



September 17-22, 2023

# 8th International Polysaccharide Conference

Graz University of Technology, Austria

[www.tugraz.at/events/epnoe2023](http://www.tugraz.at/events/epnoe2023)



# Thanks to our sponsors!



Dear colleagues and friends,

We are very pleased to welcome you to the 8<sup>th</sup> International Polysaccharide Conference held for the first time in Graz, Austria. This congress is an initiative of EPNOE, the Cellulose and Renewable Division of the American Chemical Society (ACS CELL), and the Cellulose Society of Japan (CSJ).



Our ambition is to bring together academia and industry passionate about polysaccharides related R&D and applications. Throughout the years, the EPNOE conference has become **one of the largest events in the field**, and this year gathers over **400 researchers from all over the world**.

This conference is organized by the Austrian University Consortium – **TU Graz, UNI Graz, BOKU Vienna, UNI Vienna and UNI Innsbruck**.



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We hope that you will enjoy the event, have very fruitful discussions and a great stay in Graz.

Your EPNOE 2023 organizers.



## Organizing committee

### TU Graz

- Karin Stana Kleinschek (Chair of the Conference)
- Rupert Kargl
- Stefan Spirk
- Ulrich Hirn
- Tanja Wrodnigg
- Wolfgang Bauer

### UNI Graz

- Anton Huber

### BOKU Vienna

- Antje Potthast
- Thomas Rosenau

### UNI Vienna

- Alexander Bismarck

### UNI Innsbruck

- Avinash Manian

### Conference Office:

- Patricia Götz
- Claudia Gaug
- Tobias Steindorfer
- Florian Lackner
- Tamilselvan Mohan
- Konstantin Knaipp
- Julian Selinger
- Alexander Maaß

## Members of the Executive Committee (EPNOE-CSJ-ACS):

- Pedro Fardim, EPNOE (Chair)
- Carmen Freire, EPNOE
- Karin Stana Kleinschek, EPNOE
- Yoshinobu Tsujii, CSJ
- Tadahisa Iwata, CSJ
- Wim Thielemans, ACS
- Kevin Edgar, ACS

**EPNOE** - *European Polysaccharide Network of Excellence*

**CSJ** - *Cellulose Society of Japan*

**ACS** - *American Chemical Society*



## General Information

The **EPNOE Conference** takes place at the TU Graz Campus “Neue Technik”, at two close locations: Petersgasse 16 and Stremayrgasse 16, 8010 Graz, Austria.



Left Petersgasse 16, right Stremayrgasse 16 ©TUGraz/Markus Kaiser

The **Pre-Conference** takes place at the “Inffeldgasse Campus” Inffeldgasse 25/D, 8010 Graz, Austria.



Inffeldgasse Campus © TUGraz/Lunghammer

	Date	Time	Location
<b>Pre-Conference Registration</b>	Sun 17 <sup>th</sup>	08:00 - 10:00 am	Inffeldgasse 25/D Lobby
<b>EPNOE 2023 Registration</b>	Sun 17 <sup>th</sup>	05:00 - 7:00 pm	Petersgasse 16 Lobby
	Mon 18 <sup>th</sup>	08:00 am – 12:00 pm	
<b>Conference Office</b>	Mon 18 <sup>th</sup> – Fri 22 <sup>nd</sup>	08:00 am – 10:00 am And during the breaks	Petersgasse 16 Lobby – 1 <sup>st</sup> Floor

### Lunch Location

Tent in front of Petersgasse 16.



## Poster Session

The poster session will take place on Tuesday 19<sup>th</sup> of September in the lobby in front of the lecture hall HS BMT, Stremayrgasse 16. The posters should be set up on Monday 18<sup>th</sup> of September and can remain there the whole week.

## Meeting rooms

For possible bilateral meetings, rooms are available at Petersgasse 16. If you need rooms, please make a reservation at the conference office.

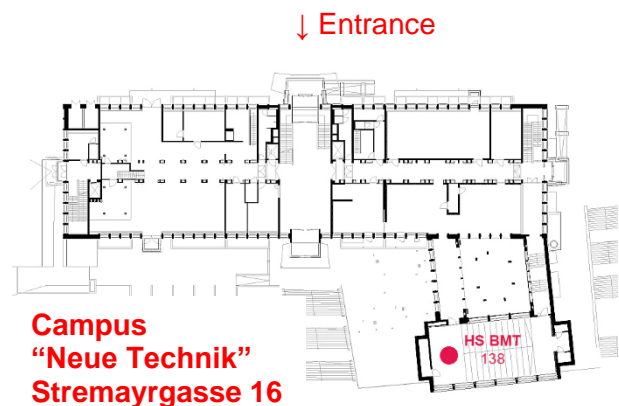
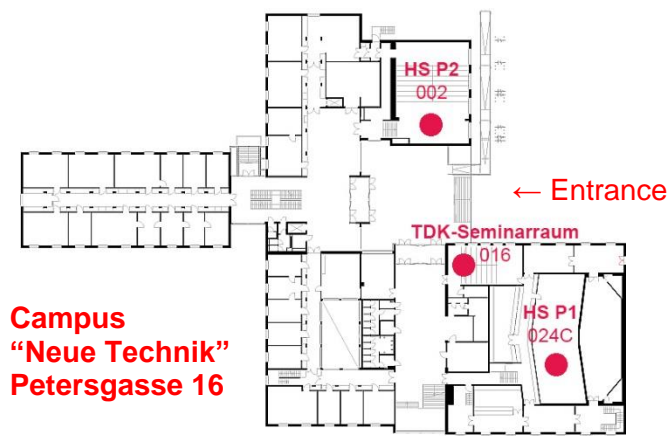
## Social events

**Get Together** - Monday 18<sup>th</sup> of September

7:30 pm at the Auditorium of UNI Graz, Universitätsplatz 3, 8010 Graz.

**Gala Dinner** - Wednesday 20<sup>th</sup> of September

Bus departure 07:00 pm in front of the conference venue Petersgasse 16 to Seifenfabrik, Angergasse 43, 8010 Graz.



Pre-conference locations	
Room	Location
HS i2	Inffeldgasse 12
HS i3	<i>Inffeldgasse 25/D</i>
HS i7	<i>Inffeldgasse 25/D</i>
Main conference locations	
Room	Location
HS P1	<i>Petersgasse 16</i>
HS P2	<i>Petersgasse 16</i>
TDK-Seminarraum	<i>Petersgasse 16</i>
HS BMT	<i>Stremayrgasse 16</i>
Meeting rooms	
Room	Location
PH01150	<i>Petersgasse 16, 1<sup>st</sup> floor</i>
BMT01046	<i>Stremayrgasse 16, 1<sup>st</sup> floor</i>
BMT03094	<i>Stremayrgasse 16, 3<sup>rd</sup> floor</i>
Social Events	
	Location
The Auditorium (Get Together)	<i>University of Graz, Universitätsplatz 3</i>
Seifenfabrik (Gala Dinner)	<i>Angergasse 43</i>



## Sessions

Session number	Session title	Session organizers
1	Advances in polysaccharide analysis, extraction and characterization	<i>Potthast, Huber, Schols, Coimbra, Navarro</i>
2	Challenges and progress in polysaccharide chemistry	<i>Gericke, Rosenau, Edgar, Tsujii</i>
3	Progress in bulk, surface and interactions of polysaccharide through experimental and computational methods	<i>Thielemans, Capron Khodayari, Hettegger, Heise</i>
4	Emerging polysaccharide based (nano)materials	<i>Spirk, Roig Serra, Norgren, Vignolini</i>
5	Polysaccharide gels, porous materials, emulsions	<i>Budtova, Liebner, Cathala, Liimatainen</i>
6	Polysaccharide in food and nutrition	<i>Nyström, Yakubov, Tenkanen, Otoni</i>
7	Polysaccharides in medical and pharmaceutical applications	<i>Kargl, Freire, Matricardi, Collic-Jouault, Jiang-Yong</i>
8	Composites, textiles and fiber network structures	<i>LeMoigne, Manian, Hirn, Iwata, Müssig</i>
9	Interactions of plant cell wall polymers	<i>Nypelö, Xu, Beaugrand</i>
10	Polysaccharides in a sustainable and circular economy	<i>Beaumont, Shen, Tardy, Syverud, Frollini</i>

**PL:** Plenary Lecture **40 min (30 + 10)**

**KN:** Keynote Lecture **30 min (25 + 5)**

**O:** Oral Presentation **20 min (15 + 5)**





# Pre-Conference

## Sunday, September 17<sup>th</sup>

8:00–10:00 am	<b>Registration for Pre-Conference participants, Inffeldgasse 25/D</b>	
09:15–9:30 am	<b>Pre-Conference Opening Ceremony, HS i7</b>	
	<b>Chemistry</b>	<b>Innovation</b>
	<b>HS i7</b>	<b>HS i3</b>
09:30–10:45 am	<i>Block polysaccharides: Preparation, characterization and self-assembly</i>	<i>The origin of ideas</i>
10:45–11:00 am	<b>Break</b>	
11:00–12:15 am	<i>Polymer-Analogue Chemical Modification of Polysaccharides</i>	<i>How to launch your startup – Incubation</i>
12:15–1:30 pm	<b>Lunch Break</b>	
1:30–2:45 pm	<i>Structure Elucidation of Complex Glycans by NMR Spectroscopy</i>	<i>Real life experiences from startup founders</i>
2:45–3:00 pm	<b>Break</b>	
3:00–4:15 pm	<i>Oxidation reaction in polysaccharide chemistry-best protocols, pitfalls and analytical aspects</i>	<i>Game theory exercise for effective communication</i>
4:30–6:30 pm	<b>Scientific Beer Workshop, HS i2 Inffeldgasse 12</b>	
5:00–7:00 pm	<b>Registration for the main EPNOE conference, Petersgasse 16</b>	



## Monday, September 18<sup>th</sup>

8:00–12:00 am	<b>Registration, Petersgasse 16</b>			
10:00–10:40 am	<b>Opening Ceremony, HS P1</b>			
10:40–11:20 am	<b>Plenary Lecture:</b> Vincent Eijnsnik, substituted by Gustav Vaaje-Kolstad, <i>HS P1</i>			
<i>Interim: 10 min</i>	<b>HS P1</b>	<b>HS P2</b>	<b>HS BMT</b>	<b>TDK-S.</b>
11:30–12:40 am	S7-KN	S5-KN	S4-KN	S8-KN
	S7-O1	S5-O1	S4-O1	S8-O1
	S7-O2	S5-O2	S4-O2	S8-O2
12:40–2:10 pm	<b>Lunch Break</b>			
02:10–3:30 pm	S7-O3	S5-O3	S4-O3	S8-O3
	S7-O4	S5-O4	S4-O4	S8-O4
	S7-O5	S5-O5	S4-O5	S8-O5
	S7-O-6	S5-O6	S4-O6	S8-O6
3:30–4:10 pm	<b>Coffee Break</b>			
4:10–5:30 pm	S7-O7	S5-O7	S4-O7	S8-O7
	S7-O8	S5-O8	S4-O8	S8-O8
	S7-O9	S5-O9	S4-O9	S8-O9
	S7-O10	S5-O10	S4-O10	S8-O10
5:30–6:30 pm	<b>EPNOE SKILLS - Upskilling of professionals for a sustainable Europe, HS P1</b>			
7:30–10:00 pm	<b>Get Together at the Auditorium / University of Graz, Universitätsplatz 3</b>			

**The Get-Together event is supported by the federal state government of Styria, enjoy the local Styrian food and entertainment program.**



## Tuesday, September 19<sup>th</sup>

8:40–9:20 am	<b>Plenary Lecture:</b> Hiroyuki Yano, <i>HS P1</i>			
<i>Interim: 10 min</i>	<b>HS P1</b>	<b>HS P2</b>	<b>HS BMT</b>	<b>TDK-S.</b>
9:30–10:40 am	S10-KN	S1-KN	S2-KN	S6-KN
	S10-O1	S1-O1	S2-O1	S6-O1
	S10-O2	S1-O2	S2-O2	S6-O2
10:40–11:10 am	<b>Coffee Break</b>			
11:10–12:30 am	S10-O3	S1-O3	S2-O3	S6-O3
	S10-O4	S1-O4	S2-O4	S6-O4
	S10-O5	S1-O5	S2-O5	S6-O5
	S10-O6	S1-O6	S2-O6	S6-O6
12:30–2:10 pm	<b>Lunch Break</b>			
2:10–3:30 pm	S10-O7	S1-O7	S2-O7	S6-O7
	S10-O8	S1-O8	S2-O8	S6-O8
	S10-O9	S1-O9	S2-O9	S6-O9
	S10-O10	S1-O10	S2-O10	S6-O10
3:30–3:50 pm	<b>Coffee Break</b>			
3:50 – 4:30 pm	<b>Plenary Lecture:</b> Manuel A. Coimbra, <i>HS P1</i>			
4:30–6:10 pm	S10-O11	S1-O11	S2-O11	S6-O11
	S10-O12	S1-O12	S2-O12	S6-O12
	S10-O13	S1-O13	S2-O13	S6-O13
	S10-O14	S1-O14	S2-O14	S6-O14
	S10-O15	S1-O15	S2-O15	
06:10 pm	<b>Group photo</b> <i>Stremayrgasse 16, entrance stairs</i>			
06:15–08:15 pm	<b>Poster Session &amp; Beer</b> <i>Stremayrgasse 16, Foyer HS BMT</i>			

