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Festive colloquium: 50 years of Polymer Engineering & Science

Due to the COVID-19-Pandemic the organizing committee of the 29th Leoben Conference on Polymer Engineering and Science had to postpone the event from April 2020 to September 2021. But now, we are confident that due to the progressing COVID-19 vaccination in Austria and Europe, the strict hygiene guidelines of the Montanuniversität Leoben and the time of year, a hybrid realization of the conference on 15th and 16th September 2021 will be possible.

The Department of Polymer Engineering and Science and the Polymer Competence Center Leoben would like to invite you to the 29th Leoben-Conference on Polymer Engineering and Science Leoben „50 Years of Polymer Engineering Leoben“. Look forward to an exciting, international specialist program online and on site, with contributions from industry and science on the following topics: SMART PRODUCTION – SUSTAINABILITY AND POLYMERS – ADDITIVE MANUFACTURING

In addition, the POLYMER SCIENCE SCHOOL AWARD will be awarded for the second time to students with innovative ideas.

Circle of participants

The conference addresses not only leading employees as well as technical-scientific personnel related to plastics technology issues, e.g. in the fields of Smart Production, Sustainability and Polymers and as well as Additive Manufacturing, but also research and industry partners, graduates and sponsors of Kunststofftechnik Leoben.

The event is also aimed at interested pupils and students from the lower level to the master's degree.

Supporting program

The program is rounded off by a poster session in which scientists present their research projects and work. Visitors can also look forward to an exhibition: Well-known companies along the entire value chain will present their products and services.

Organizer:



Further information:

Polymer Competence Center Leoben GmbH
Roseggerstraße 12, A-8700 Leoben
Tel.: +43 3842 42962-0
www.polymer.events

50 years
Polymer Engineering
& Science Leoben

Further information on the conference and the award as well as registration at

WWW.POLYMER.EVENTS

Event Ticket: € 570,- | reduced: € 490,-

Gala dinner: € 80,-

Online Ticket: € 190,- | reduced: € 160,-

Early-Bird-Special
for registration until 31.07.2021

Early bird on site: € 510,-
Early bird online: € 170,-

What the participation fee includes:

Event Ticket: Participation in the on-site conference, the Conference Proceeding on USB stick, all coffee and lunch breaks, use of all content and presentations on demand until 90 days after the event

Online Ticket: Participation in the conference online, the Conference Proceedings on USB stick by mail or digitally by e-mail. Use of all content and presentations on demand until 90 days after the event

Gala dinner: 3-course menu incl. drinks at the Falkensteiner Hotel Et Asia Spa Leoben on 15th September 2021

All prices include 20% VAT.

29th Leoben-Conference on Polymer Engineering and Science
50 Years Polymer Engineering and Science at Montanuniversität Leoben

15th and 16th September 2021

Erzherzog-Johann-Auditorium, Montanuniversität Leoben
Franz Josef-Straße 18, First Floor, 8700 Leoben



Opening

Moderation: Petra Rudolf

9:30
Prelude & Welcome
Orchestra of Montanuniversität Leoben

9:45
Montanuniversität Leoben –
history, mission & vision
Wilfried Eichlseder
Rector Montanuniversität

10:00
Polymer Engineering and Science at
Montanuniversitaet – historical
development
Walter Friesenbichler
Head of Department

10:20
Polymer Competence Center Leoben
GmbH – historical development
Elisabeth Ladstätter
(CEO PCCL)

10:35
Orchestra and Soloist
Orchestra of Montanuniversität Leoben

Program changes and errors reserved.

