



10 - 11 April 2019 | Aachen | Germany

International Injection Moulding Conference



Welcome



Ladies and Gentlemen,

on behalf of the IKV – the Institute of Plastics Processing in Industry and the Skilled Crafts at RWTH Aachen University, I cordially invite you to the "4th International Injection Moulding Conference – IIMC 2019" which is being held in Aachen on 10 - 11 April 2019.

IIMC 2019 will focus on the main challenges facing the injection moulding industry: Digitalisation of production, additive manufacturing and 3D printing, modelling and simulation as well as resource efficient production. Since its initiation in 2014, the IIMC has proved a great success both as an inspiring forum for cutting-edge technological innovations in injection moulding as well as a meeting point for leading experts and scientists from all over the world.

Networking and professional exchange are fundamental for your business success. The IIMC offers an ideal platform to meet and talk on many levels: in networking breaks, in the accompanying exhibition and - as a special highlight - in our speed-talk-session on the first conference day. The first ten interested participants will have the unique opportunity to introduce their company in a short presentation to create the basis for exchange with other attendees. Therefore, it is recommended to register soon.

We look forward to welcome you in Aachen.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Ch. Hopmann'.

Prof. Dr.-Ing. Ch. Hopmann

■ The organiser IKV

IKV, the Institute of Plastics Processing in Industry and the Skilled Crafts at RWTH Aachen University, with over 300 staff, is the leading research and training institute in the field of plastics technology in Europe. IKV's close cooperation with industry and science, together with its outstanding facilities, enable cutting-edge research in plastics technology and ensure that students benefit from a comprehensive, practically-oriented course of study. Plastics engineering graduates from IKV are thus sought-after experts in industry.

Head of the Institute is Univ.-Prof. Dr.-Ing. Christian Hopmann, who also holds the Chair of Plastics Processing at RWTH Aachen University.

More information: www.ikv-aachen.com

About the IIMC



■ Main topics

- Innovative processing solutions for efficient manufacturing in a circular economy
- Shorter time to market and higher customer satisfaction by additive manufacturing of moulds and parts
- Impact of digitisation on tomorrow's production
- Technological success stories from development to production in automotive, electrical and medical applications

The conference language is English.

■ Target audience

The conference addresses international executives and senior experts in design, development, part and mould construction, application engineering, production and quality assurance.

■ Social programme

The social programme of the International Injection Moulding Conference is the ideal opportunity for you to network with experts from the entire industry, renew professional relationships and make new business contacts.

On **Tuesday, 9 April 2019**, we cordially invite you to attend our get-together in the exhibition area of the conference venue. During the get-together you will have the opportunity to make the acquaintance of the speakers, exhibitors and other participants (dress code: business casual).

On **Wednesday, 10 April 2019** the conference-dinner provides the ideal setting for networking in a relaxed atmosphere.

On **Thursday, 11 April 2019** we offer you the opportunity to visit IKV's technical centres and laboratories on the "Research live"-tour. There you will learn more about the current state of research and development in plastics processing. You will get a deep insight in IKV's newest technologies.

Looking forward to seeing you all there!

Conference venue



Hotel Pullman Aachen - Quellenhof
Monheimsallee 52, 52062 Aachen (Germany)

Programme

▪ Tuesday, 9 April 2019

19.00 **Get-together in the exhibition area**

▪ Wednesday, 10 April 2019

9.00 **Welcome**

Prof. Dr.-Ing. Christian Hopmann
Institute of Plastics Processing (IKV) at RWTH Aachen (Germany)

**Technological success stories from development to production
in automotive applications**

9.10 **New horizons for plastics in automotive applications**

Dr.-Ing. Karlheinz Bourdon, Chairman of the IIMC 2019
KraussMaffei Technologies GmbH, München (Germany)

9.30 **Simulation Methodology for Calculating the Fatigue Strength of
Injection-Molded Parts**

Dipl.-Ing. (TU) Jens Friedrich
Hirschmann Automotive GmbH, Rankweil (Austria)

10.00 Coffee break

Foam Injection Moulding for automotive applications

10.45 **Maximizing the benefits of foaming technology**

Michael Prince
PRINCE-WEISS, Eupen (Belgium)

11.15 **Analysis of the influence of processing parameters on foam
structure and mechanical properties of foamed
thermoplastic elastomers**

Yuxiao Zhang, M.Sc. RWTH
Institute of Plastics Processing (IKV) at RWTH Aachen (Germany)

11.45 **Injection moulding of ultrahigh molecular weight
polyethylene (UHMWPE)**

Lih-Sheng (Tom) Turng, Ph.D.
University of Wisconsin-Madison, Madison (USA)

12.15 Lunch break

Impact of digitisation on tomorrow's production

13.30 **Advantage and challenges of industry 4.0 evolution for
plastic machines and their control architecture**

Dipl.-Ing. (TH) Thomas Kosthorst
BECKHOFF Automation GmbH & Co. KG, Verl (Germany)

