#### 3<sup>rd</sup> Announcement of the 3<sup>rd</sup> International Symposium on Nanocellulosic Materials

The 3<sup>rd</sup> International Symposium on Nanocellulosic Materials on November 20-21, 2021 will shift online and offline in order to prevent the spread of Covid-19. All researchers and related persons are welcome to the meeting. The delegates in Guangzhou can come to SCUT campus, Wushan Road, Guangzhou, and the ones over Guangzhou and oversea can join online by ZOOM.

Meeting Date: November 20 (Saturday)-21 (Sunday), 2021.

Venue: Zoom Meeting and South China University of Technology, Wushan Campus, Guangzhou, China

Website: https://isncm2021.aconf.org

Registration: 200 CNY/person,

#### **CONFERENCE CHAIR:**

Dr. Zhenlei Cao, president of the China Technical Association of Paper Industry, China

#### **EXECUTIVE CHAIR:**

Prof. Shiyu Fu, South China University of Technology, China

#### **ORGANIZING COMMITTEE**

Dr. Ruitao Cha, National Center for Nanoscience and Technology, China Prof. Huazhi Chen, South China University of Technology, China Prof. Guigan Fang, Institute of Chemical Industry of Forest Products, CAF, China Prof. Huang Lei, China Technical Association Paper Industry, China Prof. Yingwei Li, South China University of Technology, China Prof. Jun Li, South China University of Technology, China Prof. Chuanfu Liu, South China University of Technology, China Prof. Tao Song, South China University of Technology, China Prof. Tao Song, South China University of Technology, China Prof. Chao Tian, China National Pulp and Paper Research Institute, China Prof. Xiaohui Wang, South China University of Technology, China

#### **TIME TABLE**

Date		Item	Time
	Morning Sossion	Opening Ceremony	8:30-9:00
	Morning Session	Keynotes Session	9:00-12:10
November 20 (Saturday)		Lunch	12:10-14:00
	Afternoon Session	Oral Presentations	14:00-17:55
	Poste	18:00-20:00	
	Morning Session	Oral Presentations	8:30-12:15
		12:15-14:00	
November 21 (Sunday)		Oral Presentations	14:00-15:50
	Afternoon Session	Keynotes Session	16:00-17:30
		Closing Ceremony	17:30-18:00

#### **Conference Program**

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

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate
			President of SCUT	Welcoming address on behalf of SCUT	South China University of Technology, China
Shiyu Fu, SCUT	8:30-9:00	Opening Ceremony	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	9:00-9:30	Plenary Speech 1	Shuhong Yu	Bio-based Sustainable Structural Materials	University of Science and Technology of China, China
Hao Wang, SLAB	9:30-10:00 (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, <b>UMD</b>	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)				

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

Orlando Rojas, <b>UBC</b>	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, <b>UTokyo</b>	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, <b>NEU</b>	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	

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

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate
Junli Ren, SCUT	14:00-14:25	Invited Speaker	Hao Wang	Neutron scattering for better understanding of nanocellulose	Songshan Lake Materials Laboratory, Guangdong, China
	14:25-14:50	Invited Speaker	Ju Fang	Bio-inspired anisotropic wood-based hydrogel composites for bone repair	Southern University of Science and Technology, China
	14:50-15:10	Oral	Lei Dai	A sensitive humidity sensor based on patterned cellulose nanofibers/graphene oxide films	Shaanxi University of Science and Technology, China
	15:10-15:30	Oral	Hongshen Li	Cellulose nanofibers preparation combined with bioethanol production from fermented sweet sorghum bagasse	Tsinghua University, China, China
	15:30-15:50	Oral	Pan Chen	Surface modification effects on nanocellulose- molecular dynamics simulations using umbrella sampling and computational alchemy	Beijing Institute of Technology, China
	15:50-16:00			Tea Break (10 min)	

