ISNCM-2021

The 3rd International Symposium on Nanocellulosic Materials

Handbook

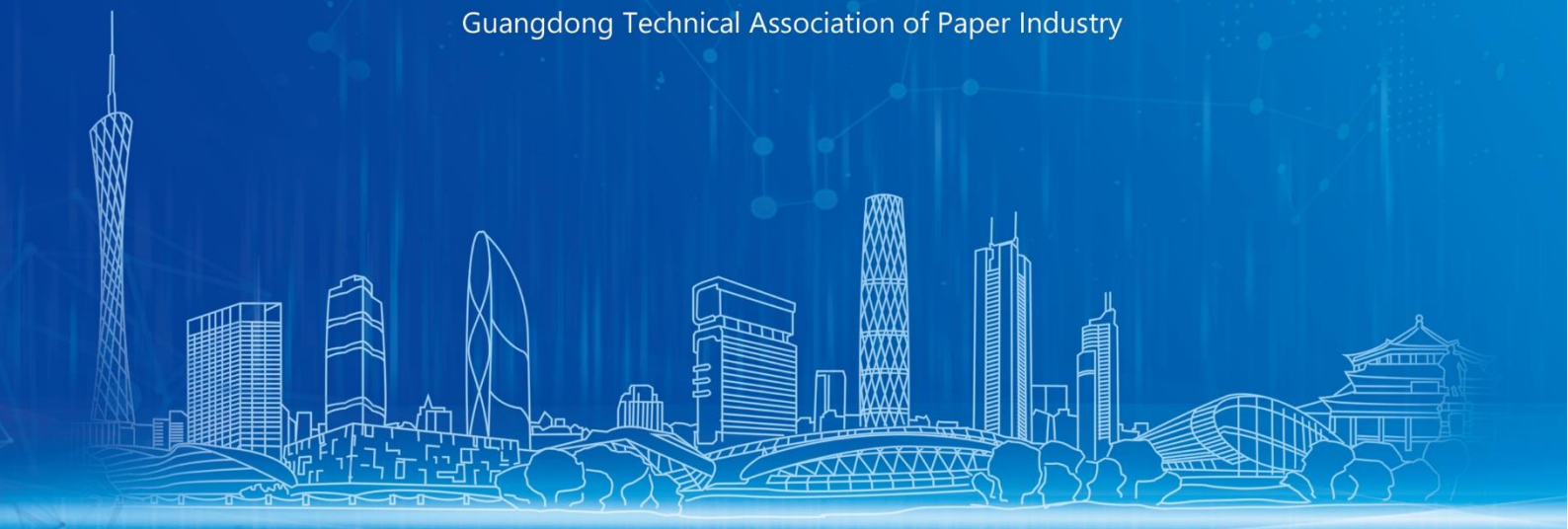
November 20-21, 2021 Guangzhou, China

Organized by

China Technical Association of Paper Industry
State Key Laboratory of Pulp and Paper Engineering, South China University of Technology

Co-organized by

China National Pulp and Paper Research Institute co.,Ltd
National Center for Nanoscience and Technology
Plant Micro-Nano Cellulose Research Center, South China University of Technology
Guangdong Technical Association of Paper Industry



CONTENT

INTRODUCTION

Researches on nanocellulose-based materials are springing up like mushroom due to the unique features with green, eco-friendly and super mechanical strength, which attracted a great concern in the field of high-performance materials and high technology. Materials based on nanocellulose become a hot division in the materials science. Because the raw sources are the same as that of paper industry, the nanocellulose is now widely applied to develop a significant new division to produce nano-paper, special paper, etc.

The objective of the 3rd ISNCM is provide a platform for researchers and technicians in the field of nanocellulose based materials at home and abroad to share their novel discoveries and their latest progresses. The 3rd ISNCM will continue the feature of last two successful conferences. The 1st and 2nd ISNCMs were held in Hangzhou and Tianjin, which drive the theoretical research and industrialization of nanocellulose-based novel materials and related technologies.

The topics of this conference include chemistry of nanomaterials based on nanocellulose, novel methods for nanocellulose preparation, surface chemistry of nanomaterials, modification of nanocellulose, application of nanomaterials, etc.

All researchers in the world are welcome to the conference, and we hope you can enjoy the meeting.

TOPICS

1) Chemistry of nanomaterials based on nanocellulose

2) Highly efficient methods for preparation nanocellulosic materials

3) Surface chemistry of nanocellulosic materials

4) Modification of nanocellulosic materials

5) Applications of nanocellulosic materials in traditional areas (e.g. paper and packaging products)

6) Applications of nanocellulosic materials in non-traditional areas (e.g. rheology modifiers, food additives, coating & paintings, oil & gas, composites, etc.)

7) Novel and emerging applications of nanocellulosic materials (medicine, biology, etc.)

8) Other related topics.

ORGANIZATION

ORGANIZED BY:

China Technical Association of Paper Industry

State Key Laboratory of Pulp and Paper Engineering, South China University of Technology

CO-ORGANIZED BY:

China National Pulp and Paper Research Institute co. Ltd

National Center for Nanoscience and Technology

Plant Micro-Nano Cellulose Research Center, South China University of Technology

Guangdong Technical Association of Paper Industry

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Prof. Junyong Zhu, USDA Forest Products Laboratory, USA

Dr. Xuejun Zou, FPInnovations, Canada

CONFERENCE GUIDE

一、本次会议采用线上+线下相结合的方式，线下会议位于华南理工大学，线上采用ZOOM

3rd ISNCM will be held by the way of " online + offline", Venue (offline): At State Key Laboratory of Pulp and Paper Engineering, South China University of Technology, Online: attend the conference via zoom

二、Conference Guide （线上会议参会指南）

1. Login（登录地址）：https://isncm2021.aconf.org/timetable.html

2. Choose the Session that you are interested in, Click: Enter meeting room

3. Please enter the Participant Code，Or you can login with account (Click here)

4. How to get Participant Code（参会码获取方式）:

1）Before the meeting, it will be sent to the registered mailbox and registered mobile phone number by email and SMS，（会前将通过邮件和短信发送到注册邮箱和注册手机号上）

2）Login：https://isncm2021.aconf.org/login.html → Click Dashboard → My Ticket → Paid Order→ Access Code

5. Only participants who have registered for payment can enter the online conference room. If you have not registered for payment, please log in to register for payment first: https://isncm2021.aconf.org/register.html

（本会议仅限注册缴费的代表进入在线会议室参会，如您尚未注册缴费，请先登录注册缴费：https://isncm2021.aconf.org/register.html）

三、Timetable（在线会议日程）：https://isncm2021.aconf.org/timetable.html

AGENDA

Conference Calendar

Date	Time	Item	Time
November 20 (Saturday)	Morning Session	Opening Ceremony	08:30-09:00
		Keynotes Session	09:00-12:10
	Lunch		12:10-14:00
	Afternoon Session	Oral Presentations	14:00-17:55
	Poster Presentations		18:00-20:30
November 21 (Sunday)	Morning Session	Oral Presentations	08:30-12:15
	Lunch		12:15-14:00
	Afternoon Session	Oral Presentations	14:00-15:50
		Keynotes Session	16:00-17:30
		Closing Ceremony	17:30-18:00

Morning, November 20, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 1, Room 1 (Liwu Building), Online + Offline

Moderator	Time	Program	Speaker	Title	Affiliate
Shiyu Fu, **SCUT**	08:30-09:00	Opening Ceremony	Min Zhu, Vice President of SCUT	Welcoming address on behalf of SCUT	South China University of Technology, China
			Zhenlei Cao	Opening speech on behalf of CTAPI	China Technical Association of Paper Industry, China
			Xingyu Jiang	Opening remark on the committee of Nanocellulosic Materials	Southern University of Science and Technology, China
			Other	Greetings from Company	
Haisong Qi, **SCUT**	09:00-09:30	Plenary Speech 1	Shuhong Yu	Bio-based Sustainable Structural Materials	University of Science and Technology of China, China
Hao Wang, **SLAB**	09:30-10:00 (20:30, Nov.19 UTC/GMT -5.00)	Plenary Speech 2	Liangbing Hu	Wood nanoscience and nanotechnologies	University of Maryland College Park, USA
Liangbing Hu, **UMD**	10:00-10:30 (18:00, Nov.19 UTC/GMT -8.00)	Plenary Speech 3	Orlando Rojas	Renewable nanoparticles in super structured and multiphase materials	The University of British Columbia, Canada
	10:30-10:40	Tea Break (10 min)			

