



10TH
INTERNATIONAL
CONFERENCE
ON FIBER AND
POLYMER
BIOTECHNOLOGY



APRIL
24-27/2018



Mercure Hotel
Balneário Camboriú
SC | Brazil



CONTACT:  ifpbiotec2018@gmail.com

FINANCIAL SUPPORT



SUPPORT



PROMOTION



1. GENERAL INFORMATION

Organization: Jürgen Andreas

Executing and promoting institution: FURB - Universidade Regional de Blumenau / FURB-Regional University of Blumenau

Areas: Polymers, Enzymology, Proteins, Bioprocesses, Textiles, Chemistry of macromolecules

Date: 24-04-2018 – 27-04-2018

Venue: Mercure Hotel, Balneário Camboriú

Keywords: polymers, textile fibers, biocatalysts, biofunctionalization, nanobiocatalysis and nanostructured materials, sustainable processes, biotechnology, enzymes, biocatalysis, technological application, biopolymers

1.1 Venue

Mercure Hotel

Av. Atlântica, 2010

88330-012 - Centro

Balneário Camboriú – SC, Brazil

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E-mail: h6661-re@accor.com.br

<https://www.accorhotels.com/pt-br/hotel-6661-mercure-camboriu-hotel/index.shtml>

1.2 Organizing Committee:

Jürgen Andreaus (Conference chair, FURB, Brazil)

Artur Cavaco Paulo (Universidade do Minho, Portugal)

Ivonete Oliveira Barcellos (FURB, Brazil)

Martinho Rau (FURB, Brazil)

Dagoberto de Oliveira Silva (FURB, Brazil)

Luiz Pereira Ramos (UFPR, Brazil)

Sérgio Henrique Pezzin (UDESC, Brazil)

1.3 Scientific Committee

Jürgen Andreaus (President of the scientific committee), FURB, Brazil

Artur Cavaco-Paulo, University of Minho, Portugal

Georg Guebitz, Boku-Vienna, Austria

Jinsong Shen, De Montfort University, UK

Vincent Nierstrasz, University Borås, Sweden

Giovanni Sanna, University of Napoli, Italy

Gianluca Ciardelli, Politecnico di Torino, Italy

Manfred Zinn, HES-SO Valais, Switzerland

Jian Chen, University Jiangnan, Wuxi, China

Kenzo Koike, Kao Corporation, Tokyo, Japan

Pramod Agrawal, Saxion University and Agrawal-Ecolabs, Enschede, The Netherlands

Tzanko Tzanov – UPC, Barcelona, Spain

SuYeon Kim, PUCP, Lima, Peru

Luiz Pereira Ramos, UFPR, Brazil

Sérgio Henrique Pezzin, UDESC, Brazil

Elba Pinto da Silva Bon, UFRJ, Brazil

2. HISTORICAL - PREVIOUS CONFERENCES:

Year	Name of the conference	Organizer	City	Country
2000	1st International Conference on Textile Biotechnology	Uminho	Póvoa de Varzim	Portugal
2002	2nd International Conference on Textile Biotechnology	University of Georgia	Athens	USA
2004	3rd International Conference on Textile Biotechnology	Technische Universität Graz	Graz	Austria
2006	4th International Conference on Textile Biotechnology	Kitech	Seoul	South Korea
2007	5th International Conference on Textile Biotechnology	Jiagnan University	Wuxi	China
2009	6th International Conference on Textile and Polymer Biotechnology	Ghent University	Ghent	Belgium
2011	7th International Conference on Polymer and Textile and Biotechnology	Stazione Sperimentale per la Seta	Milan	Italy
2014	8th International Conference on Polymer and Fibre Biotechnology	Uminho	Braga	Portugal
2016	9th International Conference on Fiber and Polymer Biotechnology	Osaka Seikei Colleague	Osaka	Japan

3. CONFERENCE TOPICS

1. *Industrial Enzymes*

- a. Novel biocatalysts for specific applications
- b. Robust enzymes for polymer and textile bioprocessing
- c. Extremozymes

2. *Natural and Bio-based Polymers and Fibers*

- a. Emerging natural
- b. Genetic engineered
- c. Biomass/fermentation-derived polymers and fibers
- d. Biodegradable polymers
- e. Self-assembling polymers
- f. Functionalization of (bio)polymers
- g. Renewable sources of polymers and chemicals; valorization of waste materials

