Hugo , Head of Research Unit, Irstea-National Research Institute, Aubiere, France
08:30	Comparative Analysis of Hydrostatic and Electric Rear Axle Traction Drives, Including In-Field-Tests Markus Heckmann , Heinz Bernhardt, Agricultural System Engineering, Technical University Munich, Germany	SmartAgriFood Machine Breakdown Service Peter Pickel , Deputy Director, Thomas Flörchinger, Nicole Hüther, John Deere GmbH & Co. KG, Kaiserslautern, Germany	Basic Study of Broken Grain - Why, How and When Breaks the Grain? Philipp Mümken , Stefan Böttinger, Institute of Agricultural Engineering, University Hohenheim, Stuttgart, Joachim Baumgarten, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany	Understanding Customer Duty Cycle through JDLink™ Michael Ryken , Senior Engineer, Jeremy L'Heureux, John Deere, Waterloo, USA
09:00	Embedded Hydraulics in Electric Hybrid Vehicle Systems Christoph Kempermann , Manager Director, Matthias Klamann, Leif Börger, Fluitronics GmbH, Krefeld, Georg Sandkühler , Head of R&D, FAUN Umwelttechnik GmbH & Co. KG, Osterholz-Scharmbeck, Germany	Safety and Certification in Context of Tractor-Implement-Systems - A Modular Approach Daniel Schneider , Mario Trapp, Institute Embedded Systems Engineering, Fraunhofer IESE, Kaiserslautern, Germany	An Automatic Sidewind Compensation for the Radialspreader of a Combine Harvester Stefan Terörde , System Engineer, Jörn Brinkmann, Christoph Heitmann, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany	Augmented Reality on Mobile Devices to Enhance Training and Service Capabilities Christian Bartolein , Advanced Engineering, John Deere GmbH & Co.KG, Nils Petersen, German Research Center for Artificial Intelligence GmbH, Kaiserslautern, Germany, Arnold A. Taube, Deere & Company, Moline, USA
09:30	Potato Harvester with an Add-on Generator and an Electric Wheel Drive Manuel Thiel , Product Development Engineer, GKN Walterscheid GmbH, Lohmar, Bernd Niemöller , System Engineering, Grimme Landmaschinenfabrik GmbH & Co. KG, Damme, Germany	Bridging the Gap between Installed and Effective Machine Capacity Thilo Steckel , Systems Developer, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Willi Nüßer, University of Applied Science, Paderborn, Germany	Combines with 3 Axles - Soil Protective and Efficient Morton Leth Bilde , Research and Advanced Engineering Manager, AGCO, Randers, Denmark, Hartmut Döll, Christian Stentzel, Technical University of Dresden, Germany	Vision-Based Manipulation for Weed Control with an Autonomous Field Robot Andreas Michaels , Corporate Sector Research and Advance Engineering Future Systems Consumer Goods, Sebastian Haug, Slawomir Grzonka, Robert Bosch GmbH, Schwieberdingen, Germany
10:00	PTO Generator Driven Electrical Components for Various Agricultural Usage Florian Kogler , Johannes Heissenberger, Institute of Energy Systems and Electrical Drives, Technical University, Vienna, Austria	Dynamic Distributed Infield Planning and Steering System for Autonomous Harvesting Max Reinecke , Development Systems and Services, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany	Measuring and Modelling the Greenhouse Gas Emissions of Grain Harvesting Systems Robert Fillingham , Engineering Department, Harper Adams University, Shropshire, United Kingdom, Huber Korte, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany	Development of an Intra-Row Weeding System for Row Crops Using Electric Servo Drives and Machine Vision for Plant Detection Matthias Müter , Peter Schulze Lammers, Lutz Damerow, Institute of Agricultural Engineering, University of Bonn, Germany
10:30	Coffee Break			
	Tractors - Tyres Heinz Böhler , Functional Group Manager Strength Test, NVH Simulation, AGCO GmbH, Marktoberdorf, Germany	Power Train - Drive Systems Peter-Michael Synek , Fluid Power Research Fund, VDMA e. V., Frankfurt/M., Germany	Industrial Products - Market Analysis Klemens Kalverkamp , Director, Grimme Landmaschinenfabrik GmbH & Co. KG, Damme, Germany	Agricultural Information - Information Technologies for Farming II John F. Reid , Director, Product Technology and Innovation, John Deere, Moline Technology Innovation Center, Moline, IL, USA
11:00	New Experimental Method for Measuring the Energy Efficiency of Tyres in Real Condition on Tractors Guilo Fancello , Entam Coordination Centre, ENTAM - European Network for Testing of Agricultural Machines, Rome, Italy, László Kocsis, ENTAM - MGI, Hungary, Emmanuel Piron , ENTAM France	Development of an Integrated Tubular Electric Drive for Rotating Shafts in Agricultural Applications Johannes Heissenberger , Florian Kogler, Institute of Energy Systems and Electrical Drives, Technical University, Vienna, Austria	Criteria for Efficiency Benchmarking of Mobile Machines Kirsten Wulfmeier , Ludger Frerichs, Institute of Mobile Machines and Commercial Vehicles, Technical University Braunschweig, Germany	Energy-Oriented Analysis in Grain Production Christian Baron von Toll , H. Meyer, Institute of Engineering Design, Technical University Berlin, Germany
11:30	Soil Compaction: Track Induced Stress isn't so Positive in Comparison with Tyre Denis Miclet , Technology and information system for agrosystems, Emmanuel Piron, Irstea, Francois Pinet, Michelin, Clermont-Ferrand, France	Process Dependent Load and Power Spectra of Combine Harvester Drives Christoph Müller , Stefan Böttinger, Institute of Agricultural Engineering, University of Hohenheim, Stuttgart, Thomas Anderl, Bosch-Rexroth AG, Elchingen, Germany	Development Strategy for a Family of Frugal Tractors for Global Markets Martin von Hoyningen-Huene , Global Manager, Horst Wiedehage, John Deere GmbH & Co. KG, Mannheim, Germany	M2M Teledesk - Manufacturer Independent Telemetry Solution for Agricultural Machinery Christian Rusch , System Engineer, Bettina Horster, CLAAS Selbstfahrende Erntemaschinen GmbH, Harsewinkel, Germany
12:00	Advancement and Validation of the Hohenheim Tyre Model Paul Witzel , Stefan Böttinger, Institute of Agricultural Engineering, University of Hohenheim, Germany	Forestry Crane with Electrohydraulic Flow-On-Demand System Martin Scherer , Marcus Geimer, Chair of Mobile Machines, Institute of Technology, Karlsruhe, Björn Weiß, Weiß Mobiltechnik GmbH, Rohrdorf, Germany	Opportunities and Challenges of the Indian Agricultural Market Herbert Coenen , Director Business Development, Uniparts India Ltd., Noida, India	Characterizing Quality of Work for Tillage by Image Data Processing Thomas Riegler , Junior Researcher, Christian Rechberger, Franz Handler, Josephinum Research, Wieselburg, Austria
12:30	Simulation of Controlled Rough Track Rides with Agricultural Assemblies Wolfgang Schimpl , Team Leader, Alois Pöttinger Maschinenfabrik GesmbH, Grieskirchen, Austria	Virtual Validation of Bearings for a New Tractor Transmission Targeting Efficiency and High Speed Dynamics Fabrizio Mandrile , Regional Manager, Piero Cherio, SKF Industrie SpA, Airasca, Italy, Yannik Sellier, SKF France S.A., Montigny le Bretonneux, France	A Global Approach to Energy Efficiency Benno Pichlmaier , Manager Research and Advanced Engineering, AGCO GmbH, Marktoberdorf, Germany, Petri Hannikainen, AGCO/Valtra Oy Ab, Suolahti, Finland, Ravi Godbole, AGCO Corporation, Duluth, USA	Internet of Agriculture Hans-Peter Grothaus , Head Dept. Development of Systembased Services, CLAAS Selbstfahrende Erntemaschinen, Harsewinkel, Germany
13:00	Lunch Break			



