



Polyurethanes

Trends in PU-Processing

International Symposium

19 March 2019

Aachen
SuperC, RWTH Aachen University

■ Research and practice in dialogue

About this symposium

■ Chairman

Dr. Ulrich Liman
Covestro Deutschland AG, Leverkusen



Ladies and Gentlemen,

continuous efforts in Research and Development are the necessary foundation for long-term and sustainable business in the PU industry. Moreover, Research and Development are essential to address global challenges, such as the growing world population, urbanization, increasing mobility, climate change and the conservation of fossil resources.

Therefore, it is important to observe the latest progress in industry and from university research. Following the motto "Polyurethanes – Trends in PU-Processing", this conference will address the latest developments and will highlight some of the major challenges being discussed in the Polyurethane market.

Aspects of digitalization and Industry 4.0 will be discussed. This covers key areas of the entire manufacturing process: from design to the optimization of the manufacturing processes. The conference will also highlight some new developments within processing technology. Currently sustainability, Recycling and technologies with improved eco-efficiency occupy a large space in various media. Presentations around these topics complete the event. All sessions are filled with practical content by experienced experts from industry and research.

Speakers and conference participants from the entire value chain will participate, from raw material manufacturers, to machine suppliers, to PU processors and users. This symposium is an ideal platform for knowledge transfer and exchange across all areas. The conference is divided into four topics in which the speakers present their views on current trends and issues in the field of Polyurethane processing.

The IKV offers participants access to up-to-date know-how and an open exchange of views. Take the opportunity to experience current and future-oriented topics from the most significant areas of PU processing. I am delighted to welcome you to the conference in Aachen and look forward to a productive event.

■ Main topics

- Industry 4.0 in PU-processing
- Sustainable PU applications and technological enablers
- Eco-Friendly materials, additives and recycling of PU
- Institutional and fundamental research

■ Target audience

This symposium is ideal for researchers, engineers and technical managers in the areas of development, production and sales of polyurethane processing, materials, additives and equipment as well as in production planning for series production of PU-applications and the associated quality assurance.

Programme

▪ Monday, 18 March 2019

- 18.00 **Get-together in the IKV technical centre for fibre-reinforced plastics**
Seffenter Weg 201, 52074 Aachen

▪ Tuesday, 19 March 2019

9.00 **Welcome**

Management of the IKV - Institute for Plastics Processing, Aachen
Dr. Ulrich Liman, Covestro Deutschland AG, Leverkusen

9.20 **Trends and research activities in the field of PU at Institute of plastics processing**

Daniel Schneider, M.Sc.

IKV - Institute for Plastics Processing, Aachen

Industry 4.0

9.40 **Polyurethane 4.0 – Digital trends for improved PU products**

Dr. Ulrich Liman, Covestro Deutschland AG, Leverkusen

10.10 **Innovative metering and mixing technology:**

On the way to smart process control for Industry 4.0

tbd, Hennecke GmbH, St. Augustin

10.40 Coffee break

Sustainable PU applications and technological enablers

11.00 **Thermal insulation and non-flammability PU foam for construction applications**

tbd, INOAC Technical Center, Hadano (Japan)

11.30 **Potential of CO₂-based polyols**

Dr. Jochen Norwig, Covestro Deutschland AG, Leverkusen

12.00 Lunch

Eco-friendly materials, additives and recycling of PU

13.00 **Fire Safety and the Future Role of Flame Retardants in Polyurethanes**

Dr. Jürgen Troitzsch

Fire and Environment Protection Service FEPS, Ascona (Suisse)

13.30 **Recycling of end-of-life mattresses into polyol for different PU foam applications**

Mila Skokova, H & S Anlagentechnik GmbH, Sulingen

14.00 Coffee break

Institutional and fundamental research

14.30 **Dry Demoulding – Compatibility of permanent release coating and PU-formulation**

Dr. Peter Bitomsky, Fraunhofer Institut für Fertigungstechnik und Angewandte Materialforschung (IFAM), Bremen

15.00 **Additive Tooling for prototyping – Efficient mould design for vacuum casting of high reactive PU**

Benjamin Rubin, M. Sc., Chair of Production Engineering of E-Mobility Components, Aachen

15.30 **Physical foaming of PU using CO₂ in the Gas-Counter-Pressure Technology**

Matthias Heck, M. Sc., IKV - Institute for Plastics Processing, Aachen

16.00 Concluding remarks and farewell

Registration

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Programme, information, registration:

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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

US-IdNr./VAT-IdNo.

Date

Signature

Event notes

■ **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.
Telephone: +49 241 80-93811, E-mail: academy@ikv.rwth-aachen.de

■ **Event venue**

SuperC, RWTH Aachen University
Templergraben 57, 52062 Aachen

■ **Attendance fee**

The attendance fee is EUR 825 for non-members of the IKV Sponsors' Association, and EUR 675 for members. The participation fee includes the conference documents, participation in the get-together, drinks and lunch (catering is subject to VAT). Bank and transfer charges are to be paid by the participants.

■ **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.ikv-aachen.de

■ **Room reservation**

The aachen tourist service e.V. will be happy to assist you with your room reservation. (www.aachen-tourist.de/hotels).
P.O. Box 102251, 52022 Aachen, Germany,
Phone: +49 241 18029-50 or -51, fax: +49 241 18029-30,
e-mail: incoming@aachen-tourist.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 5 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.

Save the date

International Injection Moulding Conference (IIMC)

10 to 11 April 2019, Aachen



- **Cutting-edge developments in injection moulding engineering and process technology**
- **Innovative approaches for the enhancement of production efficiency**
- **Impact of digitisation on tomorrow's production**
- **Technological success stories from development to production in automotive, electrical and medical applications**

The highlights of our service

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Do you have any questions?

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