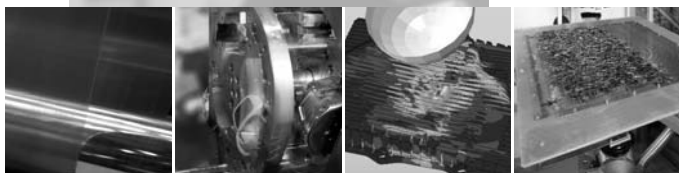


26<sup>TH</sup> INTERNATIONAL  
PLASTICS TECHNOLOGY  
COLLOQUIUM

**7 - 8 MARCH 2012**

EUROGRESS AACHEN

# **INTEGRATIVE** **PLASTICS TECHNOLOGY**



**7 - 8 MARCH 2012**

**Forum for the plastics industry  
Recruiting. Networking. Innovating.  
Plus get-together on March 6**

INSTITUT FÜR  
KUNSTSTOFFVERARBEITUNG  
AN DER RWTH AACHEN



[www.ikv-colloquium.com](http://www.ikv-colloquium.com)

**Ladies and gentlemen,**

In the plastics industry, the role played by science and industry is advancing at an ever faster rate and becoming ever more complex. Many of today's innovations will be regarded as obsolete tomorrow. To be in a position to meet the upcoming challenges, there must be three major objectives for you and your company:



- **Win talented new recruits**
- **Strengthen networks**
- **Trigger innovation**

An excellent opportunity to tackle these three key factors for success is offered by the 26<sup>th</sup> International Plastics Technology Colloquium 2012. This unique combination of specialist conference and industry forum is organised by the Institute of Plastics Processing (IKV), and will take place in Aachen on March 7 and 8, 2012.



The motto for the IKV Colloquium is "Integrative Plastics Technology", which is the key to many challenges in plastics engineering. Integrative plastics technology represents a combined approach to product development, processing processes and the determination of material properties. Only by taking a holistic view plastics products can be manufactured to comply with the specifications, conserve resources and be economical.

Why not come to Aachen and become part of this important forum for the plastics industry at the IKV Colloquium 2012? We look forward to seeing you there – and perhaps already at the get-together on March 6!

With kind regards from Aachen

A handwritten signature in black ink, appearing to read 'Ch. Hopmann'. The signature is fluid and cursive.

Prof. Dr.-Ing. Ch. Hopmann



(Photo: Brixius/IKV)

For exhibitors, the 26<sup>th</sup> IKV Colloquium has become even more attractive than in the past. Under very favourable pricing conditions, you as an exhibitor will have direct access to your target groups. With long breaks during the Colloquium and lunch snacks in the immediate vicinity, we offer you sufficient time and space to talk to your customers.

IKV has a wide range of attractive offers for exhibitors. You can just rent the stand space or we can provide you with a full-service package with all the stand fittings and furnishings. We would be pleased to comply with your individual wishes. Just let us know.

### Just some of the convincing reasons to attend:

- More than 500 experts from the plastics industry
- More than 40 exhibitors
- Essential meeting point for the plastics industry
- Favourable pricing conditions
- Coffee breaks and lunch snacks directly in the exhibition
- Networking at the get-together on March 6, 5.30 p.m.

### Exhibitor information and registration:

[www.ikv-kolloquium.de/en/exhibitors](http://www.ikv-kolloquium.de/en/exhibitors)

### Contact for exhibitors:

Dipl.-Ing. Christiane Kessler, Telephone: +49 (0) 241 80-28342  
E-mail: [kessler@ikv.rwth-aachen.de](mailto:kessler@ikv.rwth-aachen.de)

Participants can register conveniently at  
[www.ikv-kolloquium.de/en/registration](http://www.ikv-kolloquium.de/en/registration)

### Organiser/IKV:

The 26<sup>th</sup> International Plastics Technology Colloquium 2012 is organised by the Institute of Plastics Processing (IKV) in Industry and the Skilled Crafts at RWTH Aachen University. The head of the Institute is Univ.-Prof. Dr.-Ing. Christian Hopmann, who also holds the Chair of Plastics Processing at RWTH Aachen University. IKV, with well over 300 staff, is the largest research and training institute in the field of plastics technology in Europe.