The Association of German Engineers (VDI) is one of the leading engineer's associations worldwide. The Max Eyth Society for Agricultural Engineering represents a technical division of the VDI. It bears the name of the founder of agricultural engineering as a distinct discipline in Germany, Max Eyth (1836-1906).
www.vdi.de/meg



The European Society of Agricultural Engineering (EurAgEng) exists to promote the professions of Agricultural and Biosystems Engineering and the people who serve it. The Society is particularly active in conferences, Special Interest Groups, publications, networking, and international lobbying.
www.eurageng.net



The VDI Wissensforum organizes and provides seminars and conferences dedicated not only to engineers but also to academics and practitioners from widely diverse branches of the economy. Our activities are backed by the Verein Deutscher Ingenieure e.V. (VDI), a virtually inexhaustible fund of know-how constantly attracting new ideas and suggestions.

UNIFARM User Forum and 7th Workshop of the MANUFUTURE Agricultural Engineering & Technologies Community (AET)

The MANUFUTURE AET-Workshop/UNIFARM User Forum will be held in cooperation with the International LAND.technik AgEng 2013

Friday, 8 November 2013

Convention Center (CC), Deutsche Messe AG, Hannover Room 13/14

Schedule

- 08:00 Registration in Room 13/14
- 08:30–10:00 Section 1: Agricultural Engineering Strategies (UNIFARM/AET)
- 10:00–10:20 Coffee Break
- 10:20–11:50 Section 2: Agricultural Engineering Strategies (UNIFARM/AET)
- 12:00–13:00 Joint Plenary Session with LAND.technik AgEng 2013
- 13:00–13:30 Coffee break
- 13:30–15:30 Section 3: EU Projects & Research Results
- 15:30 End of the Workshop

Program will be sent out electronically about 2 months before workshop.