Morning, November 20, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 2, Room 1 (Liwu Building), Online + Offline

Moderator	Time	Program	Speaker	Title	Affiliate
Orlando Rojas, **UBC**	10:40-11:10 11:40 am, Nov 20 (UTC/GMT +7)	Plenary Speech 4	Akira Isogai	Nanocelluloses, their fundamentals and applications	University of Tokyo, Japan
Akira Isogai, **UTokyo**	11:10-11:40 (22:10, Nov.19, UTC/GMT -5.00)	Plenary Speech 5	Hongli Zhu	Nature-derived sustainable materials and high-performance energy storage	Northeastern University, USA
Hongli Zhu, **NEU**	11:40-12:10	Plenary Speech 6	Yong Huang and Min Wu	Sustainable production and application of plant-based-biomass nanomaterials	Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China
	12:10-14:00	Lunch			

Afternoon, November 20, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 3, Room 1 (Liwu Building), Online + Offline

Moderator: Junli Ren, **SCUT**	
Time	**Program**
14:00-14:25	**Hao Wang, Songshan Lake Materials Laboratory, Guangdong, China** Neutron scattering for better understanding of nanocellulose
14:25-14:50	**Ju Fang, Southern University of Science and Technology, China** Bio-inspired anisotropic eood-based hydrogel composites for bone repair
14:50-15:10	**Lei Dai, Shaanxi University of Science and Technology, China** A sensitive humidity sensor based on patterned cellulose nanofibers/graphene oxide films
15:10-15:30	**Hongshen Li, Tsinghua University, China** Cellulose nanofibers preparation combined with bioethanol production from fermented sweet sorghum bagasse
15:30-15:50	**Pan Chen, Beijing Institute of Technology, China** Surface modification effects on nanocellulose- molecular dynamics simulations using umbrella sampling and computational alchemy

SESSION 4, Room 1 (Liwu Building), Online + Offline

Moderator: Wu Lan, SCUT	
Time	**Program**
16:00-16:25	**Haisong Qi, South China University of Technology, China** Tailored cellulose nanofibers by surface/interface modification
16:25-16:50	**Chaoji Chen, Wuhan University, China** Developing sustainable lightweight structural materials from wood
16:50-17:15	**Kai Yan, Sun Yat-sen University, China** High value utilization of biomass-derived resources
17:15-17:35	**Jinsong Tao, South China University of Technology, China** Highly transparent, highly thermally stable nanocellulose/polymer hybrid substrates for flexible OLED devices
17:35-17:55	**Jinghuan Chen, China National Pulp and Paper Research Institute Co., Ltd., China** Preparation of carboxyethylated nanocellulose and its application in papermaking

Afternoon, November 20, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 5, Room 2, Online

Moderator: Fangong Kong, QLU	
Time	**Program**
14:00-14:25	**Xingyu Jiang, Southern University of Science and Technology, China** Biomedical application of nanocellulose
14:25-14:50	**Yanjun Tang, Zhejiang Sci-Tech University, China** Carboxylation modification of cellulose nanofibrils for paper coating application
14:50-15:10	**Zhiqiang Li, Tianjin University of Science and Technology, China** Preparation and properties of silane modified CNF reinforced polylactic acid (PLA) composites
15:10-15:30	**Siqi Huan, Northeast Forestry University, China** 3D-printing of low solids nanocelluloses for multifunctional applications
15:30-15:50	**Jingyang Tian, East China University of Technology, China** Synthesis of nitrogen and sulfur cooped multilevel porous carbon from lignin for high-performance supercapacitors

SESSION 6, Room 2, Online

Moderator: Meiyun Zhang, SUST	
Time	**Program**
16:00-16:25	**Guang Yang, Huazhong University of Science and Technology, China** Bacterial nanocellulose-based functional materials for biomedical applications
16:25-16:50	**Jianfeng Yao, Nanjing Forestry University, China** Cellulose hydrogels and membranes
16:50-17:15	**Jingyi Nie, Shaanxi University of Science and Technology, China** Biomimetic design and self-organizing construction of ordered nanocellulose-chitosan-hydroxyapatite composite bone defect repair scaffolds
17:15-17:35	**Chunyan Zhong, Hainan Guangyu Biotechnology Co. Ltd, China** Birth of bacterial cellulose industrialization from zero to one
17:35-17:55	**Wanqing Lei, Xi'an University of Technology, China** Preparation of cellulose nanocrystal from office waste paper and its potential application in thermal reinforcement of polyurethane

Afternoon, November 20, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 7, Room 3, Online

Moderator: Yan Xu, JLU	
Time	**Program**
14:00-14:25	**Guihua Yang, Qilu University of Technology, China** Facile preparation of sulfated cellulose nanofibril using deep eutectic solvent pretreatment
14:25-14:50	**Jing Shen, Northeast Forestry University, China** Colloids, nanostructures, and supramolecular assemblies: Toward limitless possibilities of papermaking
14:50-15:10	**Meng Wang, Qilu University of Technology, China** Shape memory and underwater super elastic MOF@cellulose aerogels for rapid and large-capacity adsorption
15:10-15:30	**Yuanping Jiang, East China University of Technology, China** Synthesize of comb-like ncc-g-plla(pdla) and the effect in PLA matrix
15:30-15:50	**Lixian Xu, Sappi, Netherland** Industrialization of nanocellulose in Sappi

SESSION 8, Room 3, Online

Moderator: Yongjian Xu, SUST	
Time	**Program**
16:00-16:25	**Yan Xu, Jilin University, China** Cellulose nanocrystals for circularly polarized light materials
16:25-16:50	**Zhaohui Wang, Hunan University, China** Nanocellulose paper-based battery separators
16:50-17:15	**Lihui Chen, Fujian Agriculture and Forestry University, China** Study on the preparation of high-reactivity dissolving pulp and its functional materials
17:15-17:35	**Guoqiang Zhou, Nanjing Forestry University, China** 3D printing cellulose nanofibers for constructing multifunctional materials
17:35-17:55	**Lijun Wang, China Agricultural University, Beijing, China** The study of rheological properties and microstructure of carboxylated nanocellulose dispersion/hydrogel

Morning, November 21, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 9, Room 1, (Liwu Building), Online + Offline

Moderator: Junfei Tian, SCUT	
Time	**Program**
08:30-08:55	**Yonghao Ni, University of New Brunswick, Canada** Nanocellulose as templates to prepare composite solid-state electrolytes and their lithium-ion transport mechanism
08:55-09:20	**Tingjie Li, KPMG, Canada** Production of cellulosic biomaterials and nanomaterial: current status, commercialization challenges and market opportunities
09:20-09:45	**Zilong Deng, Tongji University, China** Cellulose nanomaterials based edible coatings for storability extension of postharvest pears and bananas: mechanisms, development and validation
09:45-10:05	**Xuelian Zhang, Hulunbuir University, China** Application of ontology in nanocellulose domain
10:05-10:25	**Rongrong Liu, Tianjin University of Science and Technology, China** Application and preparation of cellulose nanofibrils by modified Fenton oxidation pretreatment

SESSION 10, Room 1, (Liwu Building), Online + Offline

Moderator: Zilong Deng, TJU	
Time	**Program**
10:35-11:00	**Zhiqiang Fang , South China University of Technology, China** Light management of cellulose paper
11:00-11:25	**Linge Wang, South China University of Technology, China** Electrospun cellulose-based phase change fibers for thermoregulation materials and thermal energy storage
11:25-11:45	**Qinghua Xu, Qilu University of Technology, China** Gelatin films reinforced by nanocellulose-tannin microgel towards sustainable active food packaging
11:45-12:05	**Yang Lu, Nanjing Forest University, China** Delignification of balsa wood by deep eutectic solvents for microplastics removal

Morning, November 21, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 11, Room 2, Online

Moderator: Chengrong Qin, GXU	
Time	**Program**
08:30-08:55	**Xuejun Pan, University of Wisconsin-Madison, USA** Fabrication of nanocellulosic materials from cellulose and lignocellulose using molten salt hydrate and their environmental and energy applications
08:55-09:20	**Jinguang Hu, University of Calgary, Canada** Cellulose valorization via photo/bio-processing
09:20-09:45	**Ziqiang Shao, Beijing Institute of Technology, China** New progress in preparation and application technology of Nanocellulose
09:45-10:05	**Detao Liu, South China University of Technology, China** Sustainable wood materials by controllable surface dissolution technology
10:05-10:25	**Daxin Liang, Northeast Forestry University, China** Cellulose based composite for the extraction of lithium from seawater

