

# ZELLCHEMING-Expo

Exhibition and 113th Annual General Meeting  
Pulp, paper and supplier industry  
as well as fiber based materials



## Vortragsprogramm *lecture program*

Messeforum *exhibition forum*

Cellulose Symposium *cellulose symposium*

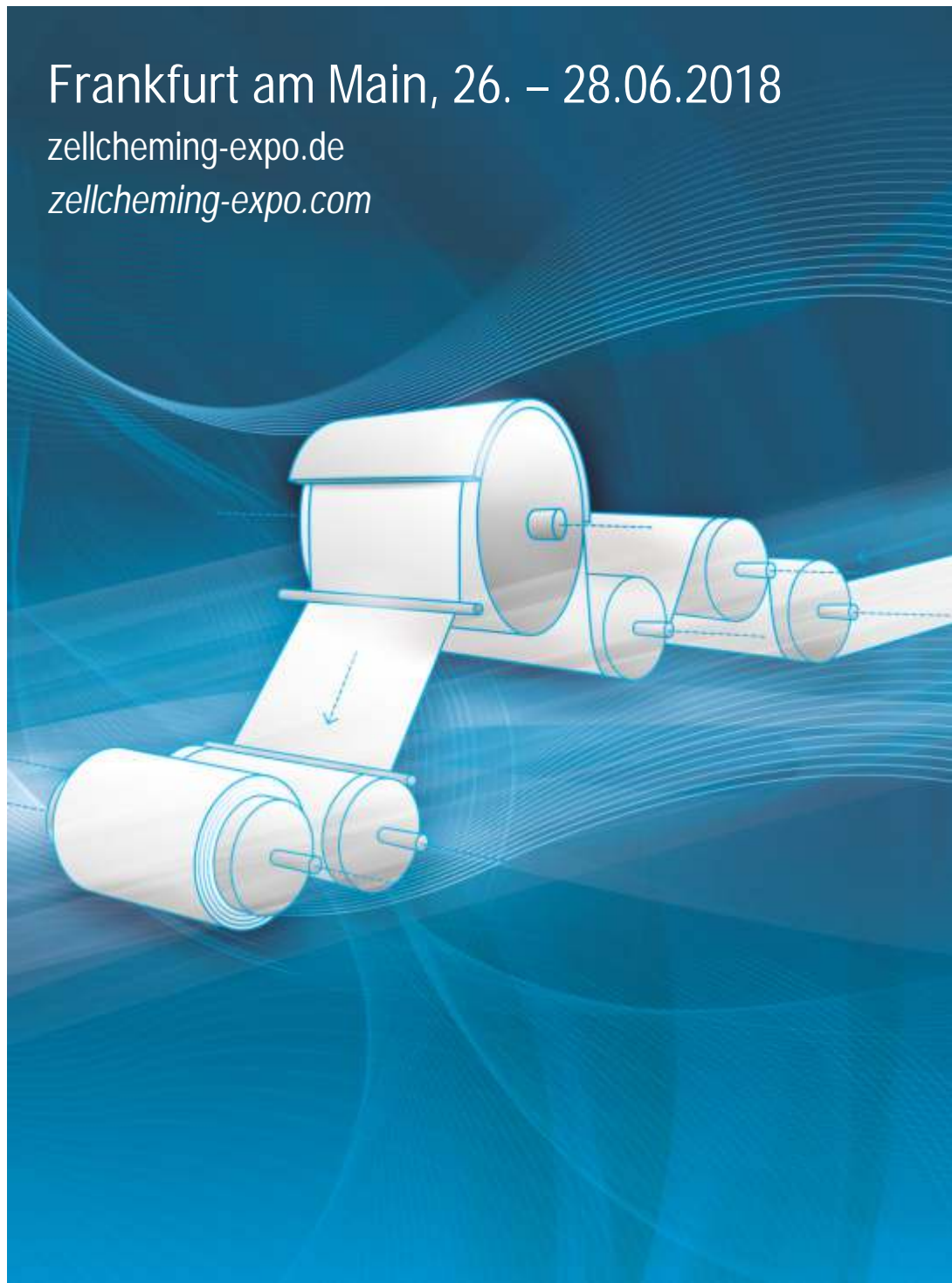
Workshops *workshops*

Stand 24.04.2018

Frankfurt am Main, 26. – 28.06.2018

[zellcheming-expo.de](http://zellcheming-expo.de)

[zellcheming-expo.com](http://zellcheming-expo.com)



Ideeller Träger / Patron  
ZELLCHEMING e.V.