**Group photo: please be at the entrance stairs of the building Stremayrgasse 16 at 6:10 p.m.**



## Wednesday, September 20<sup>th</sup>

8:40–9:20 am	<b>Plenary Lecture: EPNOE AWARD</b> João Mano, <i>HS P1</i>			
<i>Interim: 10 min</i>	<b>HS P1</b>	<b>HS P2</b>	<b>HS BMT</b>	<b>TDK-S.</b>
9:30–10:40 am	S1-KN	S8-O11	S9-KN	S3-KN
	S1-O16	S8-O12	S9-O1	S3-O1
	S1-O17	S8-O13 (end 10:30)	S9-O2	S3-O2
10:40–11:10 am	<b>Coffee Break</b>			
11:10–12:30 am	S4-O11	S8-O14	S9-O3	S3-O3
	S4-O12	S8-O15	S9-O4	S3-O4
	S4-O13	S8-O16	S9-O5	S3-O5
	S4-O14	S8-O17		S3-O6
12:30–2:10 pm	<b>Lunch Break</b>			
2:10–3:30 pm	S4-O15	S5-O11	S7-O11	S3-O7
	S4-O16	S5-O12	S7-O12	S3-O8
	S4-O17	S5-O13	S7-O13	S3-O9
	S4-O18	S5-O14	S7-O14	S3-O10
3:30–4:10 pm	<b>Coffee Break</b>			
4:10–5:50 pm	S10-O16	S5-O15	S7-O15	S2-O16
	S10-O17	S5-O16	S7-O16	S2-O17
	S10-O18	S5-O17	S7-O17	S2-O18
	S10-O19	S5-O18	S7-O18	S2-O19
	S10-O20		S7-O19	S2-O20
<i>Interim:</i>	<i>1 h 40 min time until Gala Dinner!</i>			
7:30–10:00 pm	<b>Gala Dinner</b> at the Seifenfabrik, Angergasse 43, 8010 Graz			

**Gala Dinner BUS departure: 7:00 pm in front of the conference venue -  
Petersgasse 16**



## Thursday, September 21<sup>st</sup>

9:00–9:40 am	<b>Plenary Lecture:</b> Silvia Vignolini, <i>HS P1</i>			
<i>Interim: 10 min</i>	<b>HS P1</b>	<b>HS P2</b>	<b>HS BMT</b>	<b>TDK-S.</b>
9:50–10:40 am	S4-KN	S5-KN	S7-KN	S8-KN
	S4-O19	S5-O19	S7-O20	S8-O19
10:40–11:10 am	<b>Coffee Break</b>			
11:10–12:30 am	S4-O20	S5-O20	S7-O21	S8-O20
	S4-O21	S5-O21	S7-O22	S8-O21
	S4-O22	S5-O22	S7-O23	S8-O22
	S4-O23	S5-O23	S7-O24	S8-O23
12:30–2:10 pm	<b>Lunch Break</b>			
2:10–3:10 pm	S4-O24	S5-O24	S7-O25	S8-O24
	S4-O25		S7-O26	S8-O25
	S4-O26			
3:10–3:40 pm	<b>Coffee Break</b>			
	<b>Round Tables</b>			
3:40–3:50 pm	<b>Introduction to Round Tables Event - CIRCULAR BIO ECONOMY</b>			
3:50–4:15 pm	Josef R. Wünsch - <i>President of the SUSCHEM Europe</i> <b><i>Myth and Facts about Decarbonization of Chemistry</i></b>			
4:15–4:30 pm	Wim Thielemans, KU Leuven - <i>American Chemical Society</i> <b><i>Biomass use in the perspective of USA</i></b>			
4:30–4:45 pm	Hiroshi Kamitakahara, Kyoto University - <i>Cellulose Society of Japan</i> <b><i>Biomass use in the perspective of Japan</i></b>			
4:45–5:00 pm	Karin Stana Kleinschek, TU Graz - <i>EPNOE</i> <b><i>Biomass use in the perspective of EU (EPNOE Research Roadmap)</i></b>			
5:10–6:40 pm	<b>Round Tables - topic “circular bioeconomy”</b>			
	<b>HS P1 ESEIA</b>	<b>HS P2 ZELLCHEMING</b>	<b>HS BMT ISEKI</b>	<b>TDK-S. EUCHIS</b>
	On the way to climate-neutrality using Bio-based Materials	From challenges to opportunities – Fiber-based materials in a circular future	Reimagining Food Systems towards Sustainability: Contribution of Carbohydrates to New Strategies	Chitin and Chitosan in Healthcare and the Future Bio-based Economy
7:00–8:30 pm	<b>Governing Board, HS P1</b>			
7:00–8:30 pm	<b>EPNOE Junior Meeting, HS P2</b>			



## Friday, September 22<sup>nd</sup>

08:40–9:20 am	<b>Plenary Lecture:</b> Didier Letourneur, <i>HS P1</i>			
<i>Interim: 10 min</i>	<b>HS P1</b>	<b>HS P2</b>	<b>HS BMT</b>	<b>TDK-S.</b>
9:30–10:40 am	S10-KN	S9-KN	S3-KN	S6-O15
	S10-O21	S9-O6	S3-O11	S6-O16
	S10-O22	S9-O7	S3-O12	S6-O17
10:40–11:10 am	<b>Coffee Break</b>			
11:10–12:30 am	S10-O23	S9-O8	S3-O13	S6-O18
	S10-O24	S9-O9	S3-O14	S6-O19
		S1-O18	S3-O15	S6-O20
			S3-O16	S6-O21
12:30–2:00 pm	<b>Lunch Break</b>			
2:00 pm	<b>Closing Ceremony, <i>HS P1</i></b>			



# PROGRAM

**Monday, September 18<sup>th</sup>**

Time		Location
08:00	<b>Registration</b>	Foyer Petersgasse16
10:00	<b>Opening Ceremony</b>	HS P1 Petersgasse16
10:40	<b>Plenary Lecture - Vincent Eijnsnik</b> <b>substituted by Gustav Vaaje-Kolstad</b> <i>ENZYMATIC CONVERSATION OF POLYSACCHARIDES - FROM HYDROLASES TO LYTIC POLYSACCHARIDE MONOOXYGENASES (LPMOs)</i> Chair - Karin Stana Kleinschek	HS P1 Petersgasse16
17:30	<b>EPNOE SKILLS</b> <i>UPSKILLING OF PROFESSIONALS FOR A SUSTAINABLE EUROPE</i> Moderator Anton Huber University of Graz	HS P1 Petersgasse16
17:30	<b>Pedro Fardim, KU Leuven</b> <i>EPNOE ROADMAPS 2040 - VISION AND GOALS</i>	
17:35	<b>Tiina Nypelö, Chalmers University of Technology</b> <i>TOWARDS RECOGNIZING AND FILLING SKILLS GAPS - EPNOE SKILLS ROADMAP WORK 2040</i>	
17:50	<b>Miriam Topo, EPNOE Association</b> <i>COMMUNICATION TO NON-EXPERT AUDIENCES: TIPS AND TRICKS</i>	
18:00	<b>Claudia Mair-Bauernfeind, University of Graz</b> <i>QUANTIFICATION OF SUSTAINABILITY BY MEANS OF LIFE CYCLE ASSESSMENT - YOU WILL LEARN ABOUT LCA AND WILL WORK THROUGH ON HOW THE OUTCOME CHANGES IF A DIFFERENT PERSPECTIVE IS TAKEN.</i>	
18:20	<i>DISCUSSION WITH THE PUBLIC</i>	
19:30	<b>Get Together</b>	Auditorium University of Graz Universitätsplatz 1

<b>Session 7 - Polysaccharides in medical and pharmaceutical applications</b>	<b>HS P1</b> Petersgasse 16
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Chair: Rupert Kargl

11:30

**S7-KN - Petra, Kotzbeck** Keynote lecture  
*BACTERIAL NANOCELLULOSE AND ITS IMPLICATIONS IN WOUND  
HEALING AND SKIN REGENERATION*



- 12:00      **S7-O1 - Matricardi, Pietro**  
*HYALURONAN-CHOLESTEROL NANOGELS FOR ENHANCING  
THE OCULAR DELIVERY OF THERAPEUTICS  
STRUCTURE-FUNCTION RELATIONSHIP*
- 12:20      **S7-O2 - Courtecuisse, Elise**  
*CHITOSAN-BLOCK-DEXTRAN COPOLYSACCHARIDES FOR NUCLEIC  
ACID DELIVERY*
- 12:40      **Lunch Break 1h 30min**
- Chair: Silvia Arpicco  
14:10      **S7-O3 - Sanchez, Noelia M**  
*ALGINATE ESTERS AS NOVEL MULTIFUNCTIONAL EXCIPIENTS FOR  
TABLET FORMULATION: STRUCTURE-FUNCTION RELATIONSHIP*
- 14:30      **S7-O4 - Bas, Yagmur**  
*PREPARATION AND CHARACTERIZATION OF WOOD  
NANOFIBER HYDROGELS AS WOUND DRESSINGS*
- 14:50      **S7-O5 - Delaporte, Adeline**  
*ENCAPSULATION OF COSMETIC ACTIVES BY COMPLEX  
COACERVATION: THE POTENTIAL OF FUNGAL CHITOSAN*
- 15:10      **S7-O6 - Jaiswal, Amit Kumar**  
*HYDROGEL LOADED 3D PRINTED BONE GRAFT FOR RECONSTRUCTION  
OF THE SEGMENTAL BONE DEFECT*
- 15:30      **Coffee Break 40min**
- Chair: Pietro Matricardi  
16:10      **S7-O7 - Piazza, Francesco**  
*CELL ACTIVITIES ON VISCOELASTIC SUBSTRATES SHOW AN ELASTIC  
ENERGY THRESHOLD AND CORRELATE WITH THE LINEAR ELASTIC  
ENERGY LOSS IN THE STRAIN-SOFTENING REGION*
- 16:30      **S7-O8 - Samalens, François**  
*BIO-BASED UV FILTERS-FUNCTIONALIZED POLYSACCHARIDES FOR  
COSMETICS*
- 16:50      **S7-O9 - Lackner, Florian**  
*3D PRINTING AND CHARACTERIZATION OF VASCULAR  
MODELS FROM POLYSACCHARIDES*
- 17:10      **S7-O10 - Joly, Nicolas**  
*FULLY CHARACTERIZED FATTY ACID CELLULOSE ESTERS (FACES) AS  
STARTING RAW MATERIAL FOR BIOMATERIALS, ADDITIVES AND  
ELECTRONICS SUPPORT APPLICATIONS*





<b>Session 5 - Polysaccharide gels, porous materials, emulsions</b>	<b>HS P2</b> Petersgasse16
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Chair: Tatiana Budtova

- 11:30 **S5-KN - Mikkonen, Kirsi S.** Keynote lecture  
*TRANSFORMING HEMICELLULOSES' DISTINCTIVE PROPERTIES TO UNIQUE BENEFITS*
- 12:00 **S5-O1- Cathala, Bernard**  
*XYLOGLUCAN AND CELLULOSE NANOCRYSTALS THERMORESPONSIVE HYDROGELS: GELATION MECHANISM AND FUNCTIONAL PROPERTIES*
- 12:20 **S5-O2 - Komiyama, Katsuya**  
*CELLULOSE-ALGINATE HYDROGELS FOR WATER DESALINATION INSPIRED BY THE STRUCTURE AND FUNCTION OF PLANTS*
- 12:40 **Lunch Break** 1h 30min
- Chair: Kirsi Mikkonen
- 14:10 **S5-O3 - Hao, Mengshu**  
*NOVEL CARBOHYDRATE-BINDING PROTEINS: CBM92 AND THEIR HYDROGEL-FORMING ABILITIES*
- 14:30 **S5-O4 - Kaku, Yuto**  
*INVESTIGATION OF MOLDABLE PHYSICAL CHITIN HYDROGELS AND THEIR APPLICATIONS*
- 14:50 **S5-O5- Naserifar, Shirin**  
*GELATION OF CELLULOSE IN AQUEOUS ALKALINE SOLUTIONS BY CO<sub>2</sub>*
- 15:10 **S5-O6 - Boussif, Ahmed Yassine**  
*ELABORATION OF BIO-BASED SUPERABSORBENT HYDROGELS INCORPORATING DIALDEHYDE CELLULOSE EXTRACTED FROM BANANA TREE FIBERS*
- 15:30 **Coffee Break** 40min
- Chair: Bernard Cathala
- 16:10 **S5-O7 - Budtova, Tatiana**  
*STARCH AEROGELS AND AEROGEL-LIKE XEROGELS*
- 16:30 **S5-O8 - Nicastro, Gloria**  
*CO-POLYMERIC AEROGELS FROM CELLULOSE BIOMASS AS HETEROGENEOUS CATALYSTS FOR ORGANIC REACTIONS*
- 16:50 **S5-O9 - Yu, Sujie**  
*3D PRINTED CARBOXYMETHYL CELLULOSE BASED AEROGELS AND COMPARATION WITH "BULK" AEROGELS*
- 17:10 **S5-O10 - Gelas, Loris**  
*IMPACT OF NON-SOLVENT INDUCED PHASE SEPARATION ON CELLULOSE AEROGEL MORPHOLOGY*



