

ZELLCHEMING-Conference Cellulose-Based Materials – From Science to Technology

2022
conference

June 26-29, 2022
RheinMain CongressCenter (RMCC)
Wiesbaden, Germany

ZELL  CHEMING
CONFERENCE

On behalf of the organizing committee



Markus Biesalski
TU Darmstadt



Thomas Heinze
Friedrich-Schiller-
University Jena



Samuel Schabel
TU Darmstadt



Petra Hanke
ZELLCHEMING

ZELLCHEMING
CONFERENCE



TECHNISCHE
UNIVERSITÄT
DARMSTADT

2022
conference

We cordially invite you to the

First International ZELLCHEMING-Conference – Cellulose-Based Materials – From Science to Technology,

which will take place from Sunday June 26th until Wednesday
June 29th 2022, in Wiesbaden, Germany.

This conference is a joint initiative of the association ZELLCHEMING
e.V. with its technical committees and the Technical University of
Darmstadt.

The aim of this international conference is to bring together
researchers from science and industry who are interested in R&D
topics related to polysaccharides, paper-based materials and
bioeconomy. Essentially it is our intention that chemical, physical, and
engineering experts disseminate and discuss their findings, while also
creating a completely new platform for close interaction of academia
and industry.

We are pleased to be able to offer an excellent scientific program
structured in thematic sessions which progress from polysaccharide
chemistry, to paper chemistry, and paper physics & engineering. In
addition to invited lectures, we offer the opportunity to submit poster
presentations.

Confirmed speakers



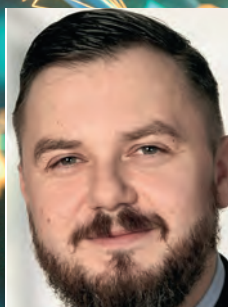
Thomas Rosenau
BOKU Vienna
Austria



**Karin Stana
Kleinschek**
TU Graz
Austria



Eugenio Ciucani
Holmen Iggesund
UK



André Lehmann
Fraunhofer
Applied Polymer
German



Andreas Sauer
SE Tylose
GmbH & Co. KG
Germany



Stefan Spirk
TU Graz
Austria



Axel Rußler
Lenzing AG
Austria



Catharina Fechter
Södra Skogsägarna
Sweden



Martin Gericke
Universität Jena
Germany



Tobias Meckel
TU Darmstadt
Germany



Orlando Rojas
The University of
British Columbia
Canada



Jaan Simon
RWTH Aachen
Germany

Confirmed speakers



Martin Thuo
Iowa State
University, USA



Gil Garnier
Monash University
Australia



Tom Lindström
KTH
Sweden



Martin Zahel
PTS
Germany



Michael Meier
Karlsruhe Institute
of Technology (KIT)
Germany



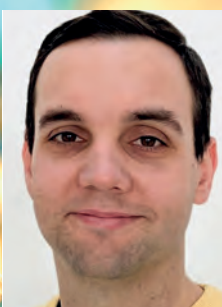
Jean-Francis Bloch
TU Grenoble
France



William Sampson
Manchester
University, UK



Frank P. Meltzer
Mercer Pulp
Products, Germany



Thomas Harter
TU Graz
Austria



Ulrich Hirn
TU Graz
Austria



Jürgen Rühle
IMTEK,
Universität Freiburg
Germany



Elisabeth Björk
RISE Research
Institutes
of Sweden

Sunday, June 26, 2022

18:00-20:00 Get together – Food & Drinks

Monday, June 27, 2022

09:00-09:10 Welcome Markus Biesalski, Thomas Heinze, Samuel Schabel

Cellulose Chemistry and Physics (Chair: Thomas Heinze, GER)

09:10-10:00 Keynote: Lignocellulosic supraparticles in bioproduct development Orlando Rojas (CAN)

10:00-10:30 Biopolymers and their potential application in biomedicine Karin Stana Kleinschek (AT)

10:30-11:00 Coffee break

11:00-11:30 Cellulosic chromophores – Minute concentrations and huge effects Thomas Rosenau (AT)

11:30-12:00 New cellulose chemistry from a sustainability perspective: renewability is not enough Michael Meier (GER)

12:00-12:30 Overview on pharmaceutical applications of cellulose ethers Andreas Sauer (GER)

12:30-13:30 Lunch break

13:30-14:00 Insights into properties of cationic starches prepared by jet cooking Stefan Spirk (AT)

14:00-14:30 Novel analytical NMR-techniques for the advanced characterization of commercial cellulose ethers Martin Gericke (GER)

14:30-15:00 Current and emerging cellulose regeneration technologies André Lehmann (GER)