### Contact IKV Colloquium:

Dipl.-Kfm. Markus Bau, Telephone: +49 (0) 241 80-96631  
E-mail: [bau@ikv.rwth-aachen.de](mailto:bau@ikv.rwth-aachen.de)

# Participant/Prices/Registration

At the IKV Colloquium you will meet customers, suppliers, research partners and also your competitors. You can discuss with them and more than 500 experts the latest topics and trends. In talks with the many budding young engineers who will also be attending, you may perhaps be able to recruit future staff members. We will give you plenty of room and time for discussing and exchanging information with your colleagues in the plastics industry. We also invite you to attend the get-together on March 6 in the Eurogress starting at 5.30 p.m.

You really need to be there! Register today!

## Your way to register online:

[www.ikv-kolloquium.de/en/registration/online-registration](http://www.ikv-kolloquium.de/en/registration/online-registration)

### Colloquium in brief

- March 6: Get-together
- March 7 - 8: Workshops and sessions
- March 8: Visit to the Institute

### Contact for registration:

Ulla Köhne, Telephone: +49 (0) 241 80-93672

E-mail: [koehne@ikv.rwth-aachen.de](mailto:koehne@ikv.rwth-aachen.de)

Susanne Meyer, Telephone: +49 (0) 241 80-96630

E-mail: [meyer@ikv.rwth-aachen.de](mailto:meyer@ikv.rwth-aachen.de)

### Ticket prices:

	2-day ticket	1-day ticket
Member of Sponsors Association	690.00 €	470.00 €
Non-member	990.00 €	690.00 €
Universities (professors, assistants, students, with ID)	690.00 €	470.00 €
Evening event "Beer colloquium"		60.00 €



(Photo: Brixius/IKV)