## Session 4 - Emerging polysaccharide based (nano)materials

**HS BMT**  
Stremayrgasse 16

Chair: Stefan Spirk

- 11:30      **S4-KN - Keplinger, Tobias** Keynote lecture  
*DESIGN OF SMART HIGH-PERFORMANCE CELLULOSE MATERIALS BASED ON WOOD*
- 12:00      **S4-O1 - Ritter, Maximilian**  
*STIMULI-RESPONSIVE (CHEMI-)LUMINESCENT WOOD MEMBRANES*
- 12:20      **S4-O2 - Roig, Anna**  
*BACTERIAL CELLULOSE NANOFIBRES AS A REINFORCING MATERIAL AND BEYOND*
- 12:40      **Lunch Break** 1h 30min
- 14:10      **S4-O3 - Jaiswal, Aayush Kumar**  
*BIOPOLYMER OPTICAL FIBERS FROM CELLULOSE FOR SENSING APPLICATIONS*
- 14:30      **S4-O4 - Knaipp, Konstantin**  
*PHOTORESPONSIVE COVALENTLY LINKED DEXTRAN NETWORKS*
- 14:50      **S4-O5 - Freire, Carmen**  
*NANOCELLULOSE AND PROTEIN AMYLOID FIBRILS: A PARTNERSHIP FOR THE DESIGN OF FUNCTIONAL SUSTAINABLE NANOMATERIALS*
- 15:10      **S4-O6 - Ding, Yong**  
*PASSIVE CLIMATE REGULATION WITH TRANSPIRING WOOD FOR BUILDINGS WITH INCREASED ENERGY EFFICIENCY*
- 15:30      **Coffee Break** 40min
- Chair: Anna Roig
- 16:10      **S4-O7 - Kontturi, Katri S.**  
*EFFECT OF NANOCELLULOSE IN ENHANCING THE PERFORMANCE OF HYBRID NANOCELLULOSE/CARBON NANOTUBE ELECTROCHEMICAL SENSORS*
- 16:30      **S4-O8- Laromaine, Anna**  
*HARNESSING NATURE AND NANOTECHNOLOGY: ADVANCES IN BACTERIAL CELLULOSE-BASED BIOHYBRID MATERIALS*
- 16:50      **S4-O9 - Lu, Yi**  
*DIRECT 3D BIOFABRICATION OF BACTERIAL NANOCELLULOSE VIA SOFT MATTER TEMPLATING*
- 17:10      **S4-O10 - Mandin, Samuel**  
*DEVELOPMENT OF CELLULOSIC NANOCOMPOSITES WITH CONTROLLED STRUCTURING BY ULTRAFILTRATION AND ULTRAVIOLET CURING*



**Session 8 - Composites, textiles and fiber network structures****TDK-S.**  
Petersgasse16

Chair: Nicolas Le Moigne

- 11:30      **S8-KN - Oksman, Kristiina** Keynote lecture  
*BIO-BASED NANOMATERIALS AND THEIR USE IN COMPOSITES*
- 12:00      **S8-O1- Lohtander-Piispa, Tia**  
*CELLULOSE FOAM FILMS WITH IMPROVED WATER TOLERANCE  
FUNCTIONALIZED WITH WILLOW BARK EXTRACT*
- 12:20      **S8-O2 - Mayer, Paul**  
*ANIONIC MODIFIED CELLULOSE TEXTILE COATED  
WITH CONDUCTING POLYMER*
- 12:40      **Lunch Break** 1h 30min
- 14:10      **S8-O3 - Canga Rodríguez, José**  
*FROM INDUSTRY 4.0 TO RESEARCH 4.0. A MODULAR  
APPROACH FOR THE DEVELOPMENT OF CELLULOSIC FIBRES*
- 14:30      **S8-O4 - Röder, Thomas**  
*VISCOSE PROCESS - OFTEN ALREADY PRONOUNCED DEAD  
AND STILL VERY MUCH ALIVE*
- 14:50      **S8-O5 - Bogner, Paul**  
*TOPOGRAPHICAL DISTRIBUTION OF FUNCTIONAL GROUPS IN  
CELLULOSE FIBERS AFTER HETEROGENEOUS CARBOXYMETHYLATION*
- 15:10      **S8-O6 - Sang, Yizhou**  
*PARTIAL WELDING OF CELLULOSE FIBERS AS  
STRUCTURAL MATERIAL*
- 15:30      **Coffee Break** 40min
- Chair: Kristiina Oksman
- 16:10      **S8-O7 - Kostic, Mirjana**  
*ELECTROKINETIC AND SORPTION PROPERTIES OF  
PLASMA TREATED JUTE FABRICS*
- 16:30      **S8-O8 - Netzer, Felix**  
*LOW-LEVEL CATIONIZATION OF COTTON AS POSSIBLE ROUTE  
TO SALT FREE REACTIVE DYEING*
- 16:50      **S8-O9 - Wurm, Florian**  
*HYDROPHILIC MODIFICATION OF CELLULOSIC SUBSTRATES  
BY CARBOXYMETHYLATED STARCH COMPOSITING*
- 17:10      **S8-O10 - Sillard, Cécile**  
*DEVELOPMENT OF 100% BIO-BASED AND BIODEGRADABLE WOMEN'S  
SANITARY NAPKINS FROM LIGNIN-RICH FIBERS*



## Tuesday, September 19<sup>th</sup>

Time		Location
08:40	<b>Plenary Lecture – Hiroyuki Yano</b> <i>DRIVING TOWARD A SUSTAINABLE SOCIETY WITH NANOCELLULOSE VEHICLES</i> Chair - Katariina Torvinen	HS P1 Petersgasse 16
15:50	<b>Plenary Lecture - Manuel A. Coimbra</b> <i>POLYSACCHARIDES, A SOURCE OF CLEAN LABEL STRATEGIES FOR FOOD INDUSTRY</i> Chair - Nicolas Le Moigne	HS P1 Petersgasse 16
18:10	<b>Group photo</b>	Entrance stairs Stremayrgasse 16
18:15	<b>Poster Session</b>	Foyer BMT Stremayrgasse 16

<b>Session 10 - Polysaccharides in a sustainable and circular economy</b>
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<b>HS P1 Petersgasse16</b>
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Chair: Marco Beaumont

09:30	<b>S10-KN - Bras, Julien</b> Keynote lecture <i>HIGH PERFORMANCE AND RECYCLABLE CELLULOSIC MATERIALS AS AN ALTERNATIVE SOLUTION IN PACKAGING WITHIN A SUSTAINABLE AND CIRCULAR ECONOMY</i>
10:00	<b>S10-O1 - Tardy, Blaise</b> <i>POLYSACCHARIDES AS ENABLERS OF THE BIOECONOMY IN ARID AREAS</i>
10:20	<b>S10-O2 - Rojas, Orlando</b> <i>APPROACHING CIRCULARITY WITH PLANT AND MARINE BIOMASS, FIBRILLATED NANOPOLYSACCHARIDES AND BIOMASS RESIDUALS</i>
10:40	<b>Coffee Break</b> 30min
Chair: Michael Hummel	
11:10	<b>S10-O3 Everaert, Emmanuel</b> <i>SCLEROTIUM GUM – BIOPOLYMER SHIELD PROTECTION FOR ANTI-POLLUTION</i>
11:30	<b>S10-O4 - King, Alistair William Thomas</b> <i>CONTROLLING THE BIODEGRADABILITY OF PAPER BY SIMPLE SURFACE ACETYLATION</i>
11:50	<b>S10-O5 - Frollini, Elisabete</b> <i>REPLACEMENT OF FOSSIL-BASED REAGENTS WITH CELLULOSE: ENHANCING MATERIAL PROPERTIES AND CONTRIBUTING TO THE CIRCULAR BIOECONOMY</i>



- 12:10 **S10-O6 - Manian, Avinash P.**  
*FATE OF COLORANTS IN RECYCLING OF CELLULOSICS FROM DENIM*
- 12:30 **Lunch Break 1h 40 min**
- Chair: Alistair King  
14:10 **S10-O7 - Brito Seixas Nunes, Mário André**  
*SUGARCANE BAGASSE/POLYDOPAMINE AS MULTIPURPOSE MATERIALS: FROM HEAVY METAL ADSORBENT TO CEMENT-BASED MATERIAL*
- 14:30 **S10-O8 - Kogler, Michaela**  
*CLASH OF THE TITANS: PLASTIC VS THE WORLD*
- 14:50 **S10-O9 - Guo, Wanxiang**  
*DEGRADATION OF THE WHEAT ENDOSPERM MATRIX AND CONSTITUTING BIOPOLYMERS DURING BAKING AND ITS ROLE ON THE PERFORMANCE OF STALE BREAD AS PACKAGING MATERIAL*
- 15:10 **S10-O10 - Chevigny, Chloé**  
*HIERARCHICAL MATERIALS BASED ON NANOCELLULOSES AND POLYLACTIDE*
- 15:30 **Coffee Break 20min**
- Chair: Elisabete Frollini  
16:30 **S10-O11 - Bunzel, Mirko**  
*IMPACT OF THERMOMECHANICAL TREATMENT ON DIETARY FIBER POLYSACCHARIDE STRUCTURES OF APPLE POMACES*
- 16:50 **S10-O12 - Wang, Yingfeng**  
*HCl GAS ALCOHOLYSIS OF COTTON LINTER FIBERS*
- 17:10 **S10-O13 - Karppinen, Katja**  
*CHARACTERIZATION OF ENDO-1,4-GLUCANASES FROM SOFTENING FRUIT FOR ENZYMATIC DEPOLYMERIZATION OF CELLULOSE*
- 17:30 **S10-O14 - Rao, Naras**  
*A COMPARISON OF POLYSACCHARIDE-BASED FLOCCULANTS FOR TREATING HARMFUL CYANOBACTERIAL BLOOMS*
- 17:50 **S10-O15 - Münstermann, Nils**  
*CHITOSAN-BASED COATINGS FOR THE WATER-PROOFING OF WOOD*



<b>Session 1 - Advances in polysaccharide analysis, extraction and characterization</b>	<b>HS P2</b> Petersgasse16
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Chair: Antje Potthast

09:30 **S1-KN - Pasch, Harald** Keynote lecture  
*ADVANCED TOOLS FOR MOLECULAR CHARACTERIZATION OF BIOBASED AND BIODEGRADABLE POLYMERS*

10:00 **S1-O1 - Sivan, Pramod**  
*UNRAVELLING THE UNIQUE STRUCTURAL MOTIFS OF GLUCURONOXylan FROM HYBRID ASPEN WOOD*

10:20 **S1-O2 - Tagliaro, Irene**  
*DEVELOPMENT OF CHITOSAN DERIVATIVES FOR ANALYTICAL APPLICATION IN CAPILLARY ELECTROPHORESIS*

10:40 **Coffee Break** 30min

Chair: Anna Lehrhofer

11:10 **S1-O3 - Falourd, Xavier**  
*<sup>1</sup>H-><sup>13</sup>C POLARIZATION TRANSFER KINETICS TO INVESTIGATE INTERACTIONS IN POLYSACCHARIDE ASSEMBLIES*

11:30 **S1-O4 - Doi, Yoshinori**  
*MONITORING NANOCELLULOSE CRYSTALLITE FUSION DURING COLLOID CONDENSATION*

11:50 **S1-O5 - Lopez-Rubio, Amparo**  
*BETA-GLUCAN-RICH EXTRACTS FROM SEVERAL MUSHROOM SPECIES: COMPOSITION, STRUCTURAL PROPERTIES AND IMMUNOSTIMULATORY ACTIVITY*

12:10 **S1-O6 - Ernst, Luise**  
*SYNTHESIS AND STRUCTURAL CHARACTERIZATION OF WATER INSOLUBLE ALPHA-GLUCANS FROM LACTIC ACID BACTERIA*

12:30 **Lunch Break** 1h 40 min

Chair: Tanja Wrodnigg

14:10 **S1-O7 - Wojtasz-Mucha, Joanna**  
*IN-SITU X-RAY ANALYSIS OF COLD ALKALI DISSOLUTION OF CELLULOSE PULPS OF VARIOUS ORIGIN*

14:30 **S1-O8 - Legat, Thibaut**  
*3D IMAGING AND STRUCTURAL INFORMATION OF THE CHIRAL NEMATIC PHASE OF CELLULOSE NANOCRYSTALS (CNC) BY SECOND HARMONIC GENERATION (SHG) MICROSCOPY*

14:50 **S1-O9 - Wintersteller, Peter**  
*APPARENT DEGREE OF POLYMERIZATION OF XANTHAN AND THE CORRELATION TO CALORIMETRIC ENTHALPY*



- 15:10 **S1-O10 - Mante, Josselin**  
EXTRACTION AND CHARACTERIZATION OF PRIMARY CELL WALL  
XYLOGLUCAN FOR THE SYNTHESIS OF REINFORCING AGENTS FOR  
CELLULOSIC MATERIALS
- 15:30 **Coffee Break** 20min
- Chair: Jonas Simon
- 16:30 **S1-O11 - Fliri, Lukas**  
RE-INVESTIGATING DEHYDRATION REACTIONS DURING  
THERMOSTABILIZATION OF CELLULOSE FIBERS BY SOLUTION STATE  
NMR
- 16:50 **S1-O12 - Coelho, Elisabete**  
DISCLOSING BREWER'S SPENT YEAST POLYSACCHARIDES TOWARDS  
THE IMPACT ON INNATE IMMUNE SYSTEM RESPONSE
- 17:10 **S1-O13 - Corsaro, Maria Michela**  
MICROBIAL CAPSULAR POLYSACCHARIDES AND THEIR  
STRUCTURE-SHAPE-ACTIVITY
- 17:30 **S1-O14 - Mattoso, Luiz Henrique Capparelli**  
COLORIMETRIC SENSORS BASED ON  
METHYLCELLULOSE/ANTHOCYANINS/CaCl<sub>2</sub> FOR  
MONITORING FISH FRESHNESS
- 17:50 **S1-O15 - Everden, Katie**  
POWERFUL METHODS FOR CHARACTERIZING CELLULOSE BASED  
MATERIALS

<b>Session 2 - Challenges and progress in polysaccharide chemistry</b>	<b>HS BMT</b> Stremayrgasse 16
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Chair: Thomas Rosenau