3. *Biofunctionalization of Synthetic Materials*

- a. Surface modification

- b. Functionalization of synthetic polymers and fibers through biocatalysis
 - c. Biologically active surfaces and interfaces
4. *Sustainable Processes*
- a. Bio-catalytic process design
 - b. Upscaling of bioprocesses to industrial level
 - c. Combination of biotechnological, chemical and physical processes
 - d. Low health and environmental impact processes
 - e. Textile bioprocessing
 - f. Wastewater treatment (bio-adsorption/biodegradation)
5. *Smart Materials through Nano bio-catalysis*
- a. Immobilization/incorporation of enzymes into nanostructured materials
 - b. Applications (proteomics, biofuel cells, antifouling, bioconversion, biosensing, bioremediation)
6. *Nano/Bio-materials and Applications*
- a. Bio-inspired, bio-mimicking approaches to material design
Nanostructured materials
 - b. (particles, fibers, etc.)
 - c. Regenerative medicine
 - d. Drug/actives encapsulation and delivery
 - e. Cosmetics
 - f. Detergency

3.1 Summary

The 10th International Conference on Fiber and Polymer Biotechnology (IFPB 2018) programmed for the period from April 24 to 27, 2018, in the Mercure Hotel in the city of Balneário Camboriú, Santa Catarina, is giving continuity to the series of events held since 2000 in biennial form. Based on previous experiences, this event counts on the participation of 100 to 150 participants. IFPB 2018 focuses on research and development of biotechnology and enzyme technology applied to fibers and polymers. It is an internationally consolidated Congress, which is in its Tenth Edition and has been carried out so far in eight countries and three continents. The use of biotechnology and biocatalysts in processes related to fibers and polymers has grown a lot in the last 25 years and proved to be a fundamental tool in the improvement and modernization of processes and products of the textile industry and other industries involving polymers, detergents, cosmetics etc. The application of biocatalysts and biotechnology is critical to the

development of greener and sustainable processes with less consumption of harmful chemical reagents, milder procedure conditions (neutral pH, lower temperatures), lower consumption of energy and water, and lower generation of effluents and residues. The use of biotechnology also allowed the development of innovative and high-quality products for clean technologies, in line with the technological requirements, and environmental preservation. IFPB 2018 is a multidisciplinary event and thematic technical sessions will be focused on the following themes: Industrial Enzymes, Natural and Bio-based Polymers and Fibers, Biofunctionalization of Synthetic Materials, Sustainable Processes, Smart Materials through Nano bio-catalysis, Nano/Bio-materials and Applications. The region of the Itajaí Valley, an industrially and economically important area nearby Balneário Camboriú, is considered one of the largest textile centers in Brazil and Latin America and has various industries sectors using bioprocesses involving biocatalysts. The IFPB 2018 is an exceptional opportunity for the discussion of research advances and prospects of biotechnology applied to the processing of polymers and fibers. Plenary lectures, technical sessions, panel sessions and short courses will stimulate the exchange of information between participants from universities, research institutes, government agencies and industries. In addition, the event will promote the participation and interaction of Brazilian undergraduate and postgraduate students, especially from FURB, event promoter, with national and international researchers and disseminate the Regional University of Blumenau-FURB more in the academic and business world.

4. FINAL PROGRAM

The final program previews one Short-course, 5 Plenary Lectures, 7 Key Note Lectures, Technical Sessions with oral presentations with a duration of 20 minutes and two Poster Sessions on April 25 and 26 in the afternoon during the coffee-break.

Time	April 24 Tuesday	Time	April 25 Wednesday	April 26 Thursday	April 27 Friday
8:30 – 10:00		9:00 - 10:00	Plenary Lecture 1 (Opening) (Georg Guebitz)	Plenary Lecture 3 (Artur Cavaco-Paulo)	Plenary Lecture 5 (Ulyana Shimanovich)
		10:00 - 10:30	Key Note Lecture 1 (Marcio Poças)	Key Note Lecture 4 (Gianluca Ciardelli)	Key Note Lecture 7 (Pedro Henrique H. Araújo)
10:00 – 12:00		10:30 – 11:00	Coffee Break	Coffee Break	Coffee Break
		11:00 – 12:20	Session 1	Session 4	Session 6
12:00 – 14:00	Registration	12:20 – 14:00	Lunch	Lunch	Closing Ceremony, Lunch
14:00 – 15:45	Short-Course Part 1	14:00 - 15:00	Plenary Lecture 2 (Richard Gross)	Plenary Lecture 4 (Airtón Martin)	
15:45 -16:15	Coffee-Break	15:00 – 15:30	Key Note Lecture 2 (Luiz Pereira Ramos)	Key Note Lecture 5 (Madalena Martins)	
16:15 – 18:00	Short-Course Part 2	15:30 – 16:30	Session 2	Lecture (Kenzo Koike) Key Note Lecture 6 (Silgia Aparecida da Costa)	
18:00 – 18:30	Free	16:30 – 17:30	Coffee Break and Poster Session	Coffee Break and Poster Session	
18:30 – 19:00	Opening Ceremony	17:30-18:00	Key Note Lecture 3 (Sérgio Henrique Pezzin)	Session 5	
19:00 – 20:00	Amélia Malheiros (Project presentation)	18:00-19:10	Session 3		
20:00	Welcome Cocktail	After 19:10	Free	Social Program	