15:00-15:30 Coffee break

15:30-16:00 New aspects about regenerated cellulose fibers – Versatile and sustainable tools for broad field of applications Axel Rußler (AT)

16:00-16:30 The variety of dissolving wood pulps and its influence on processing Catharina Fechter (SE)

16:30-17:00 Coffee break

17:00-18:00 Poster Short Presentations

18:00-20:00 Poster Show with pretzels & more

Tuesday, June 28, 2022

Paper Chemistry and Chemical Engineering of Lignocellulosics (Chair: Markus Biesalski, GER)

09:00-09:50	Keynote: The concept of agricultural residues for nitro-oxidized nanocellulose for water remediation	Tom Lindström (SE)
-------------	--	--------------------

09:50-10:20	Strategies for preparing strong and transparent films from cellulose-rich fibres using papermaking methods	Lars Wågberg (SE)
-------------	--	-------------------

10:20-10:50	Coffee break	
-------------	--------------	--

10:50-11:20	How to engineer paper bio-diagnostics?	Gil Garnier (AUS)
-------------	--	-------------------

11:20-11:50	Tailormade polymer networks for the generation of tailormade paper	Jürgen Rühle (GER)
-------------	--	--------------------

11:50-13:00	Lunch break	
-------------	-------------	--

13:00-13:30	Cellulose-derived functional materials: From lubricants and electronics	Martin Thuo (USA)
-------------	---	-------------------

13:30-14:00	How paper can change the world – Sustainable energy generation	Jean-Francis Bloch (F)
-------------	--	------------------------

14:00-14:30	Laser mediated fusing of paper materials	Martin Zahel (GER)
-------------	--	--------------------

14:30-15:00	Mechanisms controlling dispersibility in wetlaid hydroentangled nonwovens	Thomas Harter (AT)
-------------	---	--------------------

15:00-15:30	Coffee break	
-------------	--------------	--

Paper & Pulp Engineering (Chair: Samuel Schabel, GER)

15:30-16:00	No-load power – A critical parameter for laboratory refining	Frank P. Meltzer (GER)
-------------	--	------------------------

16:00-16:30	Analysis of process variations in the paperboard production based on thermography	Eugenio Cuicani (SE)
-------------	---	----------------------

16:30-17:00	Stock preparation knowledge and experiences for optimal quality in sustainable 3D wet forming	Elisabeth Björk
-------------	---	-----------------

19:00	Conference dinner	
-------	-------------------	--

Wednesday, June 29, 2022

Paper Engineering, Physics & Characterization (Chair: Samuel Schabel, GER)

09:00-09:50	Keynote: Theoretical insights into paper roughness: Dependence on sheet properties and fibre morphology	William Sampson (UK)
09:50-10:20	Multiscale modeling of paper – How to get from network to sheet level	Jaen Simon (GER)
10:20-10:40	Coffee break	
10:40-11:10	Lights, camera, action! – Imaging of dynamic processes in paper	Tobias Meckel (GER)
11:10-11:40	Evaluating nanoscale contact and adhesion using FRET microscopy	Ulrich Hirn (AT)
11:40-11:50	Closing remarks	
11:50-12:30	Good-bye Lunch	

ZELLCHEMING-Expo (optional)

13:00	ZELLCHEMING-Expo, Hall North, RMCC Wiesbaden
16:00-17:30	Science Flash – Young Talents' Competition, Foyer Hall North, RMCC Wiesbaden
19:30	ZELLCHEMING Summer Evening

Registration

Conference Fees	Early Bird	from May 15, 2022
Industry	EUR 660	EUR 715
Universities/Scientific Institutes	EUR 545	EUR 590
Students (enrollment certificate req.)	EUR 250	EUR 280

10% discount for ZELLCHEMING members on the above mentioned prices.

Optional:

Ticket ZELLCHEMING-Expo June 29, 2022	EUR 10
ZELLCHEMING Summer Evening	EUR 79

All prices incl. 19% VAT

Registration: <https://pretix.eu/zellcheming/conference/>

Accommodation

Don't forget to book a hotel room early. Wiesbaden Congress & Marketing GmbH offers a contingent of hotels within walking distance of the RMCC. Make your reservation here.

Contact

Cornelia Gembus
ZELLCHEMING Service GmbH
Neckarstraße 3
63322 Rödermark
Germany



Managing Director: Petra Hanke
Commercial register: Amtsgericht Darmstadt HRB 101092
Tax number: 007 249 51949
VAT-ID-No.: DE335906866

Phone +49 6074 72860-45
Fax +49 6074 72860-77

c.gembus@zellcheming.de
www.zellcheming.de

Twitter: @ZELLCHEMING
LinkedIn: Cellulose Based Materials Group

ZELL  **CHEMING**
GMBH