SESSION 12, Room 2, Online

Moderator: Chao Tian, CNPPRI	
Time	**Program**
10:35-11:00	**Jinsong Zeng, South China University of Technology, China** Dynamic characterization of plant micro-nanocellulose based on microfluidic technology
11:00-11:25	**Long Bai, Northeast Forestry University, China** Multiphase systems stabilized by nanocelluloses with multiple applications
11:25-11:45	**Yanhua Liu, Guangxi University, China** Surface potential tailoring and its contribution to the contact electrification of cellulose nanofibrils
11:45-12:05	**Jiaxuan Liu, Tianjin University of Science and Technology, China** Fabrication of nanocellulose-based flexible shape memory composites with dual responsiveness

Morning, November 21, 2021

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SESSION 13, Room 3, Online

Moderator: Zhong Liu, TUST	
Time	**Program**
08:30-08:55	**Huining Xiao, University of New Brunswick, Canada** Functional-modified cellulose nanofibers and exopolysaccharide nanoparticles: characteristics and applications
08:55-09:20	**Ning Yan, University of Toronto, Canada** Application of lignin containing nanocellulose fibrils in high performance sensors and flexible energy storage devices
09:20-09:45	**Wenshuai Chen, Northeast Forestry University, China** Cellulose Nanofiber Gels for Collecting Water from Air
09:45-10:05	**Jin Gu, South China Agricultural University, China** Cellulose nanofibrils as reducing and stabilizing agents in the synthesis of noble metal nanoparticles and their applications in catalysts and sensors
10:05-10:25	**Xin Gao, Kunming University of Science and Technology, China** Agriculture-residual parenchyma cells for nanocellulose: an alternative to conventional fibrous resources

SESSION 14, Room 3, Online

Moderator: Qingxi Hou, TUST	
Time	**Program**
10:35-11:00	**Chunyu Chang, Wuhan University, China** Tunicate Cellulose Nanocrystals Reinforced Polymeric Hydrogels
11:00-11:25	**Bin Li, Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences, China** Core-shell filaments of cellulose nanofibrils and guar gum produced by interfacial polyelectrolyte complexation
11:25-11:50	**Wei Liu, Tianjin University of Science and Technology, China** Fabrication and application of lignin-containing cellulose nanofibrils
11:50-12:10	**Dan Qu, Technion-Israel Institute of Technology, Israel** Circularly polarized laser with chiral nematic cellulose nanocrystal cavity

Afternoon, November 21, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 15, Room 1 (Liwu Building), Online + Offline

Moderator: Ju Fang, SUSTech	
Time	**Program**
14:00-14:25	**Xiaoying Wang, South China University of Technology, China** 3D printing nanocellulose-based materials and their application in food
14:25-14:50	**Jun Xu, South China University of Technology, China** Two novel pretreatment methods for nanocelluloses preparation: lignin-based solid acid catalysis and dilute sulfuric acid hydrolysis
14:50-15:15	**Cheng Zhong, Tianjin University of Science and Technology, China** Regulation of bacterial cellulose biosynthesis and its application
15:15-15:35	**Meichun Li, Nanjing Forestry University, China** Rheological properties of cellulose nanomaterials and their application in drilling fluids
15:35-15:55	**Haitang Liu, Tianjin University of Science &Technology** BIOMASS PRESERVATIVE: CARBOXYMETHYL HEMICELLULOSE P-HYDROXYBENZOATE SYNTHESIS AND ITS BIOLOGICAL ACTIVITY

Afternoon, November 21, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 16, Room 2, Online

Moderator: Qinghua Xu, QLU	
Time	**Program**
14:00-14:25	**Jin Huang, Southwest University, China** New cellulose nanocrystal-based materials: From surface chemistry to materials fabrication
14:25-14:50	**Dagang Liu, Nanjing University of Information Science & Technology, China** Sustainable iridescence of cast and shear coatings of cellulose nanocrystals
14:50-15:15 9:50 am, Nov.21, Kenya time	**Sabella Kiprono, Masinde Muliro University of science and Technology, Kenya** Preparation and evaluation of hydrogel capsules for surface modification of Lactobacillus plantarum for oral delivery of Bovine Serum Albumin
15:15-15:35	**Xiao Feng, South China University of Technology** Sulfated Nanocellulose-Based Conductive Composite Materials

Afternoon, November 21, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 17, Room 3, Online

Moderator: Haiqiang Shi, DLPU	
Time	**Program**
14:00-14:25	**Feng Xu, Beijing Forest University, China** Lignocellulose-based functional materials: Fabrication, properties, and applications
14:25-14:50	**Wei Hu, Northeast Normal University, China** Application of nanocellulose in membranes of batteries
14:50-15:15	**Zhouyang Xiang, South China University of Technology, China** Hemicellulose Nanocrystals: Preparations and Applications
15:15-15:35 9:15am, Nov.21 Finland time	**Liqiu Hu, Åbo Akademi university, Finland** Preparation of nanocellulose via interfering fiber-fiber interaction with polysaccharides and its redispersibility

Afternoon, November 21, 2021

Time Zone: GMT +08.00, Beijing Time

SESSION 18, Room 1 (Liwu Building), Online + Offline

Moderator	Time	Program	Speaker	Title	Affiliate
Xiaohui Wang, **SCUT**	16:00-16:30	Plenary Speech 7	Lars Berglund	Pulp fibers and wood as nanocellulose materials	KTH Royal Institute of Technology, Sweden
Lars Berglund, **KTH**	16:30-17:00	Plenary Speech 8	Thomas Rosenau	Some novel aspects of the system "cellulose – water"	University of Natural Resources and Life Sciences Vienna (BOKU), Austria
Thomas Rosenau, **BOKU**	17:00-17:30	Plenary Speech 9	Xiaohui Wang	Research on nanocellulose in state key laboratory of pulp and paper engineering	South China University of Technology, China
Shiyu Fu, **SCUT**	17:30-18:00	Closing Ceremony		1) Award for excellent posters 2) Closing Remark 3) Professor Feng Xu gives a notice for next meeting	

KEYNOTE SPEAKERS

Prof.Shuhong Yu

University of Science and Technology of China, China

Shu-Hong Yu studied chemistry in Hefei University of Technology and received BS in 1988. He got MS from Shanghai Research Institute of Chemical Industry (SRICI) in 1991. He completed PhD in Inorganic Chemistry in 1998 from University of Science and Technology of China (USTC). From 1999 to 2001, he worked in Materials and Structures Laboratory, Tokyo Institute of Technology (TIT), as a Research Postdoctoral Fellow, working with Prof. Masahiro Yoshimura. He was awarded the AvH (Alexander von Humboldt Foundation) Fellowship (2001-2002) in the Max Planck Institute of Colloids and Interfaces, Germany, working with Prof. Dr. Markus Antonietti and Prof. Dr. Helmut Cölfen. He was appointed as a full professor in 2002 and the Cheung Kong Professorship in 2006 by the Ministry of Education in the Department of Chemistry, University of Science and Technology of China (USTC). He is a Fellow of the Royal Society of Chemistry (2013-), is acting as a General Secretary and a Council member of the International Solvothermal Hydrothermal Association (ISHA) (2010-). Currently, he is leading the Division of Nanomaterials & Chemistry, Hefei National Laboratory for Physical Sciences at Microscale, USTC. He was appointed as Group Leader of the Partner Group of the Max Planck Society and the Chinese Academy of Sciences, USTC, from 2005 to 2009. He was elected as an academician of Chinese Academy of Sciences in 2019.

Prof.Liangbing Hu

University of Maryland College Park, USA

Liangbing Hu received his B.S. in physics from the University of Science and Technology of China (USTC) in 2002, where he worked on colossal magnetoresistance (CMR) materials for three years. He did his Ph.D. in at UCLA, focusing on carbon nanotube based nanoelectronics (2002-2007). In 2006, he joined Unidym Inc (www.unidym.com) as a co-founding scientist. At Unidym, Liangbing's role was the development of roll-to-roll printed carbon nanotube transparent electrodes and device integrations into touch screens, LCDs, flexible OLEDs and solar cells. He worked at Stanford University from 2009-2011, where he work on various energy devices based on nanomaterials and nanostructures. Currently, he is a professor at University of Maryland College Park. His research interests include nanomaterials and nanostructures, roll-to-roll nanomanufacturing, energy storage focusing on solid-state batteries and Ultrafast High Temperature Sintering (UHS). He is a founder of Inventwood LLC (www.inventwood.com).