4.1 Short course

Proposed title – Biocatalysis Applied to Fibre and Polymer Science

Georg Guebitz, Institute of Environmental Biotechnology, University of Natural Resources and Life Sciences (BOKU), Viena, Áustria

Richard Alan Gross, Rensselaer Polytechnic Institute, Department of Chemistry and Chemical Biology, New York, EUA

4.2 Oral presentations and poster sessions

Oral presentations should be prepared in Powerpoint (Office Microsoft).

Posters might have a maximum size of 1.20 m (height) x 1.00 m (width). They have to be prepared to be hanged with a cord or wire.

Posters should be fixed on April 24 in the afternoon or April 25 in the morning and shall be exposed during the whole conference. There will be a special Poster Session on April 25 and 26 in the afternoon (simultaneously with an extended coffee break).

4.3 Invited Speakers

For more information about the Speakers use the links below

Airton Abrahão Martin, Instituto Científico e Tecnológico da Universidade Brasil – University Brazil - São Paulo, Brazil

<http://lattes.cnpq.br/7541422056269063>

Artur Cavaco-Paulo, Centre of Biological Engineering, Universidade do Minho, Portugal

<https://www.ceb.uminho.pt/bbrg/People/Details/12b20dd2-3a63-4098-a2cf-b4a261c85db3>

Georg Guebitz, Institute of Environmental Biotechnology, University of Natural Resources and Life Sciences (BOKU), Vienna, Austria

[https://www.boku.ac.at/en/personen/person/AEE161136C4037A7/;](https://www.boku.ac.at/en/personen/person/AEE161136C4037A7/)

<http://www.ifa-tulln.boku.ac.at/en/institut-fuer-umweltbiotechnologie/>

Gianluca Ciardelli, Politecnico di Torino, Turin · DIMEAS - Department of Mechanical and Aerospace Engineering, Italy

[http://www.dimeas.polito.it/en/personale/scheda/\(nominativo\)/gianluca.ciardelli](http://www.dimeas.polito.it/en/personale/scheda/(nominativo)/gianluca.ciardelli)

Jose Domingos Fontana, Post-graduation in Science and Environmental Technology,
UTFPR- Federal University of Technology - Paraná, Curitiba, Brazil

<http://lattes.cnpq.br/3662687391650257>

Luiz Pereira Ramos, Department of Chemistry, Federal University of Parana,
Curitiba, Brazil

<http://lattes.cnpq.br/0721743417678801>

Madalena Martins, Centre of Biological Engineering, Universidade do Minho,
Portugal;

<https://www.ceb.uminho.pt/bbrg/People/Details/6fe78ae1-5c3d-48eb-959d-c446398fe071>

Marcio José Poças Fonseca, Institute of Biological Sciences, University of Brasilia,
Brazil

<http://lattes.cnpq.br/2967731651217225>

Pedro Henrique Hermes Araújo, Department of Chemical Engineering and Food
Engineering, Federal University of Santa Catarina, Brazil

<http://lattes.cnpq.br/7570230588831120>

Richard Alan Gross, Rensselaer Polytechnic Institute, Department of Chemistry and
Chemical Biology, New York, USA

<https://science.rpi.edu/chemistry/faculty/richard-gross>

<http://homepages.rpi.edu/~grossr/index.htm>

Sergio Henrique Pezzin, Department of Chemistry, State University of Santa
Catarina, Joinville, Brazil

<http://lattes.cnpq.br/2375722997534058>

Silgia Aparecida da Costa, University of São Paulo, EACH, São Paulo, Brazil

<http://lattes.cnpq.br/812148951178800>

Ulyana Shimanovich, Department of Materials and Interfaces Weizmann Institute,
Israel