Europasaal

Brüsselsaal

K1 Aachen

9:00 AM	<b>Opening Session Greetings</b> Marcel Philipp, Mayor City of Aachen; Prof. Dr.-Ing. Ernst M. Schmachtenberg, Rector of RWTH Aachen University; Prof. Dr. rer. nat. Franz Brandstetter, Chairman of the Association of Sponsors of IKV		
9:20 AM	<b>Plenary lecture</b> Prof. Dr.-Ing. Christian Hopmann		
9:50 AM	<b>RWTH Aachen Campus – Vision. Concept.</b> Prof. Dr. Ing. Dipl.-Wirt. Ing. Günther Schuh, WZL of RWTH Aachen University		
10:10 AM	<b>Georg Menges Award 2012</b>		
10:30 AM	Coffee break and visit of the exhibition		
11:00 AM	<p><b>Special robust injection techniques – Processes for improved reliability and part quality</b> Dr.-Ing. Karlheinz Bourdon, KraussMaffei Technologies GmbH</p> <p><b>Variothermal process control – increasing bond strength in multi-component parts</b> Dipl.-Ing. Johannes Wunderle</p> <p><b>Projectile injection technology (PIT) – reproducible and reliable production of large volume hollow parts</b> Dipl.-Ing. Moritz Gründer</p> <p><b>Foaming with ProFoam – the easy way to produce fine-cell injection-moulded foams</b> Dipl.-Wirt.-Ing. Daniel Sander</p>	<p><b>Possibilities for simulation along the extrusion process chain</b> Dr.-Ing. Matthias Franke-Maintz, Kautex Textron GmbH &amp; Co. KG</p> <p><b>3D modelling of the melting process in the single-screw extruder</b> Dipl.-Ing. Sebastian Grammel</p> <p><b>Simulation of the parison geometry in extrusion blow moulding using viscoelastic material models</b> Dipl.-Ing. Christian Windeck</p> <p><b>Influence of the material data measurement on the thermoforming simulation</b> Dipl.-Ing. Maren Begemann</p>	<p><b>Integration of functions and cost reduction through multi-material systems</b> Dr.-Ing. Marco Wacker, Oechsler AG</p> <p><b>Analysis of the entire process chain of highly filled soft magnetic plastics compounds</b> Dipl.-Ing. Jan Fragner</p> <p><b>New concepts for the laser transmission welding of dissimilar thermoplastics</b> Dipl.-Ing. Mathias Weber</p> <p><b>Acoustic optimisation of FRP sandwich structures by integrated elastomer layers</b> Dipl.-Ing. Tobias Preuß</p>
12:15 PM	Lunch break and visit of the exhibition		
1:45 PM	<p><b>Success resulting from innovative film concepts</b> Dr.-Ing. Jürgen van Marwick, RKW SE</p> <p><b>Function-integrated films</b> Dipl.-Ing. Stephan Eilbracht</p> <p><b>Minimising the corrugation of foamed PE films</b> Dipl.-Ing. Tilo Hildebrand</p> <p><b>Factors influencing material changes</b> Dipl.-Ing. Janina Overbeck</p>	<p><b>PU – new approaches through tailor-made processes</b> Dr.-Ing. Ingo Kleba, Rühl Puromer GmbH</p> <p><b>Process development for the PU/thermoplastic sandwich injection moulding of flat parts</b> Dipl.-Ing. Christian Holz</p> <p><b>Further development of the PU foaming process using CO<sub>2</sub> as blowing agent</b> Dipl.-Ing. Simon Latz</p> <p><b>Compact polyurethanes with continuous fibre reinforcement: Resin Spray Prepregging</b> Dipl.-Ing. Marco Pöhler</p>	<p><b>Workshop Lightweight potentials of fibre-reinforced plastics for automotive applications</b> Dr.-Ing. Jochen Töpker, BMW Group</p> <p><b>Lightweight design strategies for future vehicle generations</b> Dr.-Ing. Jochen Töpker, BMW Group</p> <p><b>Innovative polymers for lightweight design</b> Dipl.-Ing. Andreas Szentivanyi, M.Sc., Evonik Industries AG</p> <p><b>New processes for the large-volume production of highly integrated lightweight structural parts</b> Dr.-Ing. Marcus Schuck, Jacob Plastics GmbH</p>
3:00 PM	Coffee break and visit of the exhibition		
3:15 PM	<p><b>Elastomer technology – innovative approaches for compounding and injection moulding</b> Ing. Dietmar L. Morwitzer, MAPLAN Ges.m.b.H</p> <p><b>Process optimisation by analysing mixing sounds in the internal mixer</b> Dipl.-Ing. Jan Peter Dering</p> <p><b>Improving energy efficiency in the injection moulding of elastomers</b> Dipl.-Ing. Dipl.-Wirt.-Ing. Clemens Behmenburg</p> <p><b>Plasma-polymerised bonding layers in rubber/thermoplastic hybrid parts</b> Dipl.-Ing. Henrik Behm</p>	<p><b>Optimised moulds for series production</b> Dipl.-Ing. Günter Hofmann, Hofmann Innovation Group GmbH</p> <p><b>Consideration of the coolant flow in thermal mould design</b> Dipl.-Wirt.-Ing. Philipp Nikoleizig</p> <p><b>Improved simulation of the demoulding process</b> Dipl.-Wirt.-Ing. Ivo Erler</p> <p><b>New mould technologies for high-volume production of FRP</b> Dipl.-Ing. Robert Bastian</p>	<p><b>Workshop Lifetime prediction for plastics products</b> Dr. rer. nat. Rainer Dahmann, Institut für Kunststoffverarbeitung (IKV)</p> <p><b>The lifetime of plastics parts – influencing factors and methods of characterisation</b> Dipl.-Ing. Nikolai Borchmann, Institut für Kunststoffverarbeitung (IKV)</p> <p><b>Lifetime analysis of plastics parts in sanitary engineering</b> Dr.-Ing. Klaus Skrodolies, Viega GmbH &amp; Co. KG</p> <p><b>Lifetime prediction – long-term properties of plastics and methods for accelerated testing</b> Dr.-Ing. Kurt Engelsing, SKZ - KFE gGmbH</p> <p><b>Application-related design of highly loaded injection moulded parts</b> Dr. Kurt Hornberger, Robert Bosch GmbH</p>
4:30 PM	Coffee break and visit of the exhibition		
4:45 PM	<p><b>Potentials of biomaterials – compounds, composites, recycling</b> Dr. Werner Klusmeier, Johnson Controls GmbH</p> <p><b>Recycling of polylactide for packaging applications</b> Dipl.-Ing. Sebastian Schippers</p> <p><b>New materials and processes to increase the performance of fibre-reinforced plastics based on renewable resources</b> Dipl.-Ing. Jan Wessels</p> <p><b>Use of cellulose fibres in the reactive extrusion of polyamide 6</b> Dipl.-Ing. Eike Klünker</p>	<p><b>Material- and load-oriented structural analysis</b> Dr.-Ing. Stefan Glaser, BASF SE</p> <p><b>Simulation of the influence of weld lines on the component strength</b> Dipl.-Ing. Jens van Haag</p> <p><b>Time- and cost-optimised determination of material data for crash simulation</b> Dipl.-Ing. Barbara Heesel</p> <p><b>Multiaxial load conditions in the structural simulation of elastomer parts</b> Dipl.-Ing. Philipp Bruns</p>	<p><b>Workshop Location and portfolio strategies</b> Prof. Dr. Jürgen Weigand, WHU – Otto Beisheim School of Management</p> <p><b>Location and portfolio strategy in the conflict between raw material availability and customer demand</b> Dr. Willy Bert Hoven-Nivelstein, BASF SE</p> <p><b>Producing locally in Germany, selling globally</b> Dipl.-Volkswirt Bernd Reifenhäuser, Reifenhäuser GmbH &amp; Co. KG Maschinenfabrik</p> <p><b>Production that follows the customer</b> Dipl.-Wirt.-Ing. Roland Roth / Dipl.-Wirt.-Ing. Matthias Kaufmann, RKW SE</p>
6:00 PM	Visit of the exhibition and technical discussions		
8:00 PM	<b>Evening event/"Beer colloquium"</b>		