# ZELLCHEMING-Expo



Dienstag, 26.06.2018 *Tuesday, 26 June 2018*

Messeforum *exhibition forum*

Halle 4.1, Stand G29 *hall 4.1, booth G29*

| Uhrzeit <i>time</i>                                                                                                               | Thema <i>topic</i>                                                                                                                                                                      | Referent <i>speaker</i> | Firma <i>company</i>          |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------|
| „Best Practice - Lerne von den Besten“                                                                                            |                                                                                                                                                                                         |                         |                               |
| 09:30 - 12:30                                                                                                                     | Ausstellerpräsentationen                                                                                                                                                                |                         |                               |
| 12:30 - 14:00                                                                                                                     | ZELLCHEMING-Fachausschuss CHAD<br>> Dosierstellen-Umfrage<br>> Dosierreihenfolge: Sequenz und Dosierorte<br>> Trouble Shooting: Erfahrungsbericht Glückstadt                            |                         |                               |
| Business-Forum „Papier, Endverbraucher & Konsum 4.0“ Moderation: Kristina zur Mühlen, <i>Dipl.-Physikerin und TV-Journalistin</i> |                                                                                                                                                                                         |                         |                               |
| 14:00 - 14:15                                                                                                                     | Eröffnung                                                                                                                                                                               | Erich Kollmar           | Vorsitzender ZELLCHEMING e.V. |
| 14:15 - 14:45                                                                                                                     | Keynote<br>Verpackung und Nachhaltigkeit im Spiegel der Verbraucher<br><br>> Zentrale Nachhaltigkeitsthemen<br>> Stimmung in der Gesellschaft<br>> Wo steht die Industrie<br>> Ausblick | Thomas Reiner           | Deutsches Verpackungsinstitut |
| 14:45 - 15:30                                                                                                                     | tba                                                                                                                                                                                     | tba                     | tba                           |
| 15:30 - 16:00                                                                                                                     | How to replace non-renewable packaging materials                                                                                                                                        | Elina Pääkkönen         | VTT                           |
| Science-Flash Moderation: Kristina zur Mühlen, <i>Dipl.-Physikerin und TV-Journalistin</i>                                        |                                                                                                                                                                                         |                         |                               |
| 16:00 - 16:10                                                                                                                     | Intelligent Paper Surfaces                                                                                                                                                              | M. Nau                  | TU Darmstadt                  |
| 16:10 - 16:20                                                                                                                     | Functional Biogenic Polymers                                                                                                                                                            | L. Gabriel              | Universität Jena              |
| 16:20 - 16:30                                                                                                                     | Light Weight Constructives                                                                                                                                                              | Kleinert                | TU Dresden                    |
| 16:30 - 16:40                                                                                                                     | Building with Paper                                                                                                                                                                     | Robert Götzinger        | TU Darmstadt                  |
| 16:40 - 16:50                                                                                                                     | Paper-Foams                                                                                                                                                                             | Julian Kautzky          | TU Darmstadt                  |
| 16:50 - 17:00                                                                                                                     | Flame retardants Go Bio                                                                                                                                                                 | Felix Schäfer           | TU Darmstadt                  |
| 17:00 - 17:10                                                                                                                     | In situ Raman for Fiber Bending Analysis                                                                                                                                                | Alena Bell              | TU Darmstadt                  |
| 17:10 - 17:20                                                                                                                     | Biogenic Hydrogels                                                                                                                                                                      | Juliane Strätz          | TU Dresden                    |
| 17:20 - 17:30                                                                                                                     | Biogenic materials for construction                                                                                                                                                     | Dr. Andreas Geißler     | TU Darmstadt                  |
| 18:00 - 21:00                                                                                                                     | After Fair, kostenfrei <i>free of charge</i> , Eingangsbereich Halle 4.1 <i>entry hall 4.1</i>                                                                                          |                         |                               |