<http://www.weizmann.ac.il/materials/shimanovich/>

4.4 Schedule of Presentations

Tuesday, April 24, 2018

12:00-14:00	Registration
14:00-15:45 Short Course	Richard Alan Gross, Rensselaer Polytechnic Institute, Department of Chemistry and Chemical Biology, New York, USA Short Course Biocatalysis Applied to Fibre and Polymer Science Part 1
15:45-16:15	<i>Coffee Break</i>
16:45-18:00 Short Course	Georg Guebitz, Institute of Environmental Biotechnology, University of Natural Resources and Life Sciences (BOKU), Vienna, Austria Short Course Biocatalysis Applied to Fibre and Polymer Science Part 2
18:00-18:30	Free
18:30-19:00	Opening Ceremony
19:00-20:00	Amélia Malheiros – Hering S.A., Brazil <i>Trama Afetiva (Affective Weft)</i> – A collaborative experience through sustainable design
20:00–21:00	Welcome Cocktail

Wednesday, April 25, 2018

Session Chair	Gianluca Ciardelli, Politecnico di Torino, Italy Jürgen Andreas, Universidade Regional de Blumenau, Brazil
Opening Lecture Plenary Lecture 1 9:00-10:00	Georg Guebitz, Institute of Environmental Biotechnology, University of Natural Resources and Life Sciences (BOKU), Vienna, Austria Designing enzymes for future polymer and fibre processing
10:00-10:30 Key Note Lecture 1	Marcio José Poças Fonseca, University of Brasilia, Brasilia, Brazil The impact of DNA methylation on <i>Humicola grisea</i> var. <i>thermoidea</i> enzyme activities and on the glucose-mediated gene repression
10:30-11:00	<i>Coffee Break</i>
Session Chair	Pedro Henrique H. Araújo, Federal University of Santa Catarina, Brazil Tzanko Tzanov, Universitat Politècnica de Catalunya, Spain
Session 1 11:00-11:20	Alessandro Pellis, Department of Chemistry, Green Chemistry Centre of Excellence, University of York, York, United Kingdom Enzymatic tools for the green synthesis of clickable polyesters

11:20-11:40	Jürgen Andraus, Department of Chemistry, Universidade Regional de Blumenau (FURB), Blumenau, Brazil Ultrasound - a green tool to boost enzyme reactions in lignocellulosic biomass exploitation
11:40-12:00	Pramod Agrawal, Saxion University and Agrawal-Ecolabs, Enschede, The Netherlands Hydrophobic bio-functionalization of pure PLA and PLA/Jute bio-composite by surface activation with diverse esterase enzymes and coupling with Alkyl Ketene Dimer
12:00-12:20	Daniela Bresolin, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil A green polyol as support for the immobilization of lipase NS 40116 in polyurethane foam
12:20-14:00	<i>Lunch</i>
Session Chair	Artur Cavaco-Paulo, Universidade do Minho, Portugal Kenzo Koike, Kao Corporation, Japan
14:00-15:00 Plenary Lecture 2	Richard Alan Gross, Rensselaer Polytechnic Institute, Department of Chemistry and Chemical Biology, New York, USA Leaf Branch and Compost Cutinase and Ultra-Thin Bacterial Cellulose
15:00-15:30 Key Note Lecture 2	Luiz Pereira Ramos, Department of Chemistry, Federal University of Paraná (UFPR), Curitiba, Brazil Confocal laser scanning microscopy of cane bagasse before and after steam explosion and alkaline delignification
Session 2 15:30-15:50	Qiang Wang, College of textiles and clothing, Jiangnan University, Wuxi, China Highly efficient and eco-friendly degradation of wool by L-Cysteine-assisted Esperase
15:50-16:10	José Domingos Fontana, Federal University of Technology - Paraná, Curitiba (UTFPR), Brazil Insights on bacterial nanocellulose for food and non-food applications
16:10-16:30	Simona Bronco, IPCF-CNR, Pisa, Italy Valorization of food by-products as starting materials for bioplastics
16:30-17:30	Coffee Break and Poster Session

Session Chair	Luiz Pereira Ramos, Federal University of Paraná, Brazil Simona Bronco, IPCF-CNR, Italy
17:30-18:00 Key Note Lecture 3	Sergio Henrique Pezzin, State University of Santa Catarina (UDESC), Joinville, Brazil Development of biocomposites derived from biodegradable polyesters
Session 3 18:00-18:20	Camila Utsunomia, Institute of Life Technologies, HES-SO Valais, Sion, Switzerland Biocatalytic synthesis of polyhydroxyalkanoates block-copolymers: Challenges and novel approaches
18:20-18:40	Felipe Andre Pavan, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina, Florianópolis (UFSC), Brazil Influence of key production parameters in the Poly(hydroxybutyrate) production cost
18:40-19:00	André Lourenço Nogueira, Post Graduation Program in Process Engineering, UNIVILLE, Joinville, Brazil PMMA/Nanocrystalline Cellulose Nanocomposites Produced by in situ Suspension Polymerization