Europasaal

Brüsselsaal

K1 Aachen

9:00 AM	<b>Plenary lecture: The economic environment – challenges for the rubber and plastics industries</b> Dr. Carolin Vogt, IKB Deutsche Industriebank AG		
9:30 AM	Coffee break and visit of the exhibition		
9:45 AM	<b>Nano-composites as matrix materials – processing, properties and analysis</b> Dr.-Ing. Thomas Winkelmann, KraussMaffei Berstorff GmbH	<b>Added value through integrative simulation</b> Dr.-Ing. Ulrich Mohr-Matuschek, Ticona GmbH	<b>Workshop High performance and precise moulds – a success factor not only in medical technologies</b> Dr.-Ing. Oliver Pfannschmidt, Balda Medical GmbH & Co. KG
	<b>Properties of short glass fibre-reinforced polypropylene nano-composites</b> Dipl.-Ing. Dipl.-Wirt.-Ing. Florian Puch	<b>Predicting surface properties of SMC parts</b> Dipl.-Wirt.-Ing. Arne Böttcher	<b>Mould technology for clean-room applications</b> Bernd Schrenk, Otto Männer GmbH
	<b>Challenges in the analysis of nano-composites</b> Dipl.-Ing. Edge Kaya	<b>Optimised simulation of the mechanical properties of PET bottles</b> Dipl.-Ing. Sebastian Rasche	<b>Realising process reliability through highly dynamic in-mould cooling</b> Dipl.-Ing. Helmut Gries, gwK Gesellschaft Wärme Kältetechnik mbH
	<b>Changing the properties of glass fibre-reinforced phenolic resin laminates through nano-scale silicon dioxide particles</b> Dipl.-Ing. Marc Linus Fecher	<b>Integrated multi-scale simulation for semi-crystalline thermoplastics</b> Marcel Spekowiak, M.Sc.	<b>Compulsory validation in medical technology – an obstacle to innovation or the key to zero-defect production?</b> Dipl.-Ing. Oliver Grönlund, B. Braun Melsungen AG
11:00 AM	Coffee break and visit of the exhibition		
11:30 AM	<b>Precision optics – new process techniques for clearer vision</b> Dr.-Ing. Matthias Kalwa, Hella KGaA Hueck & Co.	<b>Quality assurance – new measuring processes for a reliable production</b> Dr.-Ing. Oliver Schnerr, Kistler Instrumente AG	<b>Damage behaviour of plastics in long-term use</b> Dr.-Ing. Marcel Brandt, LANXESS Deutschland GmbH
	<b>Optimised process control for injection-compression moulded optical components</b> Dipl.-Ing. Axel Reißmann	<b>Methods for inline quality control in foam production</b> Dipl.-Ing. Christoph Mülder	<b>Production-related improvement of the resistance to environmental stress cracking of polycarbonate parts</b> Dipl.-Ing. Nikolai Borchmann
	<b>Scratchproof optics – integrated coating in the injection moulding process</b> Julian Schild, M.Eng.	<b>Analysis of the part-forming process in the water injection technique using ultrasound</b> Dipl.-Ing. Sebastian Becker	<b>Fatigue life concept for short fibre-reinforced plastics parts</b> Dipl.-Ing. Hendrik Kremer
	<b>Adjustable mould inserts to minimise centring errors</b> Dipl.-Ing. Paul Walach	<b>Use of micro colour capsules to identify damage in fibre-reinforced plastics</b> Dipl.-Ing. Martin Kerschbaum	<b>Unlimited lifetime for FRP? – micro-damage and its effects</b> Dipl.-Ing. Johannes Marder
12:45 PM	Lunch break and visit of the exhibition		
2:15 PM	<b>Visit to the Institute</b>		
5:45 PM	End of the 26 <sup>th</sup> International Plastics Technology Colloquium 2012		