Mittwoch, 27.06.2018 *Wednesday, 27 June 2018*

Messeforum *exhibition forum*

Halle 4.1, Stand G29 *hall 4.1, booth G29*

| Uhrzeit <i>time</i>                    | Thema <i>topic</i>                                                                                                                   | Referent <i>speaker</i> | Firma <i>company</i>                              |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------|
| „Best Practice - Lerne von den Besten“ |                                                                                                                                      |                         |                                                   |
| 09:30 - 11:00                          | Ausstellerpräsentationen                                                                                                             |                         |                                                   |
| Festvortrag                            |                                                                                                                                      |                         |                                                   |
| 11:00 - 11:30                          | tba                                                                                                                                  | Florian Kohler          | Büttenpapierfabrik Gmund                          |
| Vortragsreihe „Bioökonomie“            |                                                                                                                                      |                         |                                                   |
| 11:30 - 12:00                          | Keynote<br>Bioökonomie - Wie groß ist der Wirtschaftsfaktor                                                                          | Peter Berg              | McKinsey                                          |
| 12:00 - 12:30                          | Global outlook - A cellulose based society                                                                                           | Frederik B. Rosén       | RISE Research Institutes of Sweden                |
| 12:30 - 13:00                          | Novel polysaccharides for paper and packaging applications                                                                           | John Fisher             | DuPont Industrial Biosciences                     |
| 13:00 - 13:30                          | Kraftlignin - Eine stoffliche Plattform mit Potential aus integrierten Zellstoff-Bioraffinerien                                      | Detlef Schmiedl         | Fraunhofer Institut für Chemische Technologie ICT |
| 13:30 - 14:00                          | Energieverbrauch und CO2-Emissionen der Papierindustrie - Modellgestützte Analyse alternativer Herstellungsprozesse                  | N.N.                    | TU Darmstadt                                      |
| 16:00 - 17:45                          | WM Spiel Deutschland - Südkorea <i>world championship Germany - South Korea</i> , Messeforum exhibition forum                        |                         |                                                   |
| 19:30 Einlass<br>20:00 Beginn          | Sommerabend / WM Party <i>Summer Evening / world championship</i> , kostenpflichtig <i>fee-based</i> , Depot 1899, Frankfurt am Main |                         |                                                   |



## Messeforum *exhibition forum*

Halle 4.1, Stand G29 *hall 4.1, booth G29*

Donnerstag, 28.06.2018 *Thursday, 28 June 2018*

| Uhrzeit <i>time</i>                                                                        | Thema <i>topic</i>                                                                                           | Referent <i>speaker</i>              | Firma <i>company</i>                                          |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------|
| <b>„Best Practice - Lerne von den Besten“</b>                                              |                                                                                                              |                                      |                                                               |
| 09:00 - 10:00                                                                              | Ausstellerpräsentationen                                                                                     |                                      |                                                               |
| <b>Vortragsreihe „Papierindustrie 4.0 - Wirtschaftliche Erfolge durch Digitalisierung“</b> |                                                                                                              |                                      |                                                               |
| 09:15 - 09:30                                                                              | Begrüßung                                                                                                    | Erich Kollmar                        | ZELLCHEMING-Vorsitzender                                      |
| 09:30 - 10:00                                                                              | Keynote<br>Digitale Transformation in der Papier- und Verpackungsindustrie                                   | Alfred Becker                        | (Global Lead for Plastics, Paper, Packing Industry)<br>SAP SE |
| 10:00 - 10:30                                                                              | Transformation der Transportlogistik durch Digitalisierung                                                   | Raphael Triemer                      | Transporeon GmbH                                              |
| 10:30 - 11:00                                                                              | Studie Industrie 4.0                                                                                         | N.N.                                 | Stepchange Consulting                                         |
| <b>Vortragsblock „Plattformen“</b>                                                         |                                                                                                              |                                      |                                                               |
| 11:00 - 11:30                                                                              | Industry 4.0 applications in a liquid board packaging mill                                                   | Jürgen Mielke<br>Dr. Hermann Schwarz | Siemens AG                                                    |
| 11:30 - 12:00                                                                              | Collaborative operations for pulp mill performance improvement                                               | Harald Meitinger                     | ABB Automation GmbH                                           |
| 12:00 - 12:30                                                                              | IIoT supports "connected plant performance"                                                                  | Uwe Franke<br>Jens Hothmer           | Honeywell Process Solutions                                   |
| <b>Vortragsblock „Prozessnahe Datenanalyse“</b>                                            |                                                                                                              |                                      |                                                               |
| 12:30 - 13:00                                                                              | Papermaking 4.0 - Applied digitization connects paper making processes with big data analysis                | Dr. Matthias Schmitt                 | Voith Digital Solutions GmbH                                  |
| 13:00 - 13:30                                                                              | Valmet industrial internet - Dialogue with data                                                              | Wolfgang Schüßler                    | Valmet GmbH                                                   |
| 13:30 - 14:00                                                                              | Wege in die Industrie 4.0 - Fluch oder Segen?                                                                | John Schulz<br>Thilo Schuler         | BTG Process Solutions                                         |
| <b>Vortragsblock „Big Data Handling Plattformen“</b>                                       |                                                                                                              |                                      |                                                               |
| 14:00 - 14:30                                                                              | Die Einführung von Industrie 4.0 Technologien in Kombination mit Cloud-basierten Analysen und Datenspeichern | Sergio Dominguez Ruiz                | GE Energy Power Conversion GmbH                               |
| 14:30 - 15:00                                                                              | Die Potentiale des Internet der Dinge liegen außerhalb der Produktion                                        | Peter Flieher                        | T.CON GmbH & Co. KG                                           |