- 09:30 **S2-KN - Kamitakahara, Hiroshi** Keynote lecture  
DESIGN, SYNTHESIS, AND FUNCTIONS OF CELLULOSIC DIBLOCK  
COPOLYMERS: FROM ORGANIC CHEMISTRY TO BIOMASS REFINERY
- 10:00 **S2-O1 - Esposito, Fabiana**  
SEMI-SYNTHESIS OF GLYCOSAMINOGLYCANS MIMETICS  
FROM SUSTAINABLE SOURCES
- 10:20 **S2-O2 - Würfel, Hendryk**  
HETEROGENEOUS ONE-POT SYNTHESIS OF REACTIVE PECTIN  
DERIVATIVES: PECTIN HYDRAZIDE AS NOVEL NUCLEOPHILE
- 10:40 **Coffee Break** 30min
- Chair: Thomas Rosenau
- 11:10 **S2-O3 - Gericke, Martin**  
FUNCTIONAL POLYSACCHARIDE GELS THROUGH  
SELECTIVE CROSSLINKING BY CLICK-CHEMISTRY-REACTIONS



- 11:30                    **S2-O4 - Elschner, Thomas**  
*DESIGN OF LIGNOCELLULOSIC MODEL SYSTEMS AND BIOINSPIRED MATERIALS BY MITSUNOBU REACTION*
- 11:50                    **S2-O5 - Simon, Jonas**  
*TOWARDS TAILORED DIALDEHYDE CELLULOSE DERIVATIVES: ACCESS TO RENEWABLE THERMOPLASTICS*
- 12:10                    **S2-O6 - Wrodnigg, Tanja Maria**  
*SUGARFUN<sup>2</sup>: CARBOHYDRATE FUNCTIONALISED CARBOHYDRATES*
- 12:30                    **Lunch Break 1h 40 min**
- Chair: Martin Gericke  
14:10                    **S2-O7 - Beaumont, Marco**  
*REVERSIBLE AND SPATIOSELECTIVE SURFACE ESTERIFICATION FOR THE PRODUCTION OF FUNCTIONAL CELLULOSE NANOFIBRILS*
- 14:30                    **S2-O8 - Kargl, Rupert**  
*CELLULOSE NANOFIBRILS CROSS-LINKED THROUGH LYSINE RESIDUES*
- 14:50                    **S2-O9 - Bedini, Emiliano**  
*TOWARDS THE SEMI-SYNTHESIS OF PHOSPHORYLATED GLYCOSAMINOGLYCANS*
- 15:10                    **S2-O10 - Rathinam, Sankar**  
*SYNTHESIS OF CHITOTRIAZOLAN DERIVATIVES FOR ANTIBACTERIAL ACTIVITY*
- 15:30                    **Coffee Break 20min**
- Chair: Hendryk Würfel  
16:30                    **S2-O11 - Lehrhofer, Anna Florentina**  
*SYNTHESIS OF NON-CONVENTIONAL CELLULOSE-BASED CHIRAL STATIONARY PHASES FOR ENANTIOSEPARATION BY HPLC*
- 16:50                    **S2-O12 - Nagy, Vivien**  
*SYNTHESIS DEVELOPMENT AND OPTIMIZATION OF N,N,N-TRIMETHYL CHITOSAN (TMC) WITH HIGH DEGREE OF TRIMETHYLATION*
- 17:10                    **S2-O13 - Coelho, Isabel**  
*DICARBOXYMETHYL CELLULOSE POLYMER: APPLICATIONS AND POTENTIALITIES*
- 17:30                    **S2-O14 - Ronchetti, Riccardo**  
*AMINO-DECORATED NANOSTRUCTURED CELLULOSES AS A POTENTIAL CARRIER SYSTEM FOR BIOACTIVE COMPOUNDS*
- 17:50                    **S2-O15 - Ferreira, Luisa Maria**  
*DEVELOPMENT OF SYNTHETIC METHODOLOGIES TO OBTAIN DICARBOXYMETHYL CELLULOSE WITH DIFFERENTIATED STRUCTURE AND PROPERTIES*





<b>Session 6 - Polysaccharide in food and nutrition</b>	<b>TDK-S.</b> Petersgasse16
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Chair: Caio Otoni

- 09:30      **S6-KN - Gilbert, Robert G** Keynote lecture  
*STARCH MOLECULAR STRUCTURE AND DIABETES*
- 10:00      **S6-O1 - Kansou, Kamal**  
*STARCH HYDROLYSIS BY AMYLASE:  
A CLOSE LOOK AT THE FIRST-ORDER REACTION  
RATE CONSTANT*
- 10:20      **S6-O2 - De Wever, Pieter**  
*TOPOCHEMICAL DESIGN OF CELLULOSE-BASED CARRIERS  
FOR IMMOBILIZATION OF ENDOXYLANASE*
- 11:10      **S6-O3 - Frommhagen, Matthias**  
*FUNCTIONALIZATION OF FOOD HYDROCOLLOIDS  
USING ENZYMES*
- 11:30      **S6-O4 - Comuzzi, Clara**  
*AN NMR APPROACH TO FOLLOW THE STRUCTURAL  
MODIFICATION OF NATIVE APPLE PECTIN DURING DIGESTION*
- 11:50      **S6-O5 - Hassler, Verena**  
*STUDIES ON THE FORMATION OF EXOPOLYSACCHARIDES  
IN FERMENTED BEVERAGES*
- 12:10      **S6-O6 - Karlsson, Jakob Stefan**  
*CORRELATING PHYSICOCHEMICAL PROPERTIES OF PEA  
POLYSACCHARIDES TO THEIR IN VITRO FAECAL FERMENTATION*
- 12:30      **Lunch Break** 1h 40 min
- Chair: Caio Otoni
- 14:10      **S6-O7 - Guzman-Puyol, Susana**  
*PLASTICIZED, GREASEPROOF, AND TRANSPARENT FOOD  
PACKAGING BIOPLASTICS FROM CHITIN-RICH WASTES*
- 14:30      **S6-O8 - Riahi, Zohreh**  
*CARRAGEENAN-BASED ACTIVE AND INTELLIGENT PACKAGING FILM  
INTEGRATED WITH TiO<sub>2</sub>-DOPED CARBON DOTS AND SWEET POTATO  
ANTHOCYANIN*
- 14:50      **S6-O9 - Jia, Jingxuan**  
*STRUCTURE CHARACTERIZATION AND LIPID-LOWERING  
ACTIVITY OF A HOMOGENEOUS HETEROPOLYSACCHARIDE FROM  
SWEET TEA (*RUBUS SUAVISSMUS* S. LEE)*
- 15:10      **S6-O10 - Hernandez-Tenorio, Fabian**  
*FORMULATIONS BASED ON PULLULAN AND A DERIVATIVE AS COATING  
MATERIAL FOR THE FOOD SECTOR*



15:30

**Coffee Break 20min**

Chair: Gleb Yakubov

16:30

**S6-O11 - Bender, Caroline**

*TIME-DEPENDENT CHANGES IN THE FINE STRUCTURE OF  
STRUCTURALLY DIFFERENT PECTINS IN IN VITRO FERMENTATION  
STUDIES WITH HUMAN INTESTINAL BACTERIA*

16:50

**S6-O12 - Martinez, Mario**

*INFLUENCE OF AMYLOSE AND AMYLOPECTIN  
MOLECULAR STRUCTURE ON SELF-ASSEMBLY  
AND WHEAT BREAD-STALING*

17:10

**S6-O13 - Bisson, Giulia**

*CHEMICAL, TECHNOLOGICAL AND BIOLOGICAL FEATURES OF AN  
EXOPOLYSACCHARIDE FROM LEUCONOSTOC MESPENTEROIDES*

17:30

**S6-O14 - Muñoz-Juan, Amanda**

*INSIGHTS OF BACTERIAL CELLULOSE NANOFIBERS' BIOINTERACTION  
USING C. ELEGANS AS A MODEL*



## Wednesday, September 20<sup>th</sup>

Time		Location
08:40	<b>Plenary Lecture – João Mano</b> <b>2023 EPNOE SCIENCE AWARD</b> <i>HYDROGELS FROM MARINE-DERIVED POLYSACCHARIDES FOR BIOMEDICAL APPLICATIONS</i> Chair - Laura Nyström	HS P1 Petersgasse 16
19:30	<b>Gala Dinner</b>	Seifenfabrik, Angergasse 43

<b>Session 1 - Advances in polysaccharide analysis, extraction and characterization</b>	<b>HS P1</b> Petersgasse16
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Chair: Henk Schols

09:30	<b>S1-KN - Nyström, Laura</b> Keynote lecture <i>COMPLEMENTARY METHODOLOGIES FOR DETECTING WEAK INTERACTIONS OF NEUTRAL SOLUBLE POLYSACCHARIDES</i>
10:00	<b>S1-O16 - Mazetto de Carvalho, Mariana</b> <i>LIPOSOME SURFACE COATING USING DISTINCT B-GLUCANS FRACTIONS FROM PLEUROTUS ERYNGII</i>
10:20	<b>S1-O17 - Koso, Tetyana</b> <i>SOLUTION-STATE NMR IS NOW AN ACCESSIBLE TOOL FOR THE ANALYSIS OF CRYSTALLINE CELLULOSES</i>
10:40	<b>Coffee Break</b> 30min

<b>Session 4 - Emerging polysaccharide based (nano)materials</b>	<b>HS P1</b> Petersgasse16
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Chair: Magnus Norgren

11:10	<b>S4-O11 - Jerlhagen, Asa</b> <i>NANOCELLULOSE MODIFICATION BY THE INCORPORATION OF CORE-SHELL NANOLATEXES SYNTHESIZED THROUGH PISA</i>
11:30	<b>S4-O12 - Mietner, Jakob Benedikt</b> <i>POLYMER MODIFIED CNF CROSS-LINKED WITH A VARIETY OF NANOPARTICLES IN A ONE-STEP SURFACE-INITIATED CONTROLLED RADICAL POLYMERIZATION (SI-SET-LRP)</i>
11:50	<b>S4-O13 - Ellassadi, Fadoua</b> <i>STRUCTURE PROPERTIES RELATIONSHIPS FOR NATURAL RUBBER FILLED WITH CELLULOSE NANOCRYSTALS</i>
12:10	<b>S4-O14 - Lakovaara, Matias</b> <i>HIGHLY TRANSPARENT HEAT-SEALABLE CNF FILMS THROUGH ESTERIFICATION AND ULTRASONIC TREATMENT</i>
12:30	<b>Lunch Break</b> 1h 40min



Chair: Magnus Norgren

- 14:10 **S4-O15 - Metilli, Lorenzo**  
*CELLULOSE-MOF SUSPENSIONS: TOWARDS SELF-SUPPORTED POLYFUNCTIONAL MATERIALS DESIGNED FROM ULTRAFILTRATION*
- 14:30 **S4-O16 - Riva, Laura**  
*INVESTIGATING THE ROLE OF AGNO<sub>3</sub>-DERIVED SILVER NANOPARTICLES SUPPORTED ONTO TEMPO-OXIDIZED CELLULOSE NANOFIBERS IN PROMOTING CD<sub>2</sub><sup>+</sup> CATIONS ADSORPTION*
- 14:50 **S4-O17 - Anisie, Alexandru**  
*COPPER OXIDE NANOPARTICLE-DOPED NANOFIBER MATS FOR EFFECTIVE AIR FILTRATION*
- 15:10 **S4-O18 - Delgado-Aguilar, Marc**  
*DIRECT SILVER NANOPARTICLES SYNTHESIS ONTO NANOCELLULOSE FOR ANTIBACTERIAL CELLULOSE-BASED FOOD PACKAGING*
- 15:30 **Coffee Break 40min**

<b>Session 10 - Polysaccharides in a sustainable and circular economy</b>	<b>HS P1</b> Petersgasse16
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Chair: Marco Beaumont

- 16:10 **S10-O16 - Selinger, Julian**  
*FROM WASTE TO WATTS: UPCYCLING COFFEE AND SUGAR INDUSTRY WASTE FOR SUPERCAPACITORS*
- 16:30 **S10-O17 - Cabrera-Villamizar, Laura**  
*HYBRID BIOPOLYMERIC AEROGELS WITH REDUCED WATER VAPOR SORPTION USING RICE STRAW CELLULOSE COLONIZED BY POLYHYDROXYLAKANOATE-PRODUCING BACTERIA*
- 16:50 **S10-O18 - Winter, Armin**  
*AQUATIC PLANTS FROM DANUBE REGION AS URBAN BIOREFINERY FEEDSTOCK*
- 17:10 **S10-O19 - de Roode, Matthew**  
*THE CHICORY INULIN PROCESS 2.0*
- 17:30 **S10-O20 - Gonçalves, Idalina**  
*RENEWABLE AND ACTIVE 3D PRINTED STARCH-BASED PACKAGES DERIVED FROM POTATO AND COFFEE BYPRODUCTS*



**Session 8 - Composites, textiles and fiber network structures****HS P2**  
Petersgasse16

Chair: Avinash Manian

09:30

**S8-O11 - Nour El Dein, Ali Al Hadi***FLAX SHIVES AS REINFORCEMENTS FOR INJECTION  
MOLDED BIO-BASED COMPOSITES*

09:50

**S8-O12 - Tilouche-Guerdelli, Khouloud***MODIFICATION OF WRAPPED FLAX ROVINGS WITH TANNINS MOLECULES  
FOR THE DEVELOPMENT OF FABRICS FOR COMPOSITE APPLICATIONS*