Prof. Orlando Rojas

The University of British Columbia, Canada

Professor Orlando Rojas is a Canada Excellence Research Chair in University of British Columbia and Director of the Bioproducts Institute. In this latter role, he synergizes a distinguished group of professors and researchers conducting multi- and cross-disciplinary research to create fundamental knowledge and applications, from seed genetics to cutting-edge biorefining technologies, from thermochemical and bio-conversion pathways to novel bio-based products. His research group, Bio-based Colloids and Materials operates between Vancouver (UBC) and Helsinki (Aalto University).Prof. Rojas received the Anselme Payen Award, established by the American Chemical Society in 1962, the highest recognition in the area of cellulose and renewable materials. He is an elected Fellow of the American Chemical Society (2013), the Finnish Academy of Science and Letters (2017) and recipient of the Tappi Nanotechnology Award (2015). He is adjunct professor in the Department of Chemical and Biomolecular Engineering of North Carolina State University.Prof. Rojas is Associate editor of Biomacromolecules and Emeritus Editor of J. Dispersion Science and Technology. He is member of the Marcus Wallenberg Foundation Selection Committee and Honorary Chair of the Asia Pacific Young Scientists Association. Prof. Rojas most recent research grants include the prestigious European Research Commission Advanced Grant (ERC-Advanced) and a Horizon H2020 project, among others. Prof. Rojas is co-lead of the national competence center to advance the Finnish materials bioeconomy, the FinnCERES Flagship, between Aalto University and the Finnish Research Center (VTT).

Prof. Akira Isogai

University of Tokyo, Japan

1985: Ph.D, Graduate School of Agriculture, The University of Tokyo.

1985-1986: Postdoc, Division of Chemistry, The Institute of Paper Chemistry, Wisconsin, USA.

1986-1994: Assistant Professor, Department of Biomaterial Sciences, The University of Tokyo.

1989-1990: Visiting scientist, Forest Products Laboratory, USDA, Wisconsin, USA.

1994-2003: Associate Professor, Department of Biomaterial Sciences, The University of Tokyo.

2003-2020: Professor, Department of Biomaterial Sciences, The University of Tokyo.

2020-: Special Research Professor, The University of Tokyo.

Prof. Hongli Zhu

Northeastern University，USA

Hongli (Julie) Zhu is currently an assistant professor at Northeastern University. Her group focuses on the research of electrochemical energy storage, biomass-derived sustainable materials, and emerging advanced manufacturing technologies. From 2012-2015, She works in the University of Maryland as postdoc, focusing on the research of flexible electronics and energy storage. From 2009 to 2011, She conducted research on materials science and processing of biodegradable and renewable biomaterials from natural wood in the KTH Royal Institute of Technology in Sweden. Her expertise is on the research of environmentally friendly natural materials, energy storage, design and application of bioresource materials in sustainable materials and advanced manufacturing. Her current google scholar citation is 12671H index 53. In energy storage, her group in Northeastern University works intensively on all-solid-state batteries and flow batteries. Here is her group webpage: https://coe.northeastern.edu/research/hongli_group/publication.html

Prof. Yong Huang

Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China

Prof. Huang received a Ph.D. in Material Science from South China University of Technology in 1996. In 2006, he worked as a visiting professor in Dortmund University, Germany. Prior to his current position as a professor in polymer science at Technical Institute of Physics & Chemistry (TIPC, CAS), Prof. Huang was appointed as professor at Institute of Chemistry, CAS from 2000 to 2007. His research interests are cellulose chemistry and materials, materials from natural and renewable resources, and has published 150 papers and 112 patents of which 65 have been authorized. In the meantime, he devoted himself in the commercialization of cellulose materials, and significant progress has been made so far.

Prof. Wu Min

Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China

Prof. Min Wu, currently, is a professor and also the Head of Applied Biomass Resources Lab, at Technical Institute of Physics and Chemistry, Chinese Academy of Sciences (TIPC, CAS). She received her Ph.D. in Materials Engineering in 2002 from Nagoya Institute of Technology (Japan). She furthered her research as a postdoctoral researcher in National Institute of Advanced Industrial Science and Technology (AIST Shikoku, Japan) and JSPS Fellow in University of Tokyo (Japan) consecutively from 2002 to 2006. After two-year service as associate professor in Institute of Chemistry (CAS), she joined the current institute. Her research interests include cellulose chemistry, nanocellulose materials, preparation and application of nanocellulose. Together with Prof. Yong Huang, she established close bonding with industry to promote the application of nanocellulose.

Prof. Lars Berglund

KTH Royal Institute of Technology, Sweden

Lars Berglund is professor of Wood and Wood Composites at KTH Royal Inst of Technology in Stockholm. He has been a visiting researcher at Stanford University, Cornell University and Kyoto University. His research interest is in nanostructured composite materials; primarily those based on cellulose. An important challenge is transparent cellulosic nanomaterials, which also can serve as load-bearing engineering materials. Professor Berglund has published more than 300 journal papers, obtained around 10 patents, examined more than 20 PhD's and is a member of the Royal Swedish Academy of Engineering Sciences. He holds an ERC Advanced Grant on Wood Nanotechnologies. He has been a "highly cited" author on Web of Science, has more than 20.000 citations and an H-index of 69.

Prof. Thomas Rosenau

University of Natural Resources and Life Sciences Vienna (BOKU), Austria

Thomas Rosenau has studied Chemistry at Dresden University of Technology. After PhD and postdoc time there and at NC State University in Raleigh, USA, he did his habilitation in organic chemistry at BOKU University Vienna, where he is currently full professor at the Department of Chemistry. He heads the Institute of Chemistry of Renewable Resources, and the Austrian Biorefinery Center Tulln (ABCT), and is also Adjunct Professor of Fiber Chemistry at Shinshu University, Japan and Adjunct Professor at the Johan Gadolin Process Chemistry Center, Abo Academy, Turku, Finland. Thomas conducts research in Organic Chemistry, Green Chemistry and Analytical Chemistry, mainly focusing on the two biopolymers cellulose and lignin as well as on plant extractives and antioxidants. He has received several major international scientific awards, is honorary fellow of several scientific organizations, and has published more than 430 SCI papers.

Prof. Xiaohui Wang

South China University of Technology, China

Dr. Xiaohui Wang is a professor at the School of Light Industry Science and Engineering, South China University of Technology. Currently, she is the deputy director of the State Key Laboratory of Pulp and Paper Engineering. Her research interests focus on biomass-based and paper-based functional materials, mainly including the modification of biomass polysaccharides such as cellulose and chitosan, biomass-based porous carbon and carbon quantum dots, cellulose-based electrode materials and energy storage applications. She has published more than 100 SCI research papers, applied for and authorized more than 30 invention patents. Professor Wang won the 2015 and 2019 Ministry of Education Natural Science Second Prize, and was selected into the Ministry of Education's Ten Thousand Talents Program for Young Top Talents and the Ministry of Education New Century Outstanding Talents programs. She is a member of the Expert Committee of the Cellulose Industry Association, a member of the Cellulose Professional Committee, and an editorial board member of the SCI journal Industrial Crop & Products, Molecules and Bioresourcs.

INVITED SPEAKERS

Dr. Ju Fang

Southern University of Science and Technology, China

Dr. Fang studied resource science and engineering at South China University of Technology from 2005 to 2009. He completed his master's degree in pulp and paper engineering there. From 2012, supported by the China Scholarship Council, he was worked as a Ph.D. studentship in Professor Tetsuo Kondo's group, Kyushu University, Japan. He received his doctorate from the Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University in 2015. After returning to China, he worked as a postdoc in the Department of Material Science and Engineering, Southern University of Science and Technology, Shenzhen. Since 2019, he has been a research assistant professor at Southern University of Science and Technology.

Inspired by nature, materials with biomimetic structures, morphologies, and functions can be achieved. It is essential to to clarify the relationship between the properties of materials and cellular functions. Base on these concepts, Fang and his co-works attempt to search for environmental and economic friendly strategies to construct biomimetic functional materials for tissue engineering.

Prof. Haisong Qi

South China University of Technology, China

Haisong Qi received the Ph.D. in Polymer Chemistry and Physics from Wuhan University. He had worked in the Institute of Organic Chemistry and Macromolecular Chemistry in Friedrich-Schiller University of Jena as a Postdoctoral Research Follow. He then became a scientific collaborator in the Department of Composite Materials in Leibniz Institute of Polymer Research Dresden. He is currently a professor in State Key Laboratory of Pulp and Paper Engineering, South China University of Technology. His research is mainly focused on chemistry and materials of natural polymer including cellulose regenerated materials, cellulose derivatives, cellulose nano-/micro-fibers and other biomass-based functional materials.