14.00 **Process and measurement data processing as enabler for
plastics industry 4.0 (working tilte)**

Dr.-Ing. Robert Vaculik
Kistler Instrumente AG, Winterthur (Switzerland)

14.30 **From data acquisition to machine learning
New chances for injection moulding**

Malte Röbig, M.Sc. RWTH
Institute of Plastics Processing (IKV) at RWTH Aachen (Germany)

15.00 Coffee break

15.30 **Speed talk presentations**

- Participants present their company and current projects
- Subsequent opportunity for discussion

19.00 **Conference dinner**

Restaurant „Ratskeller“, Markt 40, 52062 Aachen

Programme

▪ Thursday, 11 April 2019

- 9.00 **Welcome**
Dr.-Ing. Karlheinz Bourdon, Chairman of the IIMC 2019
- 9.15 **Development of AI systems for smart injection molding based on digital twin**
Chihun Lee
Pohang University of Science and Technology, Pohang (Korea)
- 9.45 **The practical implementation of a simulation-driven development approach of high-end products designed from plastics**
Dipl.-Ing. Jens van Haag
Code Product Solutions B.V., Schinnen (The Netherlands)
- 10.15 Coffee break
- Shorter time to market and higher customer satisfaction by additive manufacturing of moulds and parts**
- 10.45 **Series production using additive manufacturing requires new materials – On the processing of polyamide 6 and polypropylene in selective laser sintering**
Johannes Lohn, M.Sc., PROTIQ GmbH, Blomberg (Germany)
- 11.15 **Additive manufacturing for agile product development in the automotive industry**
Dr. Wolfgang Meyer, Volkswagen AG, Wolfsburg (Germany)
- 11.45 **Industrial additive manufacturing – Line integration in mass production**
Nicolai Lammert, M.Sc. RWTH
YIZUMI Germany GmbH, Aachen (Germany)
- 12.15 Lunch break
- Innovative processing solutions for efficient manufacturing in a circular economy**
- 13.30 **Automated optimum design and control technology of injection mold and industry-academia cooperation in Korea**
Prof. Byung-Ohk Rhee, Ajou University, Suwon (Korea)
- 14.00 **Injection molding of continuous fiber reinforced thermoplastic single polymer composites**
Prof. Dr. Jian Wang
Beijing Institute of Technology, Beijing (China)
- 14.30 Coffee break
- 14.50 **Process chain from prototype to productive system intermediate cooling technology for multi-layer lenses**
Dipl.-Ing. Theresa Distlbacher
ENGEL AUSTRIA GmbH, Schwertberg (Austria)
- 15.20 **Concluding remarks**
Prof. Dr.-Ing. Christian Hopmann
Institute of Plastics Processing (IKV) at RWTH Aachen (Germany)
- 15.30 **Research live tour**
Visit to IKV's technical centres for injection moulding and fibre reinforced plastics
- 17.00 **End of conference**

Registration

International Injection Moulding Conference

10 - 11 April 2019, Aachen, Germany

Programme, information, registration:

Heinz Dersch, M.A., Telefax: +49 241 80-6-93811

E-mail: academy@ikv.rwth-aachen.de

Our company is member of the association of IKV sponsors

yes no unknown

Title

Surname/First name

Telephone

E-mail

Company/Organisation

Department

Job position

Address

Postal code/City/Country

Billing address

Department

Address

Postal code/City/Country

USt-IdNr./VAT-IdNo.

Business addresses are included in the list of participants which is distributed to all participants. For further participants use a copy of the registration card which is available to download on www.iimc-aachen.com.

Date

Signature

Registration • Exhibition • City of Aachen



■ Registration

Many thanks for your registration for the IIMC – International Injection Moulding Conference. Please use www.iimc-aachen.com for registration.

■ Exhibition

As participating exhibitor at the IIMC you will have a unique and direct access to experts and technical specialists in the field of injection moulding including machine manufacturers and mould makers, material suppliers and processors from different branches. Furthermore, the exhibition offers you extraordinary possibilities for a short company presentation and is an ideal venue to expand your contacts in this industry in a professional surrounding. Do not miss the unique opportunity and book your exhibition and presentation space at the IIMC immediately!

If you have any questions regarding your registration or the exhibition please contact

Heinz Dersch, M.A., Phone: +49 241 80-93811

E-Mail: academy@ikv.rwth-aachen.de



■ Conference city: Aachen

Besides being the favoured residence of Charlemagne (Karl der Große), Aachen became the place for coronations of German Kings. Around the year 800, Charlemagne built a monumental and complex palace in Aachen which, after his coronation in Rome, became the designated centre of imperial power. Today, the Town Hall is still the place where politics are made. Take the chance and visit the impressive Town Hall of Aachen with us.

Aachen has a long tradition of science and research. RWTH Aachen University and the Aachen University of Applied Sciences are responsible for the education of more than 57,000 students, thus the city is permeated with a young and exciting spirit. Today the Institute of Plastics Processing (IKV) is part of the RWTH Aachen Campus Melaten. The Campus Melaten significantly influences the research competences available at RWTH Aachen University. It creates a unique symbiosis of science and economics, where experts research specifically defined and multidisciplinary relevant topics.