10:10

**S8-O13 - Bračič, Matej***THE ROLE OF POLYSACCHARIDES IN PREVENTION OF ACIDIC  
DEGRADATION OF CELLULOSE-BASED PAPER ARTEFACTS*

10:40

**Coffee Break 30min**

Chair: Avinash Manian

11:10

**S8-O14 - Hummel, Michael***COLORED TEXTILE WASTE AS CELLULOSE SOURCE  
FOR MANUFACTURED FIBERS*

11:30

**S8-O15 - Mautner, Andreas***HIGH-VELOCITY STRETCHING OF RENEWABLE POLYMER BLENDS*

11:50

**S8-O16 - Neudecker, Felix***UPGRADING WHEAT STRAW TO HIGH-PERFORMANCE  
BINDERLESS BOARDS*

12:10

**S8-O17 - Frias de Albuquerque, Mariana***EFFECT OF ENZYME HYDROLYSIS INCUBATION CONDITIONS  
ON MECHANICAL PULP FIBRE MORPHOLOGY*

12:30

**Lunch Break 1h 40min****Session 5 - Polysaccharide gels, porous materials,  
emulsions****HS P2**  
Petersgasse16

Chair: Henrikki Limatainen

14:10

**S5-O11 - Petri, Denise F. S.***THE STRUCTURE OF MICELLES CONTROLS THE RHEOLOGICAL  
AND MECHANICAL PROPERTIES OF CELLULOSE ETHER-BASED  
HYDROGELS AND CRYOGELS*

14:30

**S5-O12 - Sudre, Guillaume***STRETCHABLE HYDROGELS FROM THE CONTROLLED  
POLYELECTROLYTE ASSOCIATION OF POLYSACCHARIDES*

14:50

**S5-O13 - Guccini, Valentina***TAILORED NANOCELLULOSE-BASED HYDROGELS PREPARED BY  
OSMOTIC DEHYDRATION*

- 15:10 **S5-O14 - Navarro, Julien R.G.**  
*PRODUCTION OF VARIOUS HYBRID BIO-BASED GEL INK MATERIALS MADE OF POLYMER GRAFTED NANOCELLULOSE, SUITABLE FOR 3D PRINTING APPLICATION*
- 15:30 **Coffee Break 40min**
- Chair: Falk Liebner  
 16:10 **S5-O15 - Aguado, Roberto Juan**  
*NANOCELLULOSE AS STABILIZER FOR STORABLE EMULSIONS OF DITHIZONE/CHLOROFORM IN WATER, AND THEIR RESPONSE TO MERCURY(II) IONS*
- 16:30 **S5-O16 - Atoufi Najafabadi, Zhaleh**  
*DEVELOPMENT OF BIO-BASED AMBIENT-DRIED AEROGELS WITH PH CONTROLLABLE SURFACE CHARGE FOR VERSATILE WATER PURIFICATION*
- 16:50 **S5-O17 - Asdrubal, Aurelie**  
*FUNGAL CHITOSAN IN PICKERING EMULSION: PROMISING FULLY EMULSIFIED SYSTEM FOR TOPICAL APPLICATION*
- 17:10 **S5-O18 - Gago, Diana**  
*DEVELOPMENT OF POROUS DICARBOXYMETHYL CELLULOSE ADSORPTIVE MEMBRANES*

<b>Session 9 - Interactions of plant cell wall polymers</b>	<b>HS BMT</b> Stremayrgasse 16
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Chair: Chunlin Xu

- 09:30 **S9-KN - Dupree, Paul** Keynote lecture  
*POLYSACCHARIDE STRUCTURE INFLUENCES THE INTERACTIONS WITH LIGNIN AND CELLULOSE IN PLANT CELL WALLS*
- 10:00 **S9-O1 - Beaugrand, Johnny**  
*NON-CELLULOSIC AND CELLULOSIC CELL WALL POLYMERS INFLUENCE ON FLAX BUNDLES MECHANICAL PROPERTIES*
- 10:20 **S9-O2 - Thompson, Rosalie Joan**  
*THE USE OF SOLID-STATE NMR TO STUDY PLANT CELL WALL POLYSACCHARIDE STRUCTURE AND INTERACTIONS*
- 10:40 **Coffee Break 30min**
- Chair: Johnny Beaugrand  
 11:10 **S9-O3 - Le Moigne, Nicolas**  
*IN-SITU MONITORING OF THE ULTRASTRUCTURE AND MECHANICAL PROPERTIES OF FLAX CELL WALLS DURING CONTROLLED HEAT TREATMENT*
- 11:30 **S9-O4 - Spirk, Stefan**  
*A SCREENING PLATFORM FOR ASSESSING XYLANASE ACTIVITY ON CELLULOSE*



11:50 **S9-O5 - Xu, Chunlin**  
*BIO-BASED LATEX FROM HEMICELLULOSE*

12:30 **Lunch Break** 1h 40min

<b>Session 7 - Polysaccharides in medical and pharmaceutical Applications</b>	<b>HS BMT</b> Stremayrgasse 16
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Chair: Daniel Langerreiter

14:10 **S7-O11 - Fardim, Pedro**  
*POLYSACCHARIDE-BASED BIOHYBRID NANOFIBERS FOR WOUND HEALING APPLICATIONS*

14:30 **S7-O12 - Teixeira Polez, Roberta**  
*CHARACTERIZATION OF CELL-BIOMATERIAL ADHESION FORCES THAT INFLUENCE 3D CELL CULTURE*

14:50 **S7-O13 - Mohan, Tamilselvan**  
*ENDOTHELIZATION OF POLYCAPROLACTONE SCAFFOLDS WITH HYALURONIC ACID - PEPTIDE CONJUGATES*

15:10 **S7-O14 - Otoni, Caio Gomide**  
*STRATEGIES FOR LOADING LYOTROPIC LIQUID CRYSTALS WITHIN HYDROGELS: THE CASE OF CUBOSOMES AND BACTERIAL CELLULOSE TOWARDS CONTROLLED CARGO RELEASE*

15:30 **Coffee Break** 40min

Chair: Carmen Freire

16:10 **S7-O15 - Carvalho, Joao P F**  
*DEVELOPMENT OF ALL-CELLULOSE BIOINKS FOR 3D BIOPRINTING APPLICATIONS*

16:30 **S7-O16 - Langerreiter, Daniel**  
*SOLARSAFE – LIGHT-MEDIATED SELF-STERILIZING CELLULOSIC HYBRID MATERIAL*

16:50 **S7-O17 - Dulong, Virginie**  
*NANOGEELS OF POLYSACCHARIDES WITH ANTIOXIDANT AND ANTIBACTERIAL ACTIVITIES FOR DRUG DELIVERY*

17:10 **S7-O18 - Marin, Luminita**  
*NANOFIBERS BASED ON QUATERNIZED CHITOSAN AS BIOABSORBABLE WOUND DRESSINGS*

17:30 **S7-O19 Feitosa, Judith P A**  
*DEVELOPMENT OF GUAR GUM-BASED HYDROGELS WITH POTENTIAL APPLICATION AS WOUND DRESSINGS  
DEVELOPMENT OF GUAR GUM-BASED HYDROGELS WITH POTENTIAL APPLICATION AS WOUND DRESSINGS*



**Session 3 - Progress in bulk, surface and interactions of polysaccharide through experimental and computational methods**

**TDK-S.**  
Petersgasse 16

Chair: Katja Heise

- 09:30      **S3-KN - Ogawa, Yu** Keynote lecture  
*DRYING-INDUCED STRUCTURAL MODIFICATIONS OF NANOCELLULOSES: 4D STEM AND MOLECULAR DYNAMICS SIMULATION STUDY*
- 10:00      **S3-O1 - Medronho, Bruno**  
*PROBING CELLULOSE-SOLVENT INTERACTIONS WITH SELF-DIFFUSION NMR: ONIUM HYDROXIDE CONCENTRATION AND CO-SOLVENT EFFECTS*
- 10:20      **S3-O2 - Grisel, Michel**  
*DETERMINATION OF THE MOLECULAR INTERACTIONS BETWEEN POLYSACCHARIDES IN AQUEOUS MEDIA BY FLUORESCENCE SPECTROSCOPY*
- 10:40      **Coffee Break** 30min
- Chair: Isabelle Capron
- 11:10      **S3-O3 - Khodayari, Ali**  
*ELECTROSPINNING OF CELLULOSE NANOCRYSTALS*
- 11:30      **S3-O4 - Orelma, Hannes**  
*MANUFACTURE OF SUPERHYDROPHILIC CELLULOSE FILMS*
- 11:50      **S3-O5 - Pachernegg, Lukas**  
*CELLULOSE THIN FILM INTERACTIONS WITH IONIC LIQUIDS*
- 12:10      **S3-O6 - Palasingh, Chonnipa**  
*DIALCOHOL XYLAN THIN FILMS AND THEIR SWELLING PROPERTIES*
- 12:30      **Lunch Break** 1h 40min
- Chair: Hubert Hettegger
- 14:10      **S3-O7 - Capron, Isabelle**  
*TUNABLE EMULSIONS BASED ON CELLULOSE NANOCRYSTALS MODIFIED BY ACYL CHAINS AND CELLULOSE DERIVATIVES*
- 14:30      **S3-O8 - Biegler, Veronika**  
*DOES XYLAN HAVE A POSITIVE EFFECT IN THREE-DIMENSIONAL?*
- 14:50      **S3-O9 - Leppänen, Ilona**  
*COMBINING ORDERED CELLULOSE NANOCRYSTALS AND MOBILE SILK PROTEINS: REVEALING PARAMETERS FOR BIOPOLYMER INTERACTIONS*
- 15:10      **S3-O10 - Huynh, Ngoc**  
*TUNING THE PROPERTIES AND THE WATER INTERACTIONS OF CELLULOSE NANOFIBRIL HYDROGELS USING WILLOW BARK EXTRACT*
- 15:30      **Coffee Break** 40min





<b>Session 2 - Challenges and progress in polysaccharide chemistry</b>	<b>TDK-S</b> Petersgasse 16
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Chair: Martin Gericke

- 16:10      **S2-O16 - Remy, Laurent**  
*THERMO-SENSITIVE HYDROGELS BASED ON CARBOXYMETHYL CELLULOSE COPOLYMERS DUALY FUNCTIONALIZED BY PASSERINI THREE COMPONENT REACTION*
- 16:30      **S2-O17 - Hamzah, Oussama**  
*PASSERINI THREE-COMPONENT REACTION FOR THE HYDROPHOBIZATION OF MICROFIBRILLATED CELLULOSE: A GREEN STRATEGY TOWARD ADVANCED PAPER PACKAGING*
- 16:50      **S2-O18 - Boundaoui, Kocella**  
*ONE-POT FUNCTIONALIZATION OF PULLULAN BY FERULIC ACID USING ENZYMATIC CATALYSIS.*
- 17:10      **S2-O19 - Portillo, Guillermo**  
*CATALYST-FREE ACETYLATION OF STARCH USING GREEN DEEP EUTECTIC SOLVENTS AS REACTION PROMOTER*
- 17:30      **S2-O20 - Xu, Wenyang**  
*MOLECULAR ENGINEERING OF NANOCELLULOSE-POLY(LACTIC ACID) BIO-NANOCOMPOSITE INTERFACE BY REACTIVE SURFACE GRAFTING FROM COPOLYMERIZATION*



## Thursday, September 21<sup>st</sup>

Time		Location
09:00	<b>Plenary Lecture - Silvia Vignolini</b> <i>CELLULOSE PHOTONICS: FROM NATURE TO APPLICATIONS</i> Chair - Tiina Nypelö	HS P1 Petersgasse 16
Chair: Pedro Fardim	<b>EPNOE Round Table Event</b>	HS P1 Petersgasse 16
15:40	<b>Introduction to Round Tables Event</b> <i>CIRCULAR BIO ECONOMY</i>	
15:50	<b>Round Table Lecture - Josef R. Wünsch,</b> President of the SUSCHEM Europe <i>MYTH AND FACTS ABOUT DECARBONIZATION OF CHEMISTRY</i>	
16:15	<b>Round Table Lecture - Wim Thielemans,</b> KU Leuven - American Chemical Society <i>BIOMASS USE IN THE PERSPECTIVE OF USA</i>	
16:30	<b>Round Table Lecture - Hiroshi Kamitakahara,</b> Kyoto University - Cellulose Society of Japan <i>BIOMASS USE IN THE PERSPECTIVE OF JAPAN</i>	
16:45	<b>Round Table Lecture - Karin Stana Kleinschek,</b> TU Graz - EPNOE <i>BIOMASS USE IN THE PERSPECTIVE OF EU (EPNOE RESEARCH ROADMAP)</i>	
17:10	<b>Round Tables - Circular Bioeconomy</b>	
	<b>ESEIA:</b> <i>ON THE WAY TO CLIMATE-NEUTRALITY USING BIO-BASED MATERIALS</i>	HS P1
	<b>ZELLCHEMING:</b> <i>FROM CHALLENGES TO OPPORTUNITIES – FIBER-BASED MATERIALS IN A CIRCULAR FUTURE</i>	HS P2
	<b>ISEKI:</b> <i>REIMAGINING FOOD SYSTEMS TOWARDS SUSTAINABILITY: CONTRIBUTION OF CARBOHYDRATES TO NEW STRATEGIES</i>	HS BMT
	<b>EUCHIS:</b> <i>CHITIN AND CHITOSAN IN HEALTHCARE AND THE FUTURE BIO-BASED ECONOMY</i>	TDK-S.
19:00	<b>Governing Board</b>	HS P1 Petersgasse 16
19:00	<b>EPNOE Junior Meeting</b>	HS P2 Petersgasse 16