Prof. Chaoji Chen

Wuhan University, China

Chaoji Chen, Professor of School of Resource and Environmental Sciences at the Wuhan University. Dr. Chen focuses on the engineering, functionalization and potential sustainable uses of biomass resources such as wood, bamboo, cellulose and chitin, toward addressing the material-energy-environmental challenges. As the first, co-first or corresponding author, Chen has published more than 80 SCI articles, including Nature (2), Science, Nature Reviews Materials, Nature Sustainability, among others. Chen has made several breakthroughs in the field of wood nanotechnology toward sustainability, including super wood that is as strong as steel but six-times lighter to replace steel, moldable wood that is as strong as Al alloy and highly formable, patternable transparent aesthetic wood, wood batteries and supercapacitors for green energy storage, wood solar evaporators for clean water, and biodegradable lignocellulosic bioplastics. His works have been widely cited by global researchers for over 12,000 times with an H-factor of 60 (google scholar), with 27 as ESI Highly Cited Paper, and broadly covered by Nature, Science, MIT Technology Review, VOA, New York Post, Scientific American, The Sun, Xinhua Net, The Indian Express, among others. In the past two years, he was featured in the World's Top 2% Scientists 2020/2021 Lists and Career-Long List from 1960-2020 (Stanford University). Chen received multiple awards including 2021 MIT Technology Review "35 Innovators Under 35" Asia Pacific Award, 2021 China's Rising Start of Science and Technology Outstanding Impact Award, 2018 R&D 100 Awards, 2018 Invention of the Year of UMD in Physical Science, 100 Most Influential International Articles of China in 2015. He serves as the editorial board member or youth editorial board member of several journals including Batteries, The Innovation, SusMat, Environmental Science & Ecotechnology, and the advisory board member of the Universal Scientific Education and Research Network (USERN).

Prof. Guang Yang

Huazhong University of Science and Technology, China

Guang Yang is Professor at Huazhong University of Science and Technology, China. She received PhD degree in Chemistry from Wuhan University, China. She remained the Distinguished Young Chutian Scholar and Outstanding Talents in Hubei province, as well as Alexander von Humboldt and JSPS fellow. She was also a visiting scholar in Asahi Chemical Industry Co., Ltd., Japan and University of Akron, USA. Currently, she is serving as the Deputy Director of the Cellulose division of the Chinese Chemical Society, Deputy Director of the Polymer Characterization Committee of the Chinese Chemical Society, and the council member of several committees, including the Nanocellulose and Materials Committee of China Paper Association, the Biomedical Polymer Materials Branch of China Biomaterials Society. She has authored more than 150 publications in high impact international peer-reviewed journals, edited 2 books, authored several chapters, and registered more than 20 authorized patents. Her current research focuses on the development of nanocellulose-based functional materials, design and fabrication of novel nano-drug transporters, 3D printing, nano-assembly of ordered materials, and tissue engineering.

Prof. Jianfeng Yao

Nanjing Forestry University, China

Jianfeng Yao currently is a Professor in Chemical engineering at Nanjing Forestry University. He received his BE and PhD in Chemical Engineering from Nanjing University of Technology in China in 2000 and 2005, respectively. His research focuses on the preparation of cellulose-based functional materials as well as their applications as separation membranes and smart devices. He has published more than 200 journal articles in various fields of polymer science and engineering. His Google citation exceeds 9000 and his h-index is 57.

Dr. Jingyi Nie

Shaanxi University of Science and Technology, China

The speaker Nie Jingyi received her bachelor's degree from Zhejiang University in 2012 and was directly recommended to study for a doctor. After receiving a doctor's degree in engineering in 2017, she worked in Shaanxi University of Science and Technology (SUST), and her main scientific research interests are paper-based air filter materials and high-performance fiber paper-based functional materials. Dr. Nie presided over and completed projects including China Postdoctoral Science Foundation and Shaanxi basic research plan of natural science. She published over 20 SCI scientific research as the first author or corresponding author, including high impact academic journals such as Nature Communications and Chemical Reviews. Dr. Nie won the first place in the 2019 teachers' lecture competition of Shaanxi University of science and technology, and was promoted to associate professor exceptionally. She also won the honorary title of "excellent teacher" in 2019. In 2020, she won the honorary title of "Shaanxi University Curriculum ideological and political teaching expert". 2021 she was selected into the "6th Young Talent Promotion Program of China Association for science and technology".

Prof. Jing Shen

Northeast Forest University, China

Jing Shen was born on October 21, 1981 in Linyi (Shandong Province), China. He received BSc and MSc degrees from Qilu University of Technology in 2002 and 2005, respectively. He joined the Department of Pulp and Paper Engineering of Northeast Forestry University in 2005 as an assistant lecturer, and was promoted to lecturer in 2008. He received a PhD degree from Northeast Forestry University in 2010, and was promoted to associate professor and professor in 2010 and 2015, respectively. He was a postdoctoral fellow (August 2010 to November 2011) and a visiting scholar (July 2013 to October 2013, August 2016 to November 2016, January 2017 to March 2017) at University of New Brunswick, Canada. He won several Chinese academic awards and honors, including New Century Excellent Talents Program for Universities (2012), Nominated National Excellent Doctoral Dissertation (2012), Fok Ying Tung Prize for Young Professors (2018), Longjiang Scholars Program (2018), and Cai Lun Research Excellence Award for Young Professionals (2020). He is now a Professor of the Department of Pulp and Paper Engineering of Materials Science and Engineering College, Northeast Forestry University, China. His current research focuses on sustainable papermaking processes and paper-based functional products.

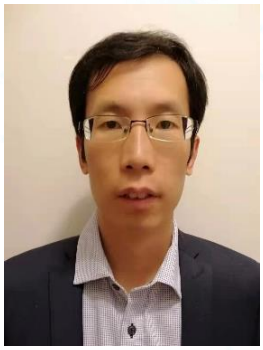
Prof. Yan Xu

Jilin University, China

Yan Xu (PhD, Imperial College London UK) is a professor in chemistry in the State Key Lab of Inorganic Synthesis and Preparative Chemistry, Jilin University, China. Her research evolves around bioinspired organized materials chemistry. The current research focuses on the synthetic construction of light management materials and smart nano-micro systems using renewable resources including nanocellulose. She has coauthored two books (Elsevier, World Scientific), holds several PCT and Chinese patents, and published 100 over peer-reviewed articles in journals including Angew Chem Int Ed, Adv Mater, CCS Chem, J Mater Chem A, Chem Mater and Chem Sci.

Prof. Zhaohui Wang

Hunan University, China



Zhaohui Wang is a professor of materials science at Hunan University, China. He received his B.E. (2007) and M.E. (2009) and Ph.D. degree (2012) from Huazhong University of Science and Technology, China. He had worked at the Uppsala University as researcher during 2013-2019, focusing on the research of nanostructured conducting polymer composites and paper batteries. His current research interests include the value-added utilization of cellulose-based functional materials, for example, design of cellulose-based separator, paper-based electrodes and flexible current collectors, and the development of biomass-based high energy density energy storage devices.

Prof. Lihui Chen

Fujian Agriculture and Forestry University, China

Lihui Chen, received his PhD degree from South China University of Technology. Currently, Prof. Chen works at Fujian Agriculture and Forestry University, and leads the National Forestry and Grassland Administration Key Laboratory of Plant Fiber Functional Materials and Key-field innovation team of Ministry of Science and Technology of the People's Republic of China. He was elected as the executive member of China Technical Association of Paper Industry and director of Fujian Province Technical Association of Paper Industry. He was selected for science and technology innovation talent of national 10, 000 talents plan, and young and middle-aged expert with outstanding contributions to the country. He has won the second prize of Chinese National Scientific and Technological Progress Award, and the first and second prizes of Fujian Scientific and Technological Progress Award. His research interests include the bio-refinery and biomass conversion, sustainable bio-materials for energy and environmental applications. He has published over 150 research papers, obtained more than 30 national invention patents, and drafted 2 Chinese national and professional standards.