Information and registration for 7th Workshop of the MANUFUTURE AET
http://www.manufuture.org/manufacturing/?page_id=668 or
 Jens Fehrmann,
 E-Mail: fehrmann@ast.mw.tu-dresden.de

For participation in the International LAND.technik AgEng 2013 Conference please register separately at page 8 of this brochure.

Room 2	Room 3A	Room 3B	Room 15/16
<p>Tractors - Safety and Tests</p> <p>Herbert Coenen, Director Business Development, Uniparts India Ltd., Noida, India</p>	<p>Industrial Products - Innovative Product Development</p> <p>Robert Kaufmann, Head of Research Department Agricultural Economics and Engineering, Agroscope Reckenholz-Tänikon Research Station ART, Ettenhausen, Switzerland</p>	<p>Harvesting Technology - Harvesting Optimisation</p> <p>Thomas Hoffmann, Head of Department Postharvest Technology, Leibniz-Institute for Agricultural Engineering Potsdam-Bornim e.V., Potsdam, Germany</p>	<p>Automation - Communication Systems</p> <p>Peter Van der Vlugt, R&D Manager, Kverneland Group Mechatronics BV, Nieu-Vennep, Netherlands</p>
<p>14:00 Design of a Load Cart to Reproduce Field Load Conditions on Test Tracks Giovanni Molari, Dept. of Agricultural and Food Sciences, Michele Mattetti, University of Bologna, Matthew Walker, CNH Italia, Modena, Italy</p>	<p>Benefits of Remote Service Support for Mobile Machines Holger Kremer, Alexei Kolesnikow, Faculty of Engineering and Computer Science, University of Applied Sciences Osnabrück, Andreas Ganseforth, Anedo Ltd., Eydelstedt, Germany</p>	<p>Compression Modeling in the Large Square Baler Kenny Nona, Dept. of Biosystems, KU Leuven, Belgium</p>	<p>ISOBUS Automation - Actual State of the AEF PG 5 Guideline Discussion Michael Suhre, Manager Business Unit Customized Automation Systems, Eckelmann AG, Wiesbaden, Florian Ahlers, AgBRAIN GmbH, Osnabrück, Hans-Jürgen Nissen, John Deere GmbH & Co.KG, Mannheim, Germany</p>
<p>14:30 Accidents Connected with Boarding Means of Tractors Elisabeth Quendler, L. Prodingner, J. Boxberger, Dept. of Sustainable Agricultural Systems, University of Natural Resources and Life Sciences, Vienna, Austria</p>	<p>New Combine to Header Connection - Concept for Very Wide Platforms Christoph Schreiber, Thomas Herlitzius, J. Krzywinski, Institute of Machine Elements and Machine Construction, Technical University, Dresden, Germany</p>	<p>Investigations of an Overlaying Cutting Method in a Rotary Mower Sebastian Kemper, Thorsten Lang, Ludger Frerichs, Institute of Mobile Machines and Commercial Vehicles, Technical University, Braunschweig, Germany</p>	<p>Tablets and Mobile Devices Used as Data Management Devices for Agricultural Machinery Jan Horstmann, Head of Electronics and Product IT Department, Maschinenfabrik Bernard KRONE GmbH, Spelle, Germany</p>
<p>15:00 Impact of the New Braking Legislation on Braking Systems for Agricultural Tractors and Introduction of Technical Solutions Kai Arens, Martin Mederer, Andreas Buch, Knorr Bremse S/N GmbH, Munich, Germany</p>	<p>Electronics for Agricultural Machines: Global and Local - a Challenge, not a Contradiction Thierry Dumont, Senior Manger Sales Product Management Systems, Bosch Rexroth AG, Schwieberdingen, Germany</p>	<p>Machinery Innovations to Meet Industrial Biomass Harvesting Demands in Expanding United States Markets. Matthew Darr, Keith Webster, Agricultural and Biosystems Engineering, Iowa State University, Ames, USA</p>	<p>Real Time Sensing and ISOBUS Philipp Münch, Sensor Specialist, John Deere GmbH & Co. KG European Technology Innovation Center, Kaiserslautern, Germany, Viacheslav Adamchuk, McGill University, Quebec, Canada, James Lenz, John Deere Technology Innovation Center, Champaign, USA</p>
<p>15:30 Break</p>			
<p>15:50 Plenary Session III, Room 2</p>			
<p>16:30 End of the Conference</p>			

Information

Route to the Exhibition Ground

By car: arrival via expressway to the exhibition center, "Parkhaus Süd 26" or "Parkhaus Süd 27". Access to the Convention Center through the "Ost 3" entrance via the "Skywalk" and the Exponale.