## Session 4 - Emerging polysaccharide based (nano)materials

HS P1

Petersgasse16

Chair: Stefan Spirk

09:50

**S4-KN - Torvinen, Katariina** Keynote lecture

*EMERGING BIO-BASED SOLUTIONS IN WEARABLE AND ENERGY STORAGE APPLICATIONS*

10:20

**S4-O19 - Bismarck, Alexander**

*MANURE AS SOURCE FOR (MODIFIED) NANOCELLULOSE, ENERGY AND MORE...*

10:40

**Coffee Break** 30min

11:10

**S4-O20 - Norgren, Magnus**

*TRIBOELECTRIC PERFORMANCE OF REGENERATED CELLULOSE*

11:30

**S4-O21 - Lemieux, Julien**

*POLYSACCHARIDE FROM CRICKETS AS BIOMASS SOURCES FOR CARBON ELECTRODES IN ELECTROCHEMICAL CAPACITOR*

11:50

**S4-O22 - Backovic, Gordana**

*EFFECTS OF ELECTRODEPOSITION MODE ON THE ELECTROCHEMICAL PERFORMANCE OF CELLULOSE NANOCRYSTAL BASED COMPOSITE ELECTRODES FOR HIGH-ENERGY-DENSITY SUPERCAPACITORS*

12:10

**S4-O23 - Fischer, Johanna**

*MICROSPHERES FROM CELLULOSE ESTERS AS ELECTRODE MATERIAL FOR ENERGY STORAGE DEVICES*

12:30

**Lunch Break** 1h 40min

Chair: Anna Roig

14:10

**S4-O24 - Xie, Fengwei**

*FACILELY PREPARED STARCH-BASED ION-CONDUCTIVE HYDROGEL, BATTERIES, AND SELF-POWERED SENSORS WITH STRAIN-SENSITIVITY*

14:30

**S4-O25 - Liu, Qian**

*EXPLOITING THE UNIQUE PROPERTIES OF BIOMASS IN ARID AREAS TOWARDS NEW CLASSES OF BIOPRODUCTS*

14:50

**S4-O26 - Kokol, Vanja**

*ECOTOXICITY AND CYTOTOXICITY OF ANTIMICROBIAL ACTIVE NANOCELLULOSE*

15:10

**Coffee Break** 30min



<b>Session 5 - Polysaccharide gels, porous materials, emulsions</b>	<b>HS P2</b> Petersgasse16
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Chair: Henrikki Liimatainen

09:50                    **S5-KN - Chassenieux, Christophe** Keynote lecture  
*STABILIZATION OF WATER IN WATER EMULSIONS AND THEIR USE AS PRECURSORS OF POROUS HYDROGELS AND MICROGELS*

10:20                    **S5-O19 - Dutertre, Fabien**  
*CHITOSAN-BASED HYDROGELS: INFLUENCE OF CROSSLINKING STRATEGY ON RHEOLOGICAL PROPERTIES*

10:40                    **Coffee Break** 30min

Chair: Christophe Chassenieux

11:10                    **S5-O20 - Legay, Laurianne**  
*PREPARATION AND CHARACTERIZATION OF HYALURONIC ACID-NANOCHITIN CAPSULES FOR DRUG DELIVERY APPLICATIONS*

11:30                    **S5-O21 - Sandu, Cibotaru**  
*TEGYLATED PHENOTHIAZINE-CHITOSAN BASED FRAMEWORKS FOR MERCURY RECOVERY*

11:50                    **S5-O22 - Nypelö, Tiina**  
*SOMETHING FROM THE TWO WORLDS: CELLULOSE HOSTING METAL CATIONS*

12:10                    **S5-O23 - Levä, Tuukka**  
*INTERDISCIPLINARY CHARACTERIZATION OF NANOCELLULOSE- AND ALGINATE-BASED HYDROGELS FOR SOLID-STATE PHOTOSYNTHETIC CELL FACTORIES*

12:30                    **Lunch Break** 1h 40min

Chair: Tatiana Budtova

14:10                    **S5-O24 - Qasim, Umair**  
*PICKERING EMULSIONS AND HYDROPHOBIZED FILMS OF AMPHIPHILIC CELLULOSE NANOFIBERS SYNTHESIZED USING RING-OPENING ESTERIFICATION IN DEEP EUTECTIC SOLVENT*

15:10                    **Coffee Break** 30min



<b>Session 7 - Polysaccharides in medical and pharmaceutical applications</b>	<b>HS BMT</b> Stremayrgasse 16
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Chair: Wu Jian-Yong

09:50 **S7-KN - Tirelli, Nicola** Keynote lecture  
*KNOWN AND UNKNOWN IN HYALURONIC ACID INTERACTIONS WITH ITS MAIN RECEPTOR (CD44)*

10:20 **S7-O20 - Ailincăi, Daniela**  
*CHITOSAN NANOFIBERS FOR BURN HEALING APPLICATIONS*

10:40 **Coffee Break** 30min

Chair: Marin Luminita

11:10 **S7-O21 - Kim, YOHAN** **online**  
*RHIZOBIAL SUCCINOGLYCAN-BASED HYDROGELS FOR STIMULI-RESPONSIVE DRUG DELIVERY*

11:30 **S7-O22 - Ciarlantini, Clarissa**  
*DEVELOPMENT OF ANTIOXIDANT WOUND DRESSINGS BASED ON FUNCTIONALIZED AND CROSSLINKED CHITOSAN*

11:50 **S7-O23 - Felgueiras, Helena P.**  
*MULTIFUNCTIONAL NANOFIBER-HYDROGEL SANDWICH-LIKE SYSTEM FOR INFECTION CONTROL IN CHRONIC WOUNDS*

12:10 **S7-O24 - Huang, Xiaojun** **online**  
*GLUCOMANNANS INITIATE A MULTI-PATHWAY SYNERGISTIC IMMUNE RESPONSE BASED ON THE RECOGNITION OF INNATE IMMUNE RECEPTORS*

12:30 **Lunch Break** 1h 40min

Chair: Elise Courtecuisse

14:10 **S7-O25 - Nunes, Cláudia**  
*SULFATED POLYSACCHARIDES FROM MARINE RESOURCES AS VALUABLE COMPOUNDS FOR BIOMEDICAL APPLICATIONS*

14:30 **S7-O26 - Barud, Hernane**  
*SILANIZED MODIFIED-BACTERIAL CELLULOSE AS PROMISING CELL CULTURE PLATFORM*

15:10 **Coffee Break** 30min



**Session 8 - Composites, textiles and fiber network structures****HS TDK-S**  
Petersgasse16

Chair: Ulrich Hirn

09:50

**S8-KN - Pelton, Robert** Keynote lecture  
*ANALYZING POLYMER ADSORPTION ISOTHERMS ON  
POROUS WOOD PULP FIBERS*

10:20

**S8-O19 - Bauer, Wolfgang**  
*BARRIER PERFORMANCE OF POLYSACCHARIDE-COATED PAPER AND  
BOARD AS A FUNCTION OF THE COATING METHOD AND  
SUBSTRATE PROPERTIES*

10:40

**Coffee Break** 30min

Chair: Ulrich Hirn

11:10

**S8-O20 - Biesalski, Markus**  
*FUNCTIONAL POLYSACCHARIDES TO TAILOR FUNCTIONAL  
PAPER FOR IMPROVED AND NEW APPLICATIONS*

11:30

**S8-O21 - Desse, Melinda**  
*IMPROVING MELT DISPERSION OF CELLULOSIC FILLERS IN  
POLY (BUTYLENE ADIPATE-CO-TEREPHTHALATE): BENEFITS OF STARCH*

11:50

**S8-O22 - Zaini, Lukmanul Hakim**  
*ULTRA-LIGHTWEIGHT FOAMED INSULATION PANELS MADE OF  
OIL PALM TRUNK FIBRES*

12:10

**S8-O23 - Zhao, Anne**  
*MADE IN CHITIN: THE POTENTIAL OF FUNGAL YARNS IN  
THE FASHION INDUSTRY*

12:30

**Lunch Break** 1h 40min

Chair: Robert Pelton

14:10

**S8-O24 - Niemeyer, Philipp**  
*NEW HYBRID ALGINATE-SILICA AEROGEL FILMS*

14:30

**S8-O25 - Czibula, Caterina**  
*EXPLORING THE ANISOTROPY OF CELLULOSIC FIBERS*

15:10

**Coffee Break** 30min

## Friday, September 22<sup>nd</sup>

Time		Location
08:40	<b>Plenary Lecture - Didier Letourneur</b> <i>CLINICAL USE OF POLYSACCHARIDES FOR MOLECULAR IMAGING AND TISSUE REPAIR: TWO EXAMPLES FROM RESEARCH WORKS TO THE PATIENTS</i> Chair – Carmen Freire	HS P1 Petersgasse 16
14:00	<b>Closing ceremony</b>	HS P1 Petersgasse 16

<b>Session 10 - Polysaccharides in a sustainable and circular economy</b>
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<b>HS P1</b> Petersgasse16
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Chair: Blaise Tardy

09:30	<b>S10-KN - Sixta, Herbert</b> Keynote lecture <i>NOVEL SUSTAINABLE WOOD FRACTIONATION PROCESS FOR THE PRODUCTION OF HIGH-QUALITY PRODUCTS FROM THE SEPARATED POLYSACCHARIDES</i>
10:00	<b>S10-O21 - Feldner, Alexander</b> <i>STARCH BASED HOTMELT ADHESIVES AS BIOBASED ALTERNATIVES TO CONVENTIONAL SYSTEMS</i>
10:20	<b>S10-O22 - Li, He</b> <i>IDENTIFICATION OF HEAT-RESISTANT ENZYMES WITH CARBOHYDRATE-BINDING MODULES IN BIOMASS DEGRADATION</i>
10:40	<b>Coffee Break</b> 30min
Chair: Blaise Tardy	
11:10	<b>S10-O23 - Westin, Per-Oskar</b> <b>online</b> <i>WATER-REPELLENT, LOW-DENSITY CELLULOSE-BASED FOAMS: PREPARATION, CHARACTERIZATION, AND BIODEGRADATION</i>
11:30	<b>S10-O24 - Trupin, Clement</b> <i>ARCHITECTURED PAPERS AND BOARDS BY STARCH-BASED GRID PRINTING: A BIO-INSPIRED, LOW-COST APPROACH TO LIGHTWEIGHT PACKAGING</i>
12:30	<b>Lunch break</b> 1h 30 min



<b>Session 9 - Interactions of plant cell wall polymers</b>	<b>HS P2</b> Petersgasse 16
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Chair: Tiina Nypelö

- 09:30      **S9-KN - Höfte, Herman** Keynote lecture  
*POLYMER INTERACTIONS UNDERLYING PLANT CELL WALL ASSEMBLY*
- 10:00      **S9-O6 - Janewithayapun, Ratchawit**  
*STRUCTURE AND PROPERTIES OF WHEAT BRAN ARABINOXYLANS AND THEIR ETHERIFIED DERIVATIVES FOR THERMOPLASTIC FILM APPLICATIONS*
- 10:20      **S9-O7 - Supriyadi, Didik**  
*AN INVESTIGATION OF WOOD BARK AS A PROMISING OF CNF'S RAW MATERIAL*
- 10:40      **Coffee Break** 30min
- Chair: Tiina Nypelö
- 11:10      **S9-O8 - Cavailles, Julie**  
*INFLUENCE OF TWIN-SCREW EXTRUSION PRETREATMENT ON THE PROPERTIES OF LIGNOCELLULOSIC-BASED MATERIALS PRODUCED BY UNIAXIAL THERMO-COMPRESSSION*
- 11:30      **S9-O9 - Dong, Yujiao**  
*MULTIFUNCTIONAL POROUS MATERIALS AND POLYMER COMPOSITES BASED ON ANISOTROPIC PECTIN CRYOGELS*

<b>Session 1 - Advances in polysaccharide analysis, extraction and characterization</b>	<b>HS P2</b> Petersgasse16
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Chair: Tiina Nypelö

- 11:50      **S1-O18 - Zwolschen, Jan Willem**  
*IN VITRO BATCH FERMENTATION OF (UN)SATURATED HOMOGALACTURONAN OLIGOSACCHARIDES BY HUMAN INOCULA*
- 12:30      **Lunch break** 1h 30 min





**Session 3 - Progress in bulk, surface and interactions of polysaccharide through experimental and computational methods**

**HS BMT**  
Stremayrgasse 16

Chair: Wim Thilemans

09:30

**S3-KN - Fischer, Peter** Keynote lecture  
*STRUCTURE AND RHEOLOGY OF STIMULI-RESPONSIVE  
NANOCELLULOSE INTERFACIAL LAYERS*

10:00

**S3-O11 - Hirn, Ulrich**  
*MODELING LIQUID PENETRATION INTO CELLULOSE FIBER NETWORKS  
BASED ON SUBSTRATE AND LIQUID SURFACE ENERGIES*

10:20

**S3-O12- Heux, Laurent**  
*MOLECULAR SWELLING FROM ESTERIFICATION OF MICROFIBRILLATED  
CELLULOSE OR PVA FILMS*

10:40

**Coffee Break** 30min

Chair: Ali Khodayari

11:10

**S3-O13 - Heckel, Sandra**  
*FIBRE MORPHOLOGY CONSERVING CELLULOSE DERIVATIZATION IN THE  
HIGH-CONSISTENCY REGIME*

11:30

**S3-O14 - Dorn, Tobias**  
*CHEMICAL "ON-SURFACE" MODIFICATION AND ANALYSIS OF  
CHITOSAN THIN-FILMS*

11:50

**S3-O15 - Abdellatif, Abdelmohsen**  
*CHITOSAN-GLUCAN/ COLLAGEN HYBRID SCAFFOLD: PREPARATION  
AND CHARACTERIZATION*

12:10

**S3-O16 - Kramar, Ana**  
*INFLUENCE OF CHITOSAN AND CELLULOSE NANOCRYSTALS ON THE  
SURFACE CHARGE OF CELLULOSE ACETATE COMPOSITE FILM*