Prof. Yonghao Ni

University of New Brunswick, Canada

Dr. Ni is Director of the Limerick Pulp and Paper Centre and Chair of the Department of Chemical Engineering, University of New Brunswick (UNB). He started his career at UNB in 1991, was promoted to Associate Professor in 1996 and to Professor in 2000, awarded a Tier 1 Canada Research Chair (CRC) in 2002. Dr. Ni’s research covers pulp and paper manufacturing, wood chemistry, integrated forest biorefinery, and lignocellulosic material. He has co-authored 500- plus refereed scientific papers, and 25 patents/ patent applications, supervised more than 100 Master’s, and Ph D students, numerous post-doctoral fellows/ visiting scholars. Dr. Ni is a Fellow of the Canadian Academy of Engineering (CAE), the Pulp and Paper Technical Association of Canada, and the International Academy of Wood Science.

Prof. Tingjie Li

Fpinnovation, Canada

Tingjie Li is a manager at KPMG for Scientific Research and Experimental Development. After obtaining his PhD degree in Mechanical & Materials Engineering from Western University (Canada), Tingjie worked at FPInnovations for 8 years to apply emerging technologies (e.g. printed electronics and 3 D printing) and biomaterials (e.g. lignin, cellulosic biomaterials) to develop active and sustainable fibre-based packaging. Currently, he specializes in R&D consulting services to pulp & paper, flexible packaging and biomaterials companies in Canada and the US.

Dr. Zilong Deng is currently an assistant professor from College of Environmental Science and Engineering in Tongji University. He is also a member of State Key Lab of Pollution Control and Resource Reuse. He received his Ph.D. degree from Oregon State University (US) in 2018 and Master degree from University of Nottingham (UK) in 2011. His research mainly focuses on the application of nanocellulose incorporated biocomposite materials for water purification and fruit preservation. He had 30 publications including Science Bulletin, Chemical Engineering Journal, ES Nano, Food Chemistry and Food Hydrocolloid. During three-year working experience in Tongji, he received funding from the National Science Foundation of China (22006115), Shanghai Sailing Program (20YF1452200) and several companies. He was also invited as a guest editor for Separations.

Prof. Zhiqiang Fang

South China University of Technology, China

Zhiqiang Fang is an associate professor in the School of Light Industry Science and Engineering at South China University of Technology (SCUT). His research interests include the design, preparation, characterizations, and electronic applications of transparent cellulose paper. He has published over 70 papers in peer-reviewed journals with total citations of 4600 (google scholar citations). He also serves as a reviewer of several Journals such as ACS Nano, ACS applied materials & Interface, and Advanced optical materials, Cellulose, and Industrial corps & products.

Prof. Linge Wang

South China University of Technology, China

Professor Linge Wang of South China University of Technology (SCUT) is currently the Associate Dean of South China Advanced Institute for Soft Matter Science and Technology, and the Associate Dean of School of Molecular Science and Engineering. He received his PhD in Chemistry from the Institute of Chemistry, Chinese Academy of Science (CAS) in 2003. He had worked at the Guangzhou Institute of Chemistry, CAS as an Assistant Professor (till 2004), Associate Professor (till 2008), and then worked at the University of Sheffield (till 2012) as a Postdoc Research Associate. He was pointed as a full professor at SCUT since Sep 2012. His research focuses on Soft Matter, particularly on polymer nanofibres, polymer vesicles, polymeric optical film, tissue engineering, cell therapy, drug delivery. He has received more than RMB 10 million in research funding as a PI. His research has been published in leading journals in a variety of materials and polymers, such as Advanced Materials, Angewandte Chemie International Edition, Macromolecules, Applied Energy, Soft Matter; has been invited to write 3 book chapters and has published 14 patents. Professor Wang is a senior member of Chinese Chemical Society, a member of Chinese Society of Cellulose and Renewable Materials, and also a member of the China Spallation Neutron Source Science and Technology Committee.

Prof. Xuejun Pan

University of Wisconsin-Madison, USA

Dr. Xuejun Pan is a Professor in the Department of Biological Systems Engineering at the University of Wisconsin-Madison. He earned his Bachelor's, Master's, and Ph.D. degrees in Chemical Engineering (Pulp & Paper) at Tianjin University of Science and Technology, China, and the second Ph.D. degree in Applied Bioscience at Hokkaido University, Japan. Dr. Pan did postdoctoral research at Georgia Tech, the University of Minnesota, and the University of British Columbia before joining the faculty at University of Wisconsin-Madison. Dr. Pan's research interest is in developing and fundamentally understanding innovative technologies for converting lignocellulosic biomass into liquid fuels, platform chemicals, and functionalized materials. He has published 110+ peer-reviewed journal articles, 6 book chapters, and 5 U.S. patents. Dr. Pan has won numerous awards, including the Andrew Chase Award in 2021, the Vilas Midcareer Award in 2018, the Alfred Toepfer Faculty Fellow Award in 2011, and the NSF Career Award in 2009. He is an elected Fellow of the International Academy of Wood Science. More information can be found at his lab website http://biorefining.bse.wisc.edu/. Email: xpan@wisc.edu

Prof. Ziqiang Shao

Beijing Institute of Technology, China

Ziqiang Shao, male, Professor, postdoctoral, doctoral supervisor of polymer functionalization in Beijing Institute of Technology, mainly engaged in the research of cellulose and its functionalization. He is currently the vice president of China cellulose industry association, the director of the technical committee of China cellulose industry association, the director of Beijing cellulose and its derived materials engineering technology research center, and the member of the Cellulose Professional Technical Committee of the Chinese chemical society, Member of Nano Cellulose Professional Committee of China Paper Society. He wrote monographs such as Production Process and Equipment of Nitrocellulose, Structure and Properties of Nitrocellulose and Cellulose Ether. He published over 300 academic papers in Chinese, English and Russian in Journal of materials chemistry A, ACS applied materials & interfaces, Nanoscales, Chemical Engineering Journal, Cellulose、 Высокомолекуляные соединение、 Journal of power sources、and Advanced Materials Research, declared more than 70 national invention patents.

Prof. Jinsong Zeng

South China University of Technology, China

Prof. Jinsong Zeng, the vice director of Guangdong Plant Fiber High-valued Cleaning Utilization Engineering Technology Research Center, vice director Guangdong Provincial Key Laboratory of Plant Resources Biorefinery, and director of Plant Fiber Material Science Research Center of SCUT, has been engaged in light industry technology and engineering research, mainly including fluid dynamics and mathematical simulation of pulp fiber suspension; green preparation, fractional separation, dynamic characterization, pilot demonstration and high-valued application of micro/nanocellulose; design and optimization of biomass fluid equipment. Prof. Zeng presided over more than ten important projects consisted mainly of one Major National Science and Technology Projects, one National Key Research and Development Program, one Applied Science and Technology R&D Special Fund Project of Guangdong Province, and a number of other level projects. With her effort , she won one first prize of National Science and Technology Progress, one first prize of Science and Technology Progress of the Ministry of Education, one second prize of Technology Invention of the Ministry of Education, and one Technological Achievements Appraisal. Up to now, she has three internationally authorized patents and fifty invention patents, more than sixty SCI and EI journal research articles, and four book chapters.

Prof. Long Bai

Northeast Forestry University, China

Long Bai is a full professor in Northeast Forestry University (NEFU) started on March 2021. He obtained his PhD degree in biomass material and engineering from NEFU at 2016. After graduation, he joined Prof. Orlando Rojas’ s group as a postdoctoral research fellow for three and a half years in Aalto University (Finland) and University of British Columbia (Canada). During his career, he has authored over 50 peer-reviewed papers. His recent project funding includes an Outstanding Young Scientist program of Heilongjiang province. His current research interests include the design and preparation of multiphase systems using nanopolysaccharides with a focus on the development of biobased, renewable materials with multifunctionalities.

SESSION 13

Prof. Huining Xiao

University of New Brunswick, Canada

Dr. Xiao, a Professor in Chemical Engineering at the University of New Brunswick (UNB) and the Fellow of Canadian Academy of Engineering, obtained his Ph.D in Chemical Engineering at McMaster University in Canada in 1995. Before joining the UNB in 2001, he was a Lecturer at the University of Manchester in the UK from 1996 to 2001. Prof. Xiao's research interests mainly cover the functional modification of cellulose including micro- or nanofibrillated cellulose with polymers and nanoparticles; enhancing multi-barrier properties of fibre networks for green-based packaging and foam materials; green-based bioadsorbents for water purification and soil remediation; antiviral/antibacterial-modified cellulose and nonwoven textiles; and smart carriers for controlled release of drugs and agrochemicals. To date Dr. Xiao has published over 320 SCI peer-reviewed journal papers. Since joining the UNB, he has supervised or co-supervised more than 30 PhD students and over 20 PDFs. The PhD students/PDFs under his supervision have also won various prestigious awards including the recipients of CRC Tie 2 in Canada and the National Science Fund of China for distinguished young scholars.