Thursday, April 26, 2018

Session Chair	Georg Gübitz, University of Natural Resources and Life Sciences, Austria Marcio José Poças Fonseca, University of Brasilia, Brazil
9:00-10:00 Plenary Lecture 3	Artur Cavaco-Paulo, Centre of Biological Engineering, Universidade do Minho, Braga, Portugal Polymer and Fibre Biocatalysis
10:00-10:30 Key Note Lecture 4	Gianluca Ciardelli, Department of Mechanical and Aerospace Engineering, Politecnico di Torino, Turin, Italy Design of fibrous and injectable platforms for the release of therapeutic ions and drugs in chronic skin wounds treatment
10:30-11:00	<i>Coffee Break</i>
Session Chair	Airton Abrahão Martin, University Brazil - São Paulo, Brazil Madalena Martins, Universidade do Minho, Portugal
Session 4 11:00-11:20	Guillem Ferreres, Universitat Politècnica de Catalunya, Terrassa, Spain Bactericidal hybrid metal-enzyme nanoparticles with polysaccharide biofilm eradication ability
11:20-11:40	Tzanko Tzanov, Universitat Politècnica de Catalunya, Terrassa, Spain Freestanding layer-by-layer membranes incorporating antibacterial biopolymer-capped silver nanoparticles

11:40-12:00	Kristina Dimitrova Ivanova, Universitat Politècnica de Catalunya, Terrassa, Spain, Multifunctional hyaluronic acid based hydrogel with enzymatically embedded silver/lignin nanoparticles
12:00-12:20	Jeddah Marie Vasquez, Vornia Biomaterials Ltd., Synergy Center, Institute of Technology – Tallaght, Dublin, Ireland Honey-mimetic Antibacterial ROS in situ forming Hydrogel Wound Dressing
12:20-14:00	<i>Lunch</i>
Session Chair	Kristina Ivanova, Universitat Politècnica de Catalunya, Spain Ulyana Shimanovich, Weizmann Institute of Science, Israel
14:00-15:00 Plenary Lecture 4	Airton Abrahão Martin, Instituto Científico e Tecnológico da Universidade Brasil – University Brazil - São Paulo, São Paulo, Brazil In vivo Confocal Raman Spectroscopy Applied to Cosmetic Science
15:00-15:30 Key Note Lecture 5	Madalena Martins, Centre of Biological Engineering, Universidade do Minho, Braga, Portugal Changes of the shape of keratin based fibers
15:30-16:00	Kenzo Koike, Kao Corporation, Tokyo, Japan Biotechnology in Cosmetics. - Application of enzymes in hair care products.
16:00-16:30 Key Note Lecture 6	Silgia Aparecida da Costa, School of Arts, Sciences and Humanities, University of São Paulo (USP), São Paulo, Brazil Biopolymers applied in the development of medical textiles
16:30-17:30	Coffee Break and Poster Session
Session Chair	Montserrat E. Sanchez , Universidad Autónoma Metropolitana, Mexico Sergio Henrique Pezzin, State University of Santa Catarina, Brazil
Session 5 17:30:17:50	Kristina Dimitrova Ivanova, Universitat Politècnica de Catalunya, Terrassa, Spain Electrical monitoring of enzymatic infection biomarkers using antibody and peptidoglycan-modified nanoporous membranes
17:50-18:10	Kazuya Sawada, Osaka Seikei College, Osaka, Japan Preparation of the fibrous bio-scaffold utilizing supercritical fluid extraction
18:10-18:30	Laura Morgan, De Montfort University, Leicester, United Kingdom Innovative Technologies for Sustainable Textile Coloration and Surface Design

18:30-18:50	Vanja Kokol, Institute of Engineering Materials and Design, University of Maribor, Maribor, Slovenia Biochemical modification and functionalization of nanocellulose, and its application potentials
18:50-19:10	Richard Cassio Oliveira Amorim, Faculty of Technology of Praia Gande, Praia Grande, Brazil Nanocellulose extraction from banana pseudo-stalk for the production of bioplastic