12:30

**Lunch break** 1h 30 min



<b>Session 6 - Polysaccharide in food and nutrition</b>	<b>TDK-S.</b> Petersgasse16
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Chair: Laura Nyström

- 09:30      **S6-O15 - Wu, Jian Yong**  
*THE EXOPOLYSACCHARIDES OF A MEDICINAL FUNGUS CS-HK1: ANTI-INFLAMMATORY ACTIVITY, MECHANISM OF ACTION AND STRUCTURE CHARACTERIZATION*
- 09:50      **S6-O16 - Andreica, Bianca Iustina**  
*COMPOSITES NANOFIBERS BASED ON QUATERNIZED CHITOSAN FOR FOOD PACKAGING*
- 10:10      **S6-O17 - Lu, Weihong**  
*EFFECT OF AN INULIN-TYPE FRUCTAN FROM PLATYCODON GRANDIFLORUM ON THE INTESTINAL MICROBIOTA IN RATS EXPOSED TO PM2.5*
- 10:40      **Coffee Break 30min**
- Chair: Laura Nyström
- 11:10      **S6-O18 - Silva, José Miguel**  
*WOOD INSPIRED BIOBASED NANOCOMPOSITE FILMS FOR ACTIVE PACKAGING*
- 11:30      **S6-O19 - Tan, Huizi online**  
*TOWARDS GUT MICROBIOTA-ORIENTED FOOD: INVESTIGATIONS OF DIETARY POLYSACCHARIDES*
- 11:50      **S6-O20 - Coreta-Gomes, Filipe**  
*CHITOLIGOSACCHARIDES HYPOCHOLESTEROLEMIC ACTIVITY: RELEVANCE OF IONIC AND NON-IONIC INTERACTIONS*
- 12:10      **S6-O21 - Chen, Chunhua online**  
*RED CHICORY LEAF DIETARY FIBER ALLEVIATIVE DSS-INDUCED COLITIS VIA ENHANCING THE INTESTINAL BARRIER AND REGULATING THE GUT MICROBIOTA*
- 12:30      **Lunch break 1h 30 min**



## POSTER – Session EPNOE 2023

Session 1 - Advances in polysaccharide analysis, extraction and characterization		Poster – Session Stremayrgasse 16
S1-P1	<b>Okugawa, Akari</b> <i>INCREASE IN OXYGEN PERMEABILITY OF REGENERATED CELLULOSE DUE TO SWELLING AND MOLECULAR MOVEMENT CAUSED BY WATER</i>	
S1-P2	<b>Yuguchi, Yoshiaki</b> <i>COMPLEX FORMATION OF SEAWEED POLYSACCHARIDE AND WHEY PROTEIN</i>	
S1-P3	<b>Pandeirada, Carolina</b> <i>WHEAT AND RYE ARABINOXYLANS ARE DIFFERENTLY SUSCEPTIBLE TO FENTON-OXIDATION</i>	
S1-P4	<b>Jiang, Xuehe</b> <i>CHEMICAL MODIFICATION AND FLUORESCENT LABELING OF CELLULOSE NANOFIBRILS: STED SUPER-RESOLUTION IMAGING OF A SINGLE FIBRIL AND ITS EMBEDDING IN A COMPOSITE</i>	
S1-P5	<b>De Ceulaer, Femke</b> <i>BIOFABRICATION OF FUNCTIONAL PULLULAN - CONTROL OF THE PULLULAN PRODUCTION AND MOLECULAR WEIGHT</i>	
S1-P6	<b>Murciano Martinez, Patricia</b> <i>PHYSICO-CHEMICAL CHARACTERIZATION OF POLYSACCHARIDES FROM EDIBLE SEAWEEDES</i>	
S1-P7	<b>Drys, Magdalena</b> <i>REACTIVE DISSOLUTION OF 6-HALO-6-DEOXYCELLULOSES AND THEIR CHARACTERIZATION BY SOLUTION-STATE NMR</i>	
S1-P8	<b>Wintersteller, Peter</b> <i>DISTRIBUTION-ANALYSIS OF AQUEOUS POLYSACCHARIDE-SYSTEMS BELOW OVERLAPPING CONCENTRATION</i>	
S1-P9	<b>Huber, Anton</b> <i>RESPONSE CAPABILITY OF AQUEOUS POLYSACCHARIDE-SYSTEMS BEYOND OVERLAPPING CONCENTRATION</i>	
S1-P10	<b>Casillo, Angela</b> <i>ANTARCTIC BACTERIA AS SOURCE OF BIOACTIVE POLYSACCHARIDES</i>	
S1-P11	<b>Vetter, Daniel</b> <i>SWEETSEP™ AEX200 A NEW STATIONARY PHASE FOR FAST AND HIGH-RESOLUTION SEPARATION OF CARBOHYDRATES USING HPAEC-PAD</i>	



- S1-P13**      **Teubler, Raimund**  
SIMPLE ANALYTICAL METHODS AS BASIS FOR PHYSICS INFORMED NEURAL NETWORKS REVEALING VALID MODELS FOR REACTIVE DIFFUSION OF VOLATILES THROUGH PAPER
- S1-P14**      **Nunes, Cláudia**  
ELECTROMECHANICAL BEHAVIOUR OF CHITOSAN-BASED BIONANOCOMPOSITES
- S1-P15**      **Melikhov, Ivan**  
STABILITY INVESTIGATION OF NOVEL SUPERBASE IONIC LIQUID
- S1-P16**      **Dauwe, Christian**  
RESEARCH ON CHITOSANS CARBOHYDRATE, VACCINES AND SACCHARIDES PURIFICATION, ANALYSATION, DETERMINATION

<b>Session 2 - Challenges and progress in polysaccharide chemistry</b>	<b>Poster – Session</b> Stremayrgasse 16
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- S2-P1**      **Geitel, Katja**  
SYNTHESIS AND CHARACTERIZATION OF POLYSACCHARIDE CARBAZATES
- S2-P2**      **Feldhusen, Jelka**  
SULFATED POLYSACCHARIDES SUBSTITUTED WITH BIFORKED GROUPS: THEIR EFFECT ON PHYSICOCHEMICAL PROPERTIES OF SUSPENSIONS AND MECHANICAL PROPERTIES OF FILMS
- S2-P3**      **Römhild, Katrin**  
POSSIBILITIES OF USING STARCH ESTERS IN PACKAGING APPLICATIONS
- S2-P4**      **Prasch, Herwig**  
CELLULOSE MODIFICATION WITH SMALL SUGAR ENTITIES AS BACTERIAL ANTI-ADHESIVES

<b>Session 3 - Progress in bulk, surface and interactions of polysaccharide through experimental and computational methods</b>	<b>Poster – Session</b> Stremayrgasse 16
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- S3-P1**      **Daghigh Shirazi, Hamidreza**  
LEEK-INSPIRED BIO-BASED FILMS WITH OPTICAL AND SELF-CLEANING FUNCTIONALITIES



- S4-P1**      **Papadakis, Raffaello**  
*GRAPHENE OXIDE POLYSACCHARIDE/POLYETHYLENIMINE CONJUGATES. SYNTHESIS, CHARACTERIZATION AND PROPERTIES*
- S4-P2**      **Engelhardt, Jürgen**  
*OPTIMIZED CARBOXYMETHYL CELLULOSE FOR LITHIUM-ION BATTERIES*
- S4-P3**      **Khakalo, Alexey**  
*SUSTAINABLE SUPERBLACK MATERIALS FROM WOOD FOR LIGHT MANAGEMENT*
- S4-P4**      **Plohl, Olivija**  
*NOVEL MAGNETIC IRON OXIDE-DEXTRAN SULPHATE NANOCOMPOSITES WITH PROMISING PROTEIN-REPELLENT PERFORMANCE*
- S4-P5**      **Durairaj, Vasuki**  
*DIRECT ELECTROCHEMICAL SENSORS DEVELOPMENT USING NANOCELLULOSE / NANOCARBON HYBRID MATERIALS*
- S4-P6**      **Ritter, Maximilian**  
*MAKING WOOD LUMINESCENT WITH STYRIAN PUMPKIN SEEDS*
- S4-P7**      **Dalloul, Feras**  
*3D GEL-PRINTING OF A TOUGH POLYMER COMPOSITE GEL INK REINFORCED WITH CHEMICALLY MODIFIED CELLULOSE NANOFIBRILS SHOWING SELF-HEALING BEHAVIOUR*
- S4-P8**      **Aguado, Roberto**  
*KINETIC/SELECTIVITY STUDY AND REAL-TIME MONITORING STRATEGY FOR TEMPO-MEDIATED OXIDATION*
- S4-P9**      **Stolpe, Amanda**  
*REGENERATED CELLULOSE TENG WITH COLOUR PRINTED SURFACE FOR INCREASED PERFORMANCE*
- S4-P10**      **Norgren, Magnus**  
*WASTE PAPER-BASED TRIBOELECTRIC NANOGENERATORS*
- S4-P11**      **Panzarasa, Guido**  
*CHITOSAN SELF-ASSEMBLY CONTROLLED IN TIME BY A PH CLOCK REACTION*
- S4-P12**      **Hu, Liqiu**  
*LOWERED WETTABILITY AND ENHANCED BARRIER PERFORMANCE OF PAPERBOARD THROUGH FULLY BIO-BASED CELLULOSE NANOFIBRILS/POLYMERIZED LIGNIN COATING MATERIALS*
- S4-P13**      **Tyagi, Sakshi**  
*CELLULOSE NANOCRYSTALS BASED FLOCCULANTS FOR MARINE MICROALGAL HARVESTING*



- S4-P14**      **Mazega Fontes, Andre**  
*DECREASING UNCERTAINTY IN ENZYMATIC HYDROLYSIS AS PRETREATMENT FOR CELLULOSE MICRO/NANOFIBERS PRODUCTION: CORRELATION BETWEEN STRUCTURAL CHANGES AND PROCESS PARAMETERS*
- S4-P15**      **Gorgieva, Selestina**  
*BIOACTIVITY OF BACTERIAL CELLULOSE INDUCED BY SPRAY-DRIED GELATIN AND GELATIN-NISIN MICROPARTICLES*
- S4-P16**      **Makeu Sokamte, Olive**  
*SURFACE CHEMICAL AND ENZYMATIC HYDROPHOBIZATION OF CELLULOSE NANOCRYSTALS*
- S4-P18**      **Andreica, Bianca Iustina**  
*CHITOSAN/QUATERNIZED CHITOSAN NANOFIBERS DESIGNED FOR BIOMEDICAL APPLICATIONS*
- S4-P19**      **Khalili, Houssine**  
*NANOCELLULOSE-FUNCTIONALIZED AFM PROBES: PROBING SURFACE INTERACTION AT THE NANOSCALE WITH NATURAL ORGANIC MATTER IN THE LIQUID PHASE.*
- S4-P20**      **Vilaró, Pilar**  
*AGGREGATION STUDIES ON THE DISSOLUTION AND REGENERATION OF BIOPOLYMERS FROM HEMP (CANNABIS SATIVA) USING IONIC LIQUIDS*



<b>Session 5 - Polysaccharide gels, porous materials, emulsions</b>	<b>Poster – Session</b> Stremayrgasse 16
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- S5-P1**      **Liu, Chenming**  
*KEVLAR NANOFIBROUS AEROGEL-BASED TANDEM CLOAK ENABLES HIGHLY EFFICIENT THERMAL CAMOUFLAGE*
- S5-P2**      **Everaert, Emmanuel**  
*CARRAGEENANS FROM VERSATILITY ON TEXTURES TO NEW FILM PROPERTIES.*
- S5-P3**      **Sonthalia, Manisha**  
*3D PRINTING OF GELATIN-CHITOSAN-GUARGUM-NANOCELLULOSE BIOMATERIAL BIOINK*
- S5-P4**      **Gruber Chiaregato, Camila**  
*CELLULOSE-BASED CRYOGELS FOR OXYGEN RELEASE*
- S5-P5**      **Sandrini, Daiana Maria Furlan**  
*LIGNOCELLULOSIC MATERIALS AS EFFICIENT DEMULSIFIERS OF INDUSTRIAL LITHIUM GREASE PRODUCTION WASTE*
- S5-P6**      **Romero Lezama, René Rafael**  
*DEVELOPMENT OF A MULTILAYER CELLULOSIC MATERIAL BASED ON CELLULOSE FOAM AND PAPER FOR WATER VAPOR BARRIER SHIFT CONCEPT IN PACKAGING*
- S5-P7**      **Abou Dib, Mira**  
*PROMISING POTENTIAL OF BIO-SOURCED AMPHIPHILIC XANTHAN AS AN EMULSIFIER IN O/W DISPERSIONS*
- S5-P8**      **Ahokas, Henna Pauliina**  
*THE INFLUENCE OF HEMICELLULOSE CONTENT ON THE SOLUBILITY AND REGENERATION OF BLEACHED SOFTWOOD PULP IN NOVEL IONIC LIQUID*
- S5-P9**      **Aguado, Roberto Juan**  
*ANTIOXIDANT FILMS AND COATINGS FROM NANOCELLULOSE-STABILIZED EMULSIONS OF THYME ESSENTIAL OIL IN WATER*
- S5-P10**      **Voisin, Hugo**  
*RHEOLOGY AND MICROSTRUCTURES OF CONCENTRATED LOW-MOLAR MASS XYLOGLUCAN MIXED WITH CELLULOSE NANOCRYSTALS*
- S5-P11**      **Ailincal, Daniela**  
*PIPERONYL-IMINO-CHITOSAN HYDROGELS AS PLATFORM FOR DRUG DELIVERY APPLICATIONS*
- S5-P12**      **Lu, Yi**  
*NANOCHITIN-JAMMED BICONTINUOUS EMULSIONS*
- S5-P13**      **Possari, Laís Taguchi**  
*BIOAEROGELS FROM ORANGE JUICE SIDE-STREAMS*