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

	16:00-16:25	Invited Speaker	Haisong Qi	Tailored cellulose nanofibers by surface/interface modification	South China University of Technology, China	
	16:25-16:50	Invited Speaker	Chaoji Chen	Developing sustainable lightweight structural materials from wood	Wuhan University, China	
Wu Lan, SCUT	16:50-17:15	Invited Speaker	Kai Yan	High value utilization of biomass-derived resources	Sun Yat-sen University, China	
	17:15-17:35	Oral	Jinsong Tao	Highly transparent, highly thermally stable nanocellulose/polymer hybrid substrates for flexible OLED devices	South China University of Technology, China	
	17:35-17:55	Oral	Jinghuan Chen	Preparation of carboxymethylated nanocellulose and its application in papermaking	China National Pulp and Paper Research Institute Co., Ltd. , China	
	18:00- 20:00	Poster	Each poster can show 10 min including question and answer			

# **SESSION 5, Room 2, Online**

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate
	14:00-14:25	Invited Speaker	Xingyu Jiang	Biomedical application of nanocellulose	Southern University of Science and Technology, China
	14:25-14:50	Invited Speaker	Yanjun Tang	Carboxylation modification of cellulose nanofibrils for paper coating application	Zhejiang Sci-Tech University, China
Fangong Kong,	14:50-15:10	Oral	Zhiqiang Li	Preparation and properties of silane modified CNF reinforced polylactic acid (PLA) composites	Tianjin University of Science and Technology, China
QLU	15:10-15:30	Oral	Siqi Huan	3D-printing of low solids nanocelluloses for multifunctional applications	Northeast Forestry University, China
	15:30-15:50	Oral	Jingyang Tian	Synthesis of nitrogen and sulfur cooped multilevel porous carbon from lignin for high-performance supercapacitors	East China University of Technology, China
	15:50-16:00			Tea Break (10 min)	

# **SESSION 6, Room 2, Online**

	16:00-16:25	Invited Speaker	Guang Yang	Bacterial nanocellulose-based functional materials for biomedical applications	Huazhong University of Science and Technology, China	
	16:25-16:50	Invited Speaker	Jianfeng Yao	Cellulose hydrogels and membranes	Nanjing Forestry University, China	
Meiyun Zhang, SUST	16:50-17:15	Invited Speaker	Jingyi Nie	Biomimetic design and self-organizing construction of ordered nanocellulose- chitosan-hydroxyapatite composite bone defect repair scaffolds	Shaanxi University of Science and Technology, China	
	17:15-17:35	Oral	Chunyan Zhong	Birth of bacterial cellulose industrialization from zero to one	Hainan Guangyu Biotechnology Co. Ltd, China	
	17:35-17:55	Oral	Wanqing Lei	Preparation of cellulose nanocrystal from office waste paper and its potential application in thermal reinforcement of polyurethane	Xi'an University of Technology, China	
	18:00- 20:00	Poster	Each poster can show 10 min including question and answer			

# **SESSION 7, Room 3, Online**

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate	
	14:00-14:25	Invited Speaker	Guihua Yang	Facile preparation of sulfated cellulose nanofibril using deep eutectic solvent pretreatment	Qilu University of Technology (Shandong Academy of Sciences), China	
	14:25-14:50	Invited Speaker	Jing Shen	Colloids, nanostructures, and supramolecular assemblies: Toward limitless possibilities of papermaking	Northeast Forestry University, China	
Yan Xu, <b>JLU</b>	14:50-15:10	Oral	Meng Wang	Shape memory and underwater super elastic MOF@cellulose aerogels for rapid and large-capacity adsorption	Qilu University of Technology (Shandong Academy of Sciences), China	
	15:10-15:30	Oral	Yuanping Jiang	Synthesize of comb-like ncc-g-plla(pdla) and the effect in PLA matrix	East China University of Technology, China	
	15:50-16:00	Tea Break (10 min)				