Friday, April 27, 2018

Session Chair	Pramod Agrawal, Saxion University and Agrawal-Ecolabs, The Netherlands Richard Alan Gross, Rensselaer Polytechnic Institute, USA
9:00-10:00 Plenary Lecture 5	Ulyana Shimanovich, Department of Materials and Interfaces, Weizmann Institute of Science, Rehovot, Israel Protein self-assembly in bio-inspired materials
10:00-10:30 Key Note Lecture 7	Pedro Henrique Hermes Araújo, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil Enzymatic ring-opening polymerization and functionalization of macrolactones
10:30-11:00	<i>Coffee Break</i>
Session Chair	Kazuya Sawada, Osaka Seikei College, Japan Vanja Kokol, University of Maribor, Slovenia
Session 6 11:00-11:20	Manuel Eduardo Martínez-López, Biotechnology Department, Universidad Autónoma Metropolitana, Mexico City, Mexico Removal of heavy metals from contaminated water using an extruded matrix of biodegradable polymers
11:20-11:40	May Kahoush, Textile Materials Technology, Department of Textiles, University of Borås, Borås, Sweden Bio-Electro-Fenton for the Treatment of Textile Wastewater
11:40-12:00	André Lourenço Nogueira, Post-Graduation Program in Process Engineering, UNIVILLE, Joinville, Brazil Antibacterial Efficiency of Cellulose Microparticles Functionalized with Silver Nanoparticles for Water Purification

12:00-12:20	Montserrat Escobar Sanchez, Universidad Autónoma Metropolitana, Mexico City, Mexico Volumetric oxygen transfer coefficient (kLa) and Reynolds number (Re) as scaling-up criteria for the production of β -N-acetylhexosaminidase of <i>Lecanicillium lecanii</i>
12:20-12:40	Closing Ceremony
12:40-14:00	Lunch

POSTER PRESENTATIONS

- PO1 Amanda Bueno, Department of Chemical Engineering, Universidade Regional de Blumenau (FURB), Blumenau, Brazil

Dyeing of Polyester Fabric in High Temperature with Natural Dye Annatto
- PO2 Amanda Marina Agustini, Department of Chemistry, Universidade Regional de Blumenau (FURB), Blumenau, Brazil

Microwave assisted synthesis of furfural and 5-hydroxymethylfurfural from glucose, fructose and sucrose
- PO3 Andrea Cristhiane Krause Bierhalz, Federal University of Santa Catarina (UFSC), Blumenau, Brazil

Release kinetics of sodium diclofenac from alginate films cross-linked with calcium ions
- PO4 Andrea Cristhiane Krause Bierhalz, Federal University of Santa Catarina (UFSC), Blumenau, Brazil

Effect of cross-linking on swelling degree and mass loss of alginate membranes from different polymeric structures
- PO5 Andreza Lopes, Department of Cell Biology, University of Brasilia, Brazil

Establishment of enzymatic cocktail for hydrolysis of biomass lignocellulosis
- PO6 Ângela Graziela Lechinski da Luz Andrade, Department of Chemistry, State University of Santa Catarina (UDESC), Joinville, Brazil

Synthesis of nanocellulose ϵ -caprolactone biocomposites via in situ polymerization
- PO7 Bernardo Dias Ribeiro, Department of Biochemical Engineering, Federal University of Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil

Suberin as an Inducer for Enzymes Production by *Yarrowia lipolytica* IMUFRJ 50682
- PO8 Bernardo Dias Ribeiro, Department of Biochemical Engineering, Federal University of Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil

Green Biphasic System for Enzymatic Polymerization of 11-Aminoundecanoic Acid
- PO9 Bruna Lyra Colombi, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil

Laccase production of white rot fungus grown on SBS paperboard coated with PET, aiming the bioadsorption strategy

- PO10 Carolina Zulian Boeira, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Crude glycerin and vinasse as feedstock for PHA production by engineered *Cupriavidus necator*
- PO11 Carolina Zulian Boeira, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Characterization of poly-hydroxybutyrate from engineered *Cupriavidus necator* grown on glycerol and glucose
- PO12 Cristian de Oliveira Romera, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Enzymatic esterification using Novozym® 435 to obtain a diene with posterior application in polymerization
- PO13 Diandra Albuquerque Lopes Costa, Department of Biology, University of Brasilia, Brazil
Production of mannanase isoforms by *Clonostachys byssicola* cultivated in soybean hulls
- PO14 Felipe Andre Pavan, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Economic Assessment of Poly(hydroxybutyrate) production
- PO15 Francielle Schmitz, Department of Chemistry, Universidade Regional de Blumenau (FURB), Blumenau, Brazil
Preparation and characterization of nanocomposites with zein and quantum dots of ZnO
- PO16 Jacinto Gonçalves, Department of Chemistry, Universidade Regional de Blumenau (FURB), Blumenau, Brazil
Enzymatic hydrolysis of lignocellulosic biomass assisted by ultrasound irradiation
- PO17 Kazuya Sawada, Osaka Seikei College, Osaka, Japan
Keratin Scaffold made by Animal Fiber Protein
- PO18 Laís Feltrin Sidou, Department of Chemistry, Universidade Regional de Blumenau (FURB), Blumenau, Brazil
Can ionic liquids enhance textile dyeing? - Assessing color fixation differences in disperse dyeing when adding ILs in small concentrations
- PO19 Marcia Margarete Meier, Department of Chemistry, State University of Santa Catarina (UDESC), Joinville, Brazil
Development of Biofunctional Bacterial Cellulose Membrane
- PO20 Mariana Quintana-Quirino, Biotechnology Department, Universidad Autónoma Metropolitana, Mexico City, Mexico
Comparison of *Gluconacetobacter xylinus* cellulose produced by submerged and solid cultures
- PO21 Natália Santos Nascimento, Department of Biotechnology, Federal University of Paraíba, João Pessoa, Brazil