Moderators

We are pleased to announce the following moderators for the sessions and workshops in Aachen.

	Dr. rer. nat. Rainer Dahlmann Head of Centre for Analysis and Testing of Plastics Institute of Plastics Processing (IKV)		Dr.-Ing. Matthias Kalwa Head of Development Coating Technologies Hella KGaA Hueck & Co.		Ing. Dietmar L. Morwitzer CEO Managing Director MAPLAN Maschinen und technische Anlagen Planungs- und Fertigungs-Ges. m.b.H		Dr.-Ing. Jürgen van Marwick Head of Business Unit Wasserburg RKW SE		
	Dr.-Ing. Matthias Franke-Maintz Director Machine Building & Finishing Line Building Dept. (M+V) Kautex Textron GmbH & Co. KG		Dr.-Ing. Ingo Kleba Managing Director RÜHL PUROMER GmbH		Dr.-Ing. Oliver Pfannschmidt Chief Technical Officer (CTO) Balda Medical GmbH & Co. KG		Dr.-Ing. Marco Wacker Chief Technology Officer (CTO) Oechsler AG		
	Dr.-Ing. Karlheinz Bourdon Member of the board of management of KraussMaffei Technologies GmbH Member of the company's Executive Committee of KraussMaffei Group		Dr.-Ing. Stefan Glaser Vice President Simulation Engineering BASF SE		Dr. Werner Klusmeier Manager AME Natural Fibers Johnson Controls GmbH & Co. KG		Dr.-Ing. Oliver Schnerr Head of Business Unit Plastics Kistler Instrumente AG		Prof. Dr. Jürgen Weigand, Co-Director Center for European Studies, Chairholder for Microeconomics and Industrial Organization at the WHU – Otto Beisheim School of Management, Vallendar
	Dr.-Ing. Marcel Brandt Customer Engineering Service Semi-Crystalline Products, CAE Development/Part Testing LANXESS Deutschland GmbH		Dipl.-Ing. Günter Hofmann Managing Director Hofmann Innovation Group GmbH		Dr.-Ing. Ulrich Mohr-Matuschek Global Leader Design/CAE Ticona GmbH		Dr.-Ing. Jochen Töpker Project Management Joint Venture SGL ACF BMW Group		Dr.-Ing. Thomas Winkelmann Manager Process Technology Twin Screw Extruders KraussMaffei Berstorff GmbH