10:45
Commemorative speeches

Clemens Holzer
President of Verband Leobener
Kunststofftechniker VLK

Michael Poecksteiner
Board of Trustees „Polymer Engineering
and Science Leoben“

Karin Katzer
DOW Chemical

Kurt Wallner
Mayor of the City of Leoben

Barbara Eibinger-Miedl
Province Styria

Elmar Pichl
Austrian Federal Ministry of Education,
Science and Research

11:25
Orchestra and soloist
Orchestra of Montanuniversität Leoben

11:35
Conference Opening
Waltraud Klasnic
Chairman Council Montanuniversität

11:45 – 13:00 Lunch break

1 Session 1: Smart Production

Session Chair: Dieter Gruber,
Polymer Competence Center Leoben, Austria

13:00
Injection molding control paradigms:
the past & next 50 years

David Kazmer
University of Massachusetts Lowell, USA

13:35
Wittmann 4.0 – IIoT realized for the
injection molding industry
Michael Wittmann
Wittmann Kunststoffgeräte, Austria

14:10 – 14:40 Coffee break

14:40
How plastics processing benefits from
digital shadows and machine learning
Christian Hopmann
Institute for Plastics Processing, Germany

15:15
Injection moulding process window
@ industry 4.0
Johannes Kilian
ENGEL AUSTRIA, Austria

15:40 – 16:10 Coffee break

Session Chair: Ralf Schledjewski,
Montanuniversität Leoben, Austria

16:10
The injection mold as a cyber physical
system

Gerald Berger-Weber
Montanuniversität Leoben, Austria

16:35
High-speed robot vision and surface
defect classification of 3D-shaped
products and components
Dieter Gruber
Polymer Competence Center Leoben, Austria

17:00
Active RTM process management
based on phenomenological models
Ewald Fauster
Montanuniversität Leoben, Austria

17:25 – 18:30 LABTOUR

19:30
Conference Dinner &
Welcome by the City of Leoben
(Hotel Falkensteiner)

2 Session 2: Sustainability and Polymers

Session Chair: Andreas Frank,
Polymer Competence Center Leoben, Austria

8:30
Circular Plastics – from wishful thin-
king to reality

Kim Ragaert
Ghent University, Belgium

9:05
Dow's commitment and response to
the plastic waste challenge
Karin Katzer
Dow Europe, Switzerland

09:35 – 10:10
POLYMER SCIENCE
SCHOOL AWARD

10:10 – 10:40 Coffee break

Session Chair: Gerald Pinter,
Montanuniversität Leoben, Austria

10:40
Plastics and the environment
Christian Bonten
Institut für Kunststofftechnik (IKT)
Stuttgart, Germany

11:15
Fundamental understanding of bio-
degradability
Andreas Künkel
BASF SE, Germany

11:45
Polymeric materials for increasing
resource efficiency
Katharina Resch-Fauster
Montanuniversität Leoben, Austria

12:10
The effect of cross-contamination
on the long-term crack resistance of
polyethylene and polypropylene
Andreas Frank
Polymer Competence Center Leoben, Austria

12:35 – 13:30 Lunch Break

3 Session 3: Additive Manufacturing

Session Chair: Sandra Schlägl,
Polymer Competence Center Leoben, Austria

13:30
3D-printable Photopolymers with
improved thermomechanics pro-
poerties: Design principles and
digital materials

Jürgen Stampfl
TU Wien, Austria

14:05
ARBURG Plastic Freeforming –
The Power of Real Materials
Frank Kynast
ARBURG, Germany

14:30
Exploring tough and biocompatible
photopolymers for the 3d printing
of medical devices
Thomas Griesser
Montanuniversität Leoben, Austria

15:00 – 15:30 Coffee break

Session Chair: Thomas Lucyshyn,
Polymer Competence Center Leoben, Austria

15:30
Hybrid products and moulds: the use
of alternative materials and tech-
niques for the rapid manufacturing
of products and moulds.

Antonio Pontes
Universidade do Minho, Portugal

16:05
Requirements on Feedstocks for
Metal and Ceramic Parts
Christian Kukla
Montanuniversität Leoben, Austria

16:30
Powder bed fusion based additive
manufacturing of polymers- poten-
tials and limits
Michael Berer
Polymer Competence Center Leoben, Austria

Closing Remarks

17:00 – 18:00
LABTOUR