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Messeforum *exhibition forum*

Halle 4.1, Stand G29 *hall 4.1, booth G29*

Donnerstag, 28.06.2018 *Thursday, 28 June 2018*

Vortragsblock „Prozessdaten Analysetools“

|               |                                                                                                                 |               |                                  |
|---------------|-----------------------------------------------------------------------------------------------------------------|---------------|----------------------------------|
| 15:00 - 15:30 | Quality focused big data analytics in the pulp and paper industry                                               | Emil Ackerman | Quva Oy                          |
| 15:30 - 16:00 | Topologie- und Parameteroptimierung in der Papierindustrie - Industrie 4.0 am Beispiel von Feinsortierprozessen | Tim Müller    | TU Darmstadt, Fluidsystemtechnik |

Raum 1 *room 1*

08:30 - 10:00 Frühstücksempfang, Frauen in der Papierindustrie

Workshop 1 *Workshop 1*

09:00 - 13:00 PTS-Nachwuchsworkshop  
Technologien von HEUTE für die Produkte von MORGEN



## Cellulose Symposium *cellulose symposium*

Halle 4.1, Konferenzraum Alliance *hall 4.1, level 4.C room Alliance*

Mittwoch, 27.06.2018 *Wednesday, 27 June 2018*

| Uhrzeit <i>time</i> | Thema <i>topic</i>                                                                                                                | Referent <i>speaker</i>                                                                 | Firma <i>company</i>                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 08:30 - 10:30       | ZELLCHEMING-Mitgliederversammlung                                                                                                 |                                                                                         |                                                                                                    |
| 14:00 - 14:30       | Flame retardants based on plant raw materials                                                                                     | Stefan Gebke<br>Katrin Thümmler<br>Steffen Fischer                                      | TU Dresden<br>Institut für Pflanzen- und<br>Holzchemie                                             |
| 14:30 - 15:00       | Xylan phenyl carbonates - From synthesis to functional polysaccharide derivatives and nanomaterials                               | Martin Gericke<br>Lars Gabriel<br>Thomas Heinze                                         | Friedrich Schiller University of Jena, Institute of Organic Chemistry and Macromolecular Chemistry |
| 15:00 - 15:30       | Marine litter - A solution for a global problem                                                                                   | Horst Wörner                                                                            | Kelheim Fibres GmbH                                                                                |
| 15:30 - 16:00       | Pause <i>break</i>                                                                                                                |                                                                                         |                                                                                                    |
| 16:00 - 16:30       | Biobased wood adhesives by modification of starch and cellulose                                                                   | Jens Buller<br>Christina Gabriel<br>Andreas Schaefer<br>Bert Volkert<br>Waltraud Vorweg | IAP, Potsdam                                                                                       |
| 16:30 - 17:00       | Europe's first pilot plant for cellulose nanocrystals production - A brief description of current status and future possibilities | Anna Svedberg<br>Karin Johnson<br>Martin Eskilsson<br>Shaul Lapidot                     | MoRe Reserch Örnsköldsvik AB<br>RISE Processum<br>Holmen AB<br>Melodea Ltd.                        |
| 17:00 - 17:30       | Dynamic heterogenous hydrogels constructed by cellulose nanocrystals                                                              | Hequin Huang<br>Kai Zhang                                                               | Wood Technology and Wood Chemistry, University of Göttingen                                        |
| 17:30 - 18:00       | Meeting TC CELL (Cellulose and Cellulose Derivatives)                                                                             |                                                                                         |                                                                                                    |



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Donnerstag, 28.06.2018 *Thursday, 28 June 2018*