Chairmen and speakers



Prof. Dr.-Ing. Christian Hopmann

Head of the Institute
Institute of Plastics Processing (IKV) at RWTH Aachen (Germany)



Dr.-Ing. Karlheinz Bourdon

Chairman of IIMC
Senior Vice President Integration
KraussMaffei Technologies GmbH, München (Germany)



Dipl.-Ing. Theresa Distlbacher

Technology Specialist Optics / Optical Components
ENGEL AUSTRIA GmbH, Schwertberg (Austria)



Dipl.-Ing. (TU) Jens Friedrich

Simulation Specialist
Hirschmann Automotive GmbH, Rankweil (Austria)



Dipl.-Ing. (TH) Thomas Kosthorst

Head of Business Management, Plastic Processing Machines
Beckhoff Automation GmbH & Co. KG, Verl (Germany)



Nicolai Lammert, M.Sc. RWTH

Head of Additive Manufacturing
YIZUMI Germany GmbH, Aachen (Germany)



Chihun Lee

Department of Mechanical Engineering
Pohang University of Science and Technology,
Pohang (Korea)



Johannes Lohn

Head of Development and Engineering
PROTIQ GmbH, Blomberg (Germany)



Dr. Wolfgang Meyer

Head of Technical Development
Volkswagen AG, Wolfsburg (Germany)

Chairmen and speakers



Michael Prince

Chief Executive Officer (CEO)
PRINCE-WEISS, Eupen (Belgium)



Prof. Byung-Ohk Rhee

Department of Mechanical Engineering
Ajou University, Suwon (Korea)



Malte Röbig, M.Sc. RWTH

Head of Department Injection Moulding
Institute of Plastics Processing (IKV)
at RWTH Aachen (Germany)



Lih-Sheng (Tom) Turng, Ph.D.

Co-Director, Polymer Engineering Center
University of Wisconsin-Madison, Madison (USA)



Dr.-Ing. Robert Vaculik

Head of Plastics Strategic Business Unit
Kistler Instrumente AG, Winterthur (Switzerland)



Dipl.-Ing. Jens van Haag

Business Development Manager Germany
Code Product Solutions B.V., Schinnen (The Netherlands)



A. Prof. Dr. Jian Wang

Department of Chemical Engineering
Beijing Institute of Technology, Beijing (China)



Yuxiao Zhang, M.Sc. RWTH

Foam Injection Moulding
Institute of Plastics Processing (IKV) at RWTH Aachen (Germany)

Event notes

Programme, registration and further information: www.iimc-aachen.com

■ **Organiser/Host**

Institute of Plastics Processing (IKV) in Industry and the Skilled Crafts
at RWTH Aachen University

Prof. Dr.-Ing. Christian Hopmann

Postal address: Seffenter Weg 201, 52074 Aachen, Germany

■ **Contact**

Heinz Dersch, M.A., Phone: +49 241 80-93811

E-Mail: academy@ikv.rwth-aachen.de

■ **Event venue**

Hotel Pullman Aachen Quellenhof

Monheimsallee 52, 52062 Aachen, Germany

Telephone: +49 241 9132-0

Parking: There are several parking places in and around the conference venue

■ **Attendance fee**

The attendance fee is EUR 1,235 for non-members of the IKV Sponsors' Association, and EUR 1,035 for members. The ticket entitles the holder to attend the conference programme, the get-together, the conference dinner and the technical centre tour. The attendance fee includes the conference documents, drinks, lunch and dinner (catering is subject to VAT).

■ **Registration**

Please use the registration form, which you can detach from the last page and send it back via fax or e-mail. A separate application form should be used for each applicant. IKV sends additional conference programmes on request.

The easiest way to register is online at www.iimc-aachen.com

■ **Room reservation**

IKV recommends the conference hotel Pullman Aachen Quellenhof for accommodation. IKV placed a hold on a limited contingent of rooms in this hotel (key word: IIMC). This contingent is available until 28 February 2019.

For any other hotel, please contact the Aachen Tourist Service e.V.

www.aachen-tourist.de, Telephone: +49 241 18029-50,

E-Mail: info@aachen-tourismus.de

■ **Conference proceedings**

The conference proceedings will be distributed at the beginning of the conference.

■ **Data protection**

In accordance with the German Data Protection Act, we would like to point out that we will keep your address in a database and process it with the help of automatic processes.

■ **Cancellations**

Please send any cancellations in a written form to IKV. If the cancellation is made by 27 March 2019, we will refund the full paid-up sum reduced by a processing charge of EUR 70. In the event of a cancellation after this date, the full attendance fee must be paid, and we will send you the conference proceedings. IKV reserves the right to cancel the event. If this happens, the whole attendance fee will be refunded. The Institute will not be responsible for other obligations over and beyond this.