By public transportation: from Hannover main railroad station via subway line 8 to terminal station "Hannover Messe/Nord", access to the Convention Center through the "Nord 2" entrance.

Access to the Exhibition Ground

It is only open to conference participants with **legitimation** send to you by email 10 days prior the event.

Access to the Convention Center

Through entrance "Süd", entrance "Nord" will be closed.

AGRITECHNICA Admission-Tickets

"Exklusivtageskarte Plus" Ticket for AGRITECHNICA from 10th to 12th November 2013 will be sold to LAND.technik AgEng 2013 conference participants during the breaks at the price of EUR 55,00 (regular price EUR 85,00)

Plenary Session III

Saturday, 9 November 2013

Room 2

15:50



Plenary Lecture
New Innovations in Car Electronics
Wolfgang Runge, Runge-Consult, Ravensburg, ehem. ZF Lenksysteme GmbH, Schwäbisch Gmünd

16:20



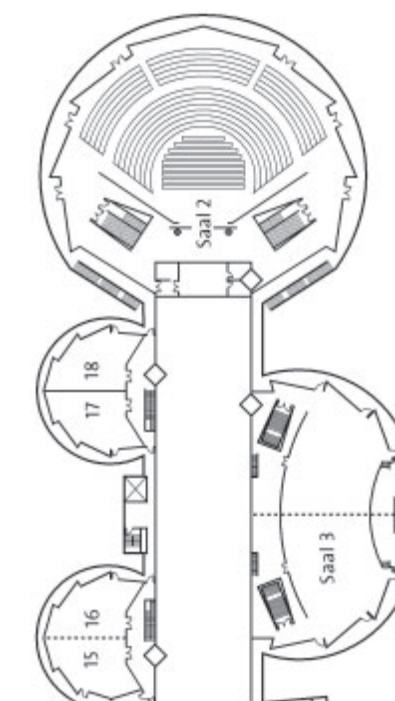
Closing Remarks
Thorsten Lang, Scientific Chairman of the Conference

Overview

Exhibition Ground



Convention Center (CC)



○ Access through entrances "Nord 2" and "Ost 3"

For more information please see the website www.vdi.de/landtechnik-ageng

71st International Conference on
Agricultural Engineering

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1111

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Phone: +49 211 6214-201
E-Mail: wissensforum@vdi.de
Internet: www.vdi.de/landtechnik-ageng

- I will be attending the 71st International Conference on Agricultural Engineering November 8-9, 2013, Hannover (12TA001013)

Please select your price category

	Price Group	Price per person + VAT
<input type="checkbox"/> Conference Fee	1	EUR 550,-
<input type="checkbox"/> VDI and EurAgEng Members	2	EUR 500,-
<input type="checkbox"/> VDI and EurAgEng Members of Universities	4	EUR 275,-
<input type="checkbox"/> Doctorial Candidates VDI Members	3	EUR 180,-

VDI/EurAgEng Member No: | | | | | | | | | |

(The VDI/EurAgEng Membership must be specified to be eligible category 2,3 and 4)

Surname

First Name Title

Department (Abbreviation if applicable)

Job Title

Function

Company

P.O. Box or Street

Postal Code, City, Country

Phone

Telefax

E-Mail

Different address for account

Payment by credit card for participants with residence outside of Germany, Austria and Switzerland.

Visa Mastercard American Express

credit card holder

card no. valid to (MM/YY)

verification number Date

Applications must be in writing. Registration confirmation and invoice will be mailed out. Please do not pay until you have been billed. For more information please see www.vdi.de/landtechnik-ageng.

Conference location and conference desk

Convention Center (CC)
Deutsche Messe AG
Exhibition Ground
30521 Hannover, Germany

Conference desk at the Convention Center

You can reach the conference desk at the following number:
Phone: +49 151 14259017

The price includes the conference proceedings (VDI report 2193), coffee-break beverages, lunch and the evening event. The proceedings will be handed out at the beginning of the conference.

Room Reservation

List of hotels with VDI preferential rate for the conference participants, please see the website www.vdi.de/landtechnik-ageng

For further individual hotel reservation for AGRITECHNICA visitors please contact

Hotelmittlervermittlung Accommodation Service
Hannover Marketing & Tourismus GmbH
Phone: +49 511 16849-792
E-Mail: hotels@hannover-tourismus.de
Code „VDI“

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