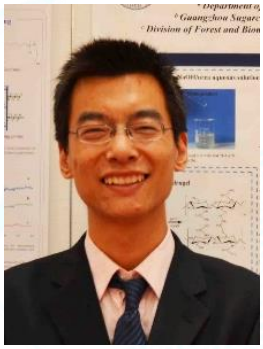
Prof. Wenshuai Chen

Northeast Forestry University, China

Wenshuai Chen is a professor in the College of Materials Science and Engineering at Northeast Forestry University. He received his B.S. degree (2008) and Ph.D. degree (2013) in Wood Science and Technology from Northeast Forestry University. During 2011~2013, he has pursued his study at Washington University in St. Louis, Georgia Institute of Technology and Kyoto University, as a visiting Ph.D. student. His recent research interests include wood physics, bionanocomposites, nanocellulose, aerogels, and the development of wood-based nanomaterials and functional systems for energy and environmental sciences. He has authored more than 60 refereed journal publications and 3 invited book chapters.

Dr. Chunyu Chang

Wuhan University, China



Dr. Chunyu Chang is currently an associate professor of polymer science in Wuhan University. In 2011, he received his Ph.D from Wuhan University for work done in Prof. Lina Zhang's laboratory on the design and synthesis of cellulose hydrogels. He was awarded a JSPS postdoctoral fellowship in Kyoto University under supervision of Prof. Yoshiyuki Nishio from 2011 to 2013. His research interests include: (1) Preparation of nanocellulose, (2) Cellulose nanocrystals reinforced polymeric hydrogels, and (3) Nancellulose-based materials for water purification. He has published more than 60 peer-reviewed papers which have received more than 4500 citations.

Prof. Wei Liu

Tianjin University of Science and Technology, China

Wei Liu, PhD, Distinguished professor at Tianjin University of Science and Technology, China, and visiting scholar at University of New Brunswick, Canada. He has been mainly focusing on the research topics of high yield pulping and biorefinery, and fabrication and application of nanocellulose based materials. He has published more than 50 papers, and 11 authorized patents.

Prof. Xiaoying Wang

South China University of Technology, China

Xiaoying Wang is a full Professor of South China University of Technology. She received Ph.D. from Wuhan University in July, 2008. Her doctoral dissertation was elected as “The National Excellent Doctoral Dissertation Nomination Papers” in 2010. She joined the Key Laboratory of Paper and Pulp Engineering in the South China University of Science and Technology in 2008. She was selected as “Youth Yangtze Scholar” in 2015, National Outstanding Youth Science Foundation in 2016, Young and middle-aged scientific and technological innovation leaders in the Ministry of Science and Technology in 2018 and "Ten Thousands Plan" Leading Talents of Science and Technology Innovation in 2019. Her research interests include polysaccharide-based nanocomposite for food and medicine applications. She had led all kinds of programs involving the general program of National Natural Science Foundation of China, program for New Century Excellent Talents in University in China and so on, altogether 15 projects. She has published 134 SCI papers, which of first-authorized/corresponding author are 78, a book titled “Nanocomposites: Synthesis, Characterization and Applications” as only editor, and two books as the author. She has also declared 45 national invention patents, 32 of which have been authorized (one is US patent).

Prof. Cheng Zhong

Tianjin University of Science and Technology, China

Cheng Zhong is a professor from Tianjin University of Science and Technology, China. He received his Ph.D. degree from Tianjin University in 2007. He has been a visiting scholar at Leipzig university, Germany and Michigan State University, USA. He was selected as an outstanding young scientific and technological talent of Tianjin in 2014, as an excellent teacher of Tianjin in 2019, and as a young and middle-aged scientific and technological innovation leading talents of Tianjin in 2020. He takes many roles such as a director of the Industrial Biochemistry and Molecular Biology Branch of the Chinese Society of Biochemistry and Molecular Biology, a member of Nanocellulose and Materials Committee, China Technical Association of Paper Industry, a standing member of Biochemical Youth Professional Committee, the Chemical Industry and Engineering Society of China, and a member of the Chinese Society for Microbiology. Since 2014, he has been a guest associate editor for the journal Frontiers in Microbiology (IF: 4.2) and also a peer reviewer for more than 20 international journals. He has published more than 60 papers (including 2 highly cited papers), and applied for more than 60 invention patents (including 20 granted invention patents). He was awarded the Science and Technology Progress Award of Tianjin in 2019 (Ranked 1st) and Engineering Degree Excellent Teaching Achievement Award of Tianjin (Ranked 1st).

Prof. Jin Huang

Southwest University, China

Mr. Jin Huang obtained Ph.D degree in Wuhan University, and serves as the full-professor in Southwest University (China) and as the director of "Chongqing Key Laboratory of Soft-Matter Material Chemistry and Function Manufacturing". He carried out scientific research at Institute of Chemistry (Chinese Academy of Sciences), Wuhan University of Technology, Institut National Polytechnique de Grenoble, etc. His research focuses on "Polymer-Centered Soft-Matter Materials", "Sustainable Chemistry and Materials", "Flexible Materials and Devices", "Advanced Materials Manufacturing", etc. The research on "cellulose nanocrystals-based materials" has achieved great progress. He has published over 200 peer-reviewed papers, and edited 3 monographs and wrote 8 book chapters.

Prof. Dagang Liu

Nanjing University of Information Science & Technology, China

Professor Dagang Liu was awarded his Ph.D in Polymer Physics & Chemistry in 2007 from Wuhan University of China. He then worked as a postdoctor in Louisiana State University in 2008-2010. He was appointed as a full professor at Nanjing University of Information Science and Technology since 2011. He has a specific interest in the field of biomass resources and environment and focuses on the development of biomass based nanomaterials and their applications for environmental treatment or wastewater/air purification. Dr. Liu is an author of more than 80 peer-reviewed publications.

Prof. Feng Xu

Beijing Forest University, China

Professor in College of Materials Science and Technology of Beijing Forestry University. Expert of the Special Government Allowance of the State Council. Fellow of the International Academy of Wood Sciences. Member of the Institute of Chemical Industry of forest products of the Chinese Academy of Forestry. Member of the Technical Committee of the China Cellulose Industry Association. Associate editor of "Journal of Beijing Forestry University". Editorial board member of 4 international SCI journals as well as "Biomass Chemical Engineering" and "Journal of Forestry Engineering". Focus on the research of efficient utilization of biomass resources. Granted a number of funds, such as the 13th Five-Year Plan National Key R&D Initiative Project, the 12th Five-Year Science and Technology Support Plan, and the National Outstanding Youth Foundation. Innovative results have been achieved in the separation of the main components of biomass and the preparation of chemicals and materials. Published more than 200 academic papers, 15 national invention patents of China. Awarded 1 Second Prize of Nature of the Ministry of Education, and 1 First Prize of Invention of the Society of both Light Industry and Forestry.

Prof. Wei Hu

Northeast Normal University, China

Northeast Normal University, major in the research and application of eco-friendly materials. She worked as JSPS postdoctoral researcher in AIST, Japan and NSERC invited researcher in NRC, Canada, successively. As a researcher, she has explored the chemical modification for commercial application of biomass materials, such as cellulose, natural fiber and lignin for more than 6 years in NRC, Canada. She has undertaken and fulfilled 19 national and provincial projects, and acquired many awards, such as Changbai Mountain Distinguished leading talents of Jilin Province. More than 70 SCI related papers were published, and 18 patents were authorized.

Zhouyang Xiang
South China University of Technology, China

Zhouyang Xiang is now working as an Associate Professor at the School of Light Industry and Engineering, South China University of Technology. He received his PhD degree from the University of Wisconsin-Madison in 2015 with a major in Biological Systems Engineering. He received his MS degree from North Carolina State University in 2011 with a major in Forest Biomaterials. His research interests are the structural analyses and valorized utilizations of hemicelluloses, which include (1) The physical and chemical structures of xylan-type hemicelluloses; (2) Hemicellulose-based high performance fine chemicals including emulsifying agent, dispersing agent and functional coating; (3) Hemicellulose-based catalysts/catalyst supports.

He has published over 50 publications, mainly in the top journals of the related fields, including Chemical Engineering Journal, Green Chemistry, ACS Applied Materials & Interfaces, ACS Sustainable Chemistry & Engineering, Bioresource Technology, Carbohydrate Polymers, Cellulose, etc. In the past five years, he has received research funding from the National Science Foundation of China, the National Science Foundation of Guangdong Province, Guangzhou Science and Technology Program, China Postdoctoral Science Foundation, etc. He has been invited to be a guest editor in several journals including Frontiers in Energy Research, Coatings and International Journal of Polymer Science. At present, he is a member of the Young Scholars Committee of Fine Chemical Specialty Committee of Chemical Society of China.