| Uhrzeit <i>time</i> | Thema <i>topic</i>                                                              | Referent <i>speaker</i>                                                                                                                                                                                      | Firma <i>company</i>                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09:00 - 09:30       | Optimized phase coupling in lignin-polyolefin blends                            | Melanie Bartel<br>Jens Erdmann<br>Johannes Ganster<br>Isabell Kühnel<br>Katrin Schwarz<br>Bodo Saake                                                                                                         | Fraunhofer IAP<br><br>University Hamburg                                                                                                                                                                                                                                                                                                                                                   |
| 09:30 - 10:00       | Lignin-based nanoparticles for the preparation of melamine foams and composites | Gunnar Engelmann<br>Frank Börner<br>Bert Volkert                                                                                                                                                             | Fraunhofer IAP, Potsdam                                                                                                                                                                                                                                                                                                                                                                    |
| 10:00 - 10:30       | From reactive lignins to polymeric resins and polymer foams                     | Mareike Ziegowski<br>M. Ott<br>S. Trosien<br>Markus Biesalski                                                                                                                                                | TU Darmstadt                                                                                                                                                                                                                                                                                                                                                                               |
| 10:30 - 11:00       | Pause <i>break</i>                                                              |                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                            |
| 11:00 - 11:30       | Valorisation of black liquor for the production of 2G-transportation fuels      | Jörn Appelt<br>J.O. Strüven<br>P. Eidam<br>D. Meier<br>M. Kristian<br>A. Oasmaa<br>C. Anacker<br>U. Armbruster<br>A. Martin<br>Y. Chapelliere<br>C. Mirodatos<br>Y. Schuurman                                | Thünen Institute Wood Research<br><br>VTT Technical Research Centre of Finland<br>LIKAT Leibniz Institute for Catalysis<br><br>IRCELYON, Lyon University                                                                                                                                                                                                                                   |
| 11:30 - 12:00       | Energy storage systems based on paper fines                                     | Stefan Spirk<br>Wolfgang Bauer<br>Rene Eckhart<br>Wolfgang J. Fischer<br>Mathias A. Hobisch<br><br>Eléonore Mourad<br>Stefan A. Freunberger<br><br>Armin Zankel<br><br>Andreas Mautner<br><br>Wim Thielemans | Institute of Paper, Pulp and Fibre Technology, Graz University of Technology<br><br>Institute for Chemistry and Technology, Graz University of Technology<br><br>Institute of Electron Microscopy and Nanoanalysis, NAWI Graz<br><br>Polymer and Composite Engineering Group, Department of Materials Chemistry, University of Vienna<br><br>Department of Chemical Engineering, KU Leuven |



## Cellulose Symposium *cellulose symposium*

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| Uhrzeit <i>time</i> | Thema <i>topic</i>                                                                                                                                | Referent <i>speaker</i>                                                                                                      | Firma <i>company</i>                                                                                                    |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| 12:00 - 12:30       | Liquid Penetration into paper                                                                                                                     | Sarah Krainer<br>Ulrich Hirn                                                                                                 | Institute of Paper, Pulp and Fibre Technology, TU Graz / CD<br>Laboratory of Fibre Swelling and Paper Performance, Graz |
| 12:30 - 13:00       | Strong packing materials from high yield pulps -<br>Fundamental aspects                                                                           | Tove Samuelsson<br>Gunilla Pettersson<br>Hans Höglund<br>Sven Norgren<br>Anna Svedberg<br>Per Engstrand<br>Christer Götesson | FSCN, Mid Sweden University<br><br>Sandvik Process Systems AB                                                           |
| 13:00 - 14:00       | Pause <i>break</i>                                                                                                                                |                                                                                                                              |                                                                                                                         |
| 14:00 - 14:30       | Improvement of deinking sludge dewatering performance<br>using cellulase enzymes                                                                  | Bodo Saake<br>Ron Janzon<br>Friedrich Steffen                                                                                | University of Hamburg,<br>Department of Wood Science,<br>Chemical Wood Technology                                       |
| 14:30 - 15:00       | The fluorescence microscopy toolkit in investigations on<br>paper - High-speed, superresolution and 3D-imaging                                    | Tobias Meckel<br>Laura Babel<br>Markus Langhans                                                                              | TU Darmstadt, Merck Lab &<br>Macromolecular Chemistry &<br>Paper Chemistry                                              |
| 15:00 - 15:30       | Designing functional nanoporosity into paper                                                                                                      | Annette Andrieu-Brunsen<br>Nicole Herzog<br>Christelle Dubois                                                                | Ernst-Berl-Institut für Technische<br>und Makromolekulare Chemie,<br>TU Darmstadt                                       |
| 15:30 - 16:00       | Redox-switchable paper-hybrids based on functional<br>polymers                                                                                    | C. Rüttiger<br>S. Schöttner<br>M. Gallei                                                                                     | Ernst-Berl-Institut für Technische<br>und Makromolekulare Chemie,<br>TU Darmstadt                                       |
| 16:00 - 16:30       | Influence of cavitation processes on molecular and<br>structural properties of recycled fibres and starch for<br>their application in papermaking | Tiemo Arndt<br>Lutz Hamann<br>Birgit Kießler                                                                                 | PTS Papiertechnische Stiftung                                                                                           |