<b>Session 6 - Polysaccharide in food and nutrition</b>	<b>Poster – Session</b> Stremayrgasse 16
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- S6-P1**      **Srivastava, Nandita**  
*POLYSACCHARIDE-BASED SELF-ASSEMBLED SMART HYDROGEL FOR IN VITRO DELIVERY OF CO-ENCAPSULATED PROBIOTICS AND FOLIC ACID*
- S6-P2**      **Zemljič, Lidija**  
*COATING TECHNOLOGIES FOR PLA USING NATURAL EXTRACTS AND POLYSACCHARIDES FOR THE DEVELOPMENT OF ACTIVE PACKAGING CONCEPT*
- S6-P3**      **Kaloper, Saša**  
*ACTIVE FOOD PACKAGING CONCEPT FOR POLYPROPYLENE BASED ON BILAYER COATINGS OF CHITOSAN AND PLANT EXTRACT FORMULATIONS*
- S6-P4**      **Priyadarshi, Ruchir**  
*SULFUR QUANTUM DOTS ADDED ACTIVE PACKAGING/COATING FORMULATIONS BASED ON SEAWEED-DERIVED POLYSACCHARIDES FOR FOOD PRESERVATION*
- S6-P5**      **Bautista, Gio Ferson**  
*GLYCOPROANTHOCYANIDINS FROM WESTERN RED CEDAR BARK AS FUNCTIONAL INGREDIENTS IN FOOD*
- S6-P6**      **Yu, Wenchen**  
*STRUCTURAL ANALYSIS AND ATTENUATES HYPERURICEMIC NEPHROPATHY OF DEXTRAN FROM THE IMPERATA CYLINDRICA BEAUV. VAR. MAJOR (NEES) C. E. HUBB.*

<b>Session 7 – Polysaccharides in medical and pharmaceutical applications</b>	<b>Poster – Session</b> Stremayrgasse 16
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- S7-P1**      **Mrázek, Jiří**  
*MICROSTRUCTURE AND MECHANICAL PROPERTIES OF HYDRATED LAUROYL-HYALURONAN FILMS*
- S7-P2**      **Hsiung, Shih-Yi**  
*MACHINE LEARNING-BASED MONOSACCHARIDE PROFILING FOR TISSUE-SPECIFIC CLASSIFICATION OF WOLFIPORIA EXTENSA SAMPLES*
- S7-P3**      **Radwan, Rasha Mahmoud**  
*PREPARATION, CHARACTERIZATION OF HYALURONAN/ZINC OXIDE NANOCOMPOSITE-BASED MEMBRANE*
- S7-P4**      **Elveren, Beste**  
*POLYSACCHARIDE BASED STIMULI RESPONSIVE SMART WOUND DRESSINGS WITH CONTROLLED ANTI-INFLAMMATORY DRUG RELEASE*
- S7-P5**      **Steindorfer, Tobias**  
*ADVANCED SURFACE AND PROCESSING TECHNIQUES FOR THE DESIGN OF MULTIFUNCTIONAL 2D AND 3D POLYMERIC MATERIALS*





- S7-P6**      **Kuzmič, Katja**  
*SIMPLE "THIOL-CLICK" ROUTE TO STABLE BIOPOLYMER-BASED ANTIFOULING COATINGS ON POLYDIMETHYLSILOXANE*
- S7-P7**      **Másson, Már**  
*THE EFFECT OF THE DEGREE OF SUBSTITUTION AND MOLECULAR WEIGHT ON ANTIMICROBIAL ACTIVITY OF CHITOSAN DERIVATIVES*
- S7-P8**      **Dobaj Štiglic, Andreja**  
*PREPARATION OF COLLAGEN-CELLULOSE SCAFFOLDS FOR TISSUE ENGINEERING WITH CONTROLLED MECHANICAL PROPERTIES AND LONG-TERM STABILITY*
- S7-P9**      **Sandu, Cibotaru**  
*QUATERNIZED CHITOSAN NANOFIBERS FOR BONE REGENERATION*
- S7-P11**      **Mehling, Marina**  
*NEW SYNERGISM BETWEEN NATIVE CELLULOSE AND BIOMOLECULES*
- S7-P12**      **Arpicco, Silvia**  
*DESIGN, PREPARATION, CHARACTERIZATION AND EVALUATION OF THE TARGETING ABILITY OF PEG/HYALURONIC ACID-PHOSPHOLIPID CONJUGATE MIXED MICELLES*
- S7-P13**      **Paoletti, Luca**  
*HYALURONAN-ESTRADIOL NANOGELS AS POTENTIAL DRUG CARRIERS TO TARGET ER+ BREAST CANCER CELL LINE*
- S7-P14**      **Wojciechowska, Joanna Bożena**  
*POLYMER CROSS-LINKING COLON-TARGETED ENCAPSULATION STRATEGY ENABLES TO IMPROVE OXIDATIVE STABILITY OF PUFA-RICH OILS*
- S7-P15**      **de Paula, Regina Célia Monteiro**  
*DOXURUBICIN-GALACTOMANNAN COPOLYMER NANOCONJUGATES FOR POTENTIAL CANCER TREATMENT*
- S7-P16**      **Balasubramanian, Saravana Karthikeyan**  
*PHYSICO-CHEMICAL AND BIOLOGICAL CHARACTERIZATION OF SYNTHETIC AND EGGSHELL DERIVED NANOHYDROXYAPATITE/CARBOXYMETHYL CHITOSAN COMPOSITES FOR PULP-DENTIN REGENERATION*
- S7-P17**      **Lazaridou, Maria**  
*DEVELOPMENT OF CROSSLINKING PROCESS FOR THE BIOPOLYMER CHITOSAN USING FUROIC ACID FOR POTENTIAL BIOMEDICAL APPLICATIONS*
- S7-P18**      **Brugnoli, Benedetta**  
*ACTIVITY OF CHITOSAN-SODIUM USNATE NANO-ASSEMBLIES AGAINST OSTEOSARCOMA 143B CELLS*



**Session 8 - Composites, textiles and fiber network structures****Poster – Session**  
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- S8-P1**      **Pfennich, Andrea Christine**  
*WATER DISPERSABILITY OF PAPERS– BALANCING MATERIAL STRENGTH AND DISPERSIBILITY*
- S8-P2**      **Pauliukaitytė, Ingrida**  
*BIOCOMPATIBILITY OF NANOFIBROUS CELLULOSE PREPARED BY WET-TYPE ELECTROSPINNING*
- S8-P3**      **Mietner, Benedikt**  
*CELLULOSE FIBER SURFACE MODIFICATION BY SET-LRP FOR COMPOUNDING INTO MECHANICALLY ENHANCED 3D-PRINTABLE MATERIALS*
- S8-P4**      **Rossi, Patrícia Fernanda**  
*PLA FIBERS PRODUCED BY SOLUTION BLOW-SPINNING MODIFIED WITH CURCUMIN AND LIGNIN CARBON DOTS: EVALUATION OF ANTIMICROBIAL ACTIVITY*
- S8-P5**      **Bugaut, Mathieu**  
*EFFECT OF PROCESSING ON THE DISPERSION AND RHEOLOGICAL BEHAVIOUR OF CNC REINFORCED POLYVINYL ALCOHOL NANOCOMPOSITES*
- S8-P6**      **Scheer, Alexa**  
*EXPLORING THE PARTIAL DISSOLUTION OF CELLULOSE FIBERS IN IONIC LIQUID*
- S8-P7**      **Kramar, Ana**  
*PREPARATION OF CELLULOSE ACETATE-CHITOSAN FILMS USING SOLUTION BLOW SPINNING*
- S8-P8**      **Orzan, Elliott**  
*EFFECT OF CURING TEMPERATURE ON PHYTIC ACID CROSS-LINKING TO CELLULOSE*
- S8-P9**      **Sturm, Michael**  
*TOWARDS NEW SOLVENTS FOR LYOCELL – A COMPARISON OF [MTBDH][ACO] AND ITS SUCCESSOR [MTBNH][ACO]*

**Session 9 - Interactions of plant cell wall polymers****Poster – Session**  
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- S9-P1**      **Ladd-Parada, Marjorie**  
*INFLUENCE OF CHEMICAL TREATMENTS ON THE MULTI-SCALE STRUCTURE AND MOLECULAR ORGANISATION OF WHEAT BRAN*
- S9-P2**      **Schaubeder, Jana**  
*EFFECT ON PAPER PROPERTIES BY ADDING AND REMOVING XYLAN FROM CHEMICAL PULPS*



- S9-P3**      **Lupo, Cristina**  
*INTERACTIONS BETWEEN NEUTRAL SOLUBLE POLYSACCHARIDES AND SMALL MOLECULE: INTERPRETATION BY ISOTHERMAL TITRATION CALORIMETRY*
- S9-P4**      **Cybulska, Justyna**  
*MODIFICATIONS OF BACTERIAL CELLULOSE BY IN SITU BIOSYNTHESIS WITH PECTIN AND HEMICELLULOSES*
- S9-P5**      **Kurzyna-Szklarek, Magdalena**  
*FORTIFICATION OF BC-PECTIN CONJUGATES WITH DIVALENT METAL IONS*
- S9-P6**      **Boulos, Samy**  
*INTERACTION OF BARLEY B-GLUCAN WITH SMALL MOLECULES STUDIED VIA POLYSACCHARIDE SPIN-LABELLING & PULSE DIPOLAR EPR SPECTROSCOPY*
- S9-P7**      **Natalio, Filipe**  
*PROMISCUITY IN GLYCOSYLTRANSFERASES: EXPLORING THE IN VITRO AND IN VIVO FORMATION OF CHITIN NANOFIBRILS BY BACTERIAL CELLULOSE SYNTHASES*

<b>Session 10 - Polysaccharides in a sustainable and circular economy</b>	<b>Poster – Session</b> Stremayrgasse 16
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- S10-P1**      **Kokol, Vanja**  
*SCREEN-PRINTING OF NANOFIBRILLATED CELLULOSE FOR AN IMPROVED MOISTURE MANAGEMENT OF FLAME-RESISTANT FABRIC*
- S10-P2**      **Kraševac Glaser, Tjaša**  
*INVESTIGATION OF PHYSICO-CHEMICAL PROPERTIES OF ISOLATED KERATIN SOLUTION FROM POULTRY FEATHERS BY SUBCRITICAL WATER*
- S10-P3**      **Austen, Diana Christine**  
*UPCYCLING OF PAPER TOWELS - ENZYMATIC SACCHARIFICATION FOR SUSTAINABLE PRODUCTS*
- S10-P4**      **Schleicher, Malin**  
*SACCHARIFICATION OF REJECTS OF PAPER PRODUCTION FOR A CIRCULAR ECONOMY*
- S10-P5**      **Craquelin, Mathie**  
*CHITOSAN DERIVATIVES FOR WHEAT PROTECTION AGAINST PATHOGENIC FUNGI*
- S10-P6**      **Skov, Kasper Brandhøj**  
*ACETYLATION OF ANHYDROGLUCOSE TO ENHANCE THE HYDROPHOBIC PERFORMANCE OF STALE BREAD AS PACKAGING MATERIAL*
- S10-P7**      **Kvikant, Minette**  
*AMPHIPHILIC HEMICELLULOSE AS A STABILIZER IN AQUEOUS DISPERSION COATING*

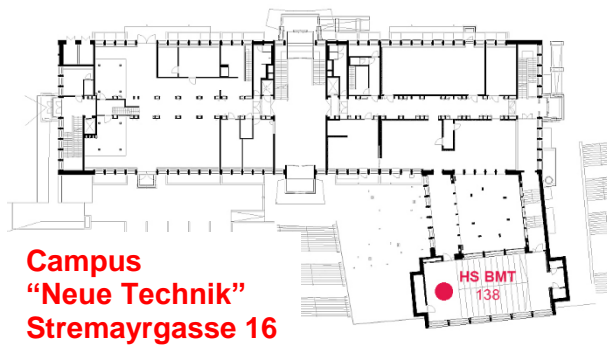


- S10-P8**      **Lopez-Rubio, Amparo**  
*CIRCULAR VALORISATION OF INDUSTRIAL ALGAE WASTE STREAMS INTO HIGH-VALUE PRODUCTS TO FOSTER FUTURE SUSTAINABLE BLUE BIOREFINERIES IN EUROPE (CIRCALGAE PROJECT)*
- S10-P9**      **Šurina, Paola**  
*NANOCELLULOSE PRODUCTION AND APPLICATION IN TISSUE ENGINEERING*
- S10-P10**    **Debabèche, Nesrine Battoul**  
*ALL-CELLULOSE SANDWICHES*
- S10-P11**    **La Placa, Antonia**  
*CHEMICAL REACTIVITY OF VERY SWOLLEN CELLULOSE*
- S10-P12**    **Valim Suquisaqui, Ana Beatriz**  
*MICROFIBRILLATED CELLULOSE (MFC) CRYOGEL INCORPORATED WITH POLY(LACTIC ACID) (PLA) NANOPARTICLES*





↓ Entrance



← Entrance