# **SESSION 8, Room 3, Online**

	16: 00-16: 25	Invited Speaker	Yan Xu	Cellulose nanocrystals for circularly polarized light materials	Jilin University, China
	16: 25-16: 50	Invited Speaker	Zhaohui Wang	Nanocellulose paper-based battery separators	Hunan University, China
Yongjian Xu,	16: 50-17: 15	Invited Speaker	Lihui Chen	Study on the preparation of high-reactivity dissolving pulp and its functional materials	Fujian Agriculture and Forestry University, China
SUST	17: 15-17: 35	Oral	Guoqiang Zhou	3D printing cellulose nanofibers for constructing multifunctional materials	Nanjing Forestry University, China
	17: 35-17: 55	Oral	Lijun Wang	The study of rheological properties and microstructure of carboxylated nanocellulose dispersion/hydrogel	China Agricultural University, Beijing, China
	18:00- 20:00	Poster	Each poster can show 10 min including question and answer		

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

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate
	8:30-8:55	Invited Speaker	Yonghao Ni	Nanocellulose as templates to prepare composite solid-state electrolytes and their lithium-ion transport mechanism	University of New Brunswick, Canada
	8:55-9:20	Invited Speaker	Tingjie Li	Production of cellulosic biomaterials and nanomaterial: current status, commercialization challenges and market opportunities	KPMG, Canada
Junfei Tian, SCUT	9:20-9:45	Invited Speaker	Zilong Deng	Cellulose nanomaterials based edible coatings for storability extension of postharvest pears and bananas: mechanisms, development and validation	Tongji University, China
	9:45-10:05	Oral	Xuelian Zhang	Application of ontology in nanocellulose domain	Hulunbuir University, China
	10:05-10:25	Oral	Rongrong Liu	Application and preparation of cellulose nanofibrils by modified Fenton oxidation pretreatment	Tianjin University of Science and Technology, China
	10:25-10:35			Tea Break (10 min)	

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

	10:35-11:00	Invited Speaker	Zhiqiang Fang	Light management of cellulose paper	South China University of Technology, China	
	11:00-11:25	Invited Speaker	Linge Wang	Electrospun cellulose-based phase change fibers for thermoregulation materials and thermal energy storage	South China University of Technology, China	
Deng, <b>TJU</b>		Oral	Qinghua Xu	Gelatin films reinforced by nanocellulose- tannin microgel towards sustainable active food packaging	Qilu University of Technology (Shandong Academy of Sciences), China	
	11:45-12:05	Oral	Yang Lu	Delignification of balsa wood by deep eutectic solvents for microplastics removal	Nanjing Forest University, China	
	12:05-14:00	Lunch time				

# **SESSION 11, Room 2, Online**

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate	
	8:30-8:55	Invited Speaker	Xuejun Pan	Fabrication of nanocellulosic materials from cellulose and lignocellulose using molten salt hydrate and their environmental and energy applications	University of Wisconsin- Madison, USA	
Changemen	8:55-9:20	Invited Speaker	Jinguang Hu	Cellulose valorization via photo/bio-processing	University of Calgary, Canada	
Chengrong Qin, <b>GXU</b>	9:20-9:45	Invited Speaker	Ziqiang Shao	New progress in preparation and application technology of Nanocellulose	Beijing Institute of Technology, China	
	9:45-10:05	Oral	Detao Liu	Sustainable wood materials by controllable surface dissolution technology	South China University of Technology, China	
	10:05-10:25	Oral	Daxin Liang	Cellulose based composite for the extraction of lithium from seawater	Northeast Forestry University, China	
	10:25-10:35	Tea Break (10 min)				

# **SESSION 12, Room 2, Online**

Chao Tian, <b>CNPPRI</b>	10:35-11:00	Invited Speaker	Jinsong Zeng	Dynamic characterization of plant micro- nanocellulose based on microfluidic technology	South China University of Technology, China
	11:00-11:25	Invited Speaker	Long Bai	Multiphase systems stabilized by nanocelluloses with multiple applications	Northeast Forestry University, China
	11:25-11:45	Oral	Yanhua Liu	Surface potential tailoring and its contribution to the contact electrification of cellulose nanofibrils	Guangxi University, China
	11:45-12:05	Oral	Jiaxuan Liu	Fabrication of nanocellulose-based flexible shape memory composites with dual responsiveness	Tianjin University of Science and Technology, China
	12:05-