- Preparation of Thermo-Responsive Hydrogels Containing Carvacrol Encapsulated in Nanoparticles
- PO22 Patrícia Raquel Silva Zanoni, Embrapa Forestry, Colombo, Brazil
Laccase immobilization on nanofibrillated cellulose for use in lignin refinery
- PO23 Roberta Karoline Morais Ferreira, Department of Chemistry, Regional University of Goiás, Anapolis, Brazil
Conductive Monolithic Polymers for Peroxidase Immobilization
- PO24 Sabine Hillesheim, Department of Chemistry, Universidade Regional de Blumenau (FURB), Blumenau, Brazil
Activity of β -glucosidase enzyme under ultrasonic irradiation
- PO25 Sidnei Emilio Bordignon, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Kinetic analysis on cell growth and poly-hydroxybutyrate production by parental and recombinant *Cupriavidus necator* strains
- PO26 Sidnei Emilio Bordignon, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Kinetic and respiration parameters of engineered *Cupriavidus necator* during poly-hydroxybutyrate production
- PO27 Tania Maria Costa, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Inhibitory effect of α -glucosidase enzyme by mycelium of *Ganoderma lipsiense*
- PO28 Taisei Takeuchi, Department of Biomedical Engineering, Osaka Institute of Technology, Osaka, Japan
In vitro mouse embryo culture on decellularized uterus tissue
- PO29 Thalles Canton Trevisol, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Effect of CaCl_2 crosslinking on mechanical properties of polysaccharide-based membranes
- PO30 Thalles Canton Trevisol, Department of Chemical Engineering and Food Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Brazil
Water behavior properties of films made by different alginate and carboxymethyl cellulose proportions
- PO31 Vanja Kokol, Institute of Engineering Materials and Design, University of Maribor, Maribor, Slovenia
Effect of peptide binding on antibacterial activity and cytotoxicity of protein-based substrates
- PO32 Xuerong Fan, Key Laboratory of Science and Technology of Eco-Textile, Jiangnan University, Wuxi, China
Synthesis, characterization, reactivity ratios and properties of starch-g-poly (acrylic acid-co-methyl acrylate) triggered via enzyme

- PO33 Roziana Cunha C. Jordão, Centre of Sciences and Technology, Catholic University of Pernambuco – UNICAP, Recife, Brazil
- Biosurfactant producing species evaluating several substrates for application in decontamination by petroderivatives
- PO34 Roziana Cunha C. Jordão, Centre of Sciences and Technology, Catholic University of Pernambuco – UNICAP, Recife, Brazil
- Production of Levan by *Bacillus subtilis* var. *Natto* in Bioreactor
- PO35 Karina Alves, Department of Chemistry, Universidade Regional de Blumenau (FURB), Blumenau, Brazil
- Valorization of cotton waste using deep eutectic solvents
- PO36 Dagoberto de Oliveira Silva, Department of Chemistry, Universidade Regional de Blumenau (FURB), Blumenau, Brazil
- Influence of deep eutectic solvents on the enzymatic hydrolysis of cellulose

5. REGISTRATION DATA AND COSTS

Registrations dates and costs for Brazilian and international participants are as follows:

DUE TO GOVERNMENTAL FUNDING WE CAN OFFER A SPECIAL DISCOUNT FOR BRAZILIAN RESEARCHERS REGISTRATION - 30 % OFF

Sponsors and Regular values have also been reduced

Attendee Category	Early Bird until 28/03/2018	Regular after 28/03/2018
Brazilian Graduate Student	R\$ 350,00	R\$ 400,00
Brazilian Post-graduate Student	R\$ 600,00	R\$ 700,00
Brazilian Researcher / Professors	R\$ 1200,00	R\$ 1500,00
Special discount: 30 % off	R\$ 840,00	R\$ 1050,00
International Researcher (international payment)	R\$ 1350,00	R\$ 1700,00
Company	R\$ 1500,00	R\$ 2000,00

Each registration permits the submission of up to two (2) abstracts and its publication in the proceedings, participation of the short-course and includes the welcome cocktail, coffee-breaks and lunch during the conference.