POSTER

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Description of poster display and evaluation:

1. Poster display address:

1）Room 1: https://isncm2021.aconf.org/timetable.html?session=191113

2）Room 2： https://isncm2021.aconf.org/timetable.html?session=191114

3）Room 3： https://isncm2021.aconf.org/timetable.html?session=191124

Anyone can go in and see it. The poster template can be downloaded online（ https://isncm2021.aconf.org/news.html ），

2. From 18:00 to 20:30 on November 20, the authors present the poster of 3-5 minutes and Q&A of 3-5 minutes for the evaluators to give scores. Three excellent posters will be selected from each room. Certificates and awards will be issued to the excellent posters. Total score = Poster Score (30%) + Presentation Score (70%)

Conference room login method: https://isncm2021.aconf.org/news/4410.html

Poster 1， Room1

NO.	Title of paper	Author	Title of author
47	Application of ontology modeling in nanocellulose domain	Xuelian Zhang	Hulunbuir University
48	Preparation of Fe/N co-doped hierarchical porous carbon nanosheets derived from chitosan nanofibers for high-performance supercapacitors	Yaqi Yang	Beijing Institute of Technology
49	A double layer laminated film of cellulose nanocrystals and dye displaying vibrant circularly polarized light	Lihong Wei	Jilin University
51	Cellulose nanofiber with high degree of polymerization: The merits of retaining nature-designed structure	Jie Zhou	South China University of Technology
52	Cellulose nanocrystals films with NIR II circularly polarized luminescence for cancer diagnosis applications	Di Lu	Jilin University
53	Planar-Homeotropic Textures in Chiral Nematic Cellulose Nanocrystal Films Enabling Tunable Circular Polarization Patterns on Both Plane and Lateral Surfaces	Ping Li	State Key Laboratory of Inorganic Synthesis & Preparative Chemistry
54	Preparation and characterization of modified cellulose nanofibers reinforced poly (butylene adipate-co-terephthalate)(PBAT) composites	Leilei Hou	China National Pulp and Paper Research Institute Co., Ltd
63	HIGHLY EFFICIENT AND SELECTIVE MODIFICATION OF LIGNIN TOWARD OPTICALLY DESIGNABLE AND MULTIFUNCTIONAL LIGNOCELLULOSE NANOPAPER	Zehai Wang	Guangxi University
64	NTEGRATION OF A CELLULOSE NANOFIBRILS BASED TRIBOELECTRIC NANOGENERATOR AND GAS SENSOR FOR REAL-TIME WIRELESS FOOD-QUALITY ASSESSMENT	Chenchen Cai	Guangxi University
96	Extraction of cellulose nanofibrils by the synergistic effect of ball milling and chemical modification	Xijun Wang	Guangxi university
97	Facile Preparation and Characteristic Analysis of Sulfated Cellulose Nanofibril via the Pretreatment of Sulfamic Acid-Glycerol Based Deep Eutectic Solvents	Weidong Li	Qilu University of Technology
122	Mechanically Flexible Carbon Aerogel with Wavy Layers and Springboard Elastic Supporting Structure for Selective Oil/Organic Solvent Recovery	Jiran Dong	South China University of Technology
125	Structural change and redispersion characteristic of dried lignin-containing cellulose nanofibril and its reinforcement in PVA nanocomposite film	Haocheng Fu	South China University of Technology

Poster 2， Room2

NO.	Title of paper	Author	Title of author
50	ON-Demand Circularly Polarized Room-Temperature Phosphorescence in Chiral Nematic Nanoporous Silica Films	Dan Zhang	Jilin University
67	Extraction of Chitin from Crayfish Shells by Microwave-Assisted Deep Eutectic Solvent Treatment	Ziyan Li	Nanjing Forestry University
68	STABILIZATION OF BIODIESEL/WATER PICKERING EMULSION USING CELLULOSE NANOMATERIALS WITH TAILORED MORPHOLOGY AND SURFACE CHEMISTRY	Xinyue Liu	Nanjing Forestry University
34	Effect of micro/nano structure formed between hemicellulose and nano/micro-fibrils on properties of cellulose films	MIngzhu Yao	Guangxi University
58	Flexible self-powered high performance ammonia sensor based on MOF/cellulose nanofibrils composites	Bin Luo	Guangxi University
59	RADIAL PISTON TRIBOELECTRIC NANOGENERATOR-ENHANCED CELLULOSE FIBER AIR FILTER FOR SELF-POWERED PARTICULATE MATTER REMOVAL	Jilong Mo	Guangxi University
55	Study on the Effect of Carboxyethylation Pretreatment on Cellulose Cation Efficiency	Jiaxi Wang	China National Pulp and Paper Research Institute Co.,Ltd.
56	Fabrication of Nanolcellulose stabilized nano zero-valent iron for Heavy metal removal	Song Mingyang	Tongji University
94	A High-Efficient Air Filter Media with Three-Dimensional Network Composed of Core-Shell Zeolitic Imidazolate Framework-8@Tunicate Nanocellulose for PM0.3 Removal	Zhongyuan Huang	South China University of Technology
61	3D Conductive Cellulose Nanofiber Carbon Aerogels with the Desired Pores for Supercapacitors	Chunxia Yan	Beijing Institute of Technology
117	SUPERHYDROPHOBIC WOOD-BASED FLEXIBLE CONDUCTIVE COMPOSITE FOR EFFICIENT ELECTROMAGNETIC SHIELDING	Junqing Chen	South China University of Technology
121	Preparation and Properties of Cellulose Nanocrystalline Reinforcement Green Barrier Packing Material	Hui Pei	Xi'an University of Technology
126	Fibrillating wood chips to facilitate high-valued lignin extraction and high titer ethanol production	Yan Wu	South China University of Technology
127	Co-assembly with cellulose nanocrystals to promote photothermal-conversion applications of black phosphorus nanosheets—— simultaneous promotion of exfoliation, chemical stability, and photothermal-conversion efficiency	Yi He	Southwest University

Poster 3， Room3

NO.	Title of paper	Author	Title of author
9	ENHANCED PERFORMANCE OF A CELLULOSE NANOFIBRILS-BASED TRIBOELECTRIC NANOGENERATOR BY TUNING THE SURFACE POLARIZABILITY AND HYDROPHOBICITY	Qiu Fu	Guangxi University
60	HEMICELLULOSE-RICH TRANSPARENT WOOD: MICROSTRUCTURE AND MACROSCOPIC PROPERTIES	Mengyang Zhang	Guangxi University
62	Green Approach to Facilely Design Hydrophobic Aerogel Directly from Bagasse	Zerong Li	Guangxi university
65	Lignocellulosic Nanofibers from Energy Cane Bagasse as fluid modifiers in Oil Drilling field	Chaozheng Liu	Nanjing Forestry University
28	DELIGNIFICATION OF BALSA WOOD BY DEEP EUTECTIC SOLVENTS FOR MICROPLASTICS REMOVAL	Yang Lu	Nanjing Forestry University
57	Nanocellulose hydrogel functionalization with biological molecules for biomedical application-Review	HAIXIN JIAO	Jiangsu University
95	Nanocellulose Membrane with Temperature-gated Nanochannels for Controllable Osmotic Energy Harvesting	Xuejiao Lin	South China University of Technology
66	Effect of hemicellulose content on the property of CNFs and their films	Caixia Zhang	Guangxi University
98	Comparison of effects of Sodium Chloride and Potassium Chloride on Spray Drying and Redispersion of Cellulose Nanofibrils Suspension	光瑞 马	Qilu University of Technology
93	Tough and multifunctional composite film actuator based on cellulose nanofibers toward smart wearables	Jie Wei	Beijing Institute of Technology
123	Waterborne Fluorescent Dual Anti-counterfeiting Ink Based on Yb/Er-Carbon Quantum Dots Grafted with Dialdehyde Nano-fibrillated Cellulose	Pengfei Li	South China University of Technology
124	Silver Nanoparticles-embedded Hybrid Nanopaper with Significant Thermal Conductivity Enhancement	Cheng Rui	South China University of Technology
128	Co-assembly strategy of flexible long-chains to endowing ductility and AI potential of structural monochromatic array based on rigid cellulose nanocrystals	Zhenxu Shi	Southwest University

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