6. SPONSORS AND EXHIBITORS

The amount for **REGULAR SPONSORS** is **R\$ 5.000,00** with the right for one registration and publishing the company's logo on the conference's web-site, conference banners and conference proceedings.

The amount for **GOLD SPONSORS** is **R\$ 7.000,00** with the right for three registrations and publishing the company's logo on all conference materials including the web-site and a space (3 m²) for exhibition.

The amount for **PLATINUM SPONSORS** is **R\$ 10.000,00** with the right for six registrations, publishing the company's logo on all conference materials including the web-site and a space (6 m²) for exhibition.

Companies interested in sponsoring the conference or exhibiting their portfolio and products during the event are invited to contact the Organizing Committee.

Exhibitors conditions and special conditions for Sponsors can be negotiated.

7. BIOCATALYSIS AND BIOTRANSFORMATION - SPECIAL EDITION OF IFPB 2018

Participants of the conference are invited to submit by June 15, 2018 manuscripts for a Special Edition of IFPB 2018 to Biocatalysis and Biotransformation

<http://www.tandfonline.com/loi/ibab20>

Manuscripts have to be submitted through the Manuscript Central:

<https://mc.manuscriptcentral.com/gbab>

indicating that they are submitted to a Special Edition of IFPB 2018

Manuscripts will pass through a normal Peer Review Process according to the Journals Guidelines

8. HOW TO ARRIVE

The nearest Airport to Balneário Camboriú is NAVEGANTES (1 hour flight from São Paulo). From there regular shuttle-buses leave to the bus station in Balneário Camboriú (40 km and 40 minutes' drive). The bus may drop you off at the Mercure Hotel if you ask for.

Two companies handle this transfer independently:

JOPAVI – R\$ 50,00 per person

<http://www.jopaviturismo.com.br/pacote/transfer>

Time schedule from Navegantes to Balneário Camboriú

04:00hs | 07:30hs | 13:00hs | 17:00hs

****The bus at 04:00 only leaves with two paying persons.**

Time schedule from Balneário Camboriú to Navegantes:

09:30hs | 12:00hs | 15:00hs | 19:00hs

LUFER – – R\$ 38,50 per person

<http://www.luferviagem.com.br/transfer>

Time schedule from Navegantes to Balneário Camboriú

Monday - Friday: 07:50hs | 10:00hs | 12:00hs | 13:30hs | 15:50hs | 19:10hs| 21:00hs

Saturday: 10:30hs | 13:30hs | 15:50hs

Sunday: 10:00hs | 13:45hs | 15:50hs | 19:15hs

Time schedule from Balneário Camboriú to Navegantes:

Monday - Friday: 07:30hs | 10:00hs | 12:30hs | 13:50hs | 16:30hs | 18:00hs

Saturday: 7:30hs | 12:00hs | 15:00hs | 17:30hs

Sunday: 7:30hs | 12:00hs | 15:00hs | 18:00hs

9. ACCOMMODATION

Balneário Camboriú is a resort at the coast of Santa Catarina State with a huge amount of facilities for accommodation.

The Mercure Camboriu Hotel is the hotel of the conference and offers excellent conditions for accommodating during the event. Near the Mercure Camboriu Hotel various other facilities can be found.

FOR HOTEL RESERVATION PLEASE CONTACT JO CINTRA EVENTOS

Jo Cintra Eventos is the official travel agency for the 10th INTERNATIONAL CONFERENCE ON FIBER AND POLYMER BIOTECHNOLOGY. As the official travel agency, they negotiate with hotels and airlines to arrange the best accommodation and flight ticket rates.

<https://eventos.jocintra.com.br/evento/detalhes/ev/58>

10. CONTACT INFORMATION

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Homepage: <http://proxy.furb.br/soac/index.php/10IFPB2018/>

Facebook: <https://www.facebook.com/fiberpolymer.biotechnology.1>

11. SUPPORT

FINANCIAL SUPPORT



SUPPORT



The Society of Fiber Science and Technology, Japan
Fiber Finishing Research Committee (FFRC)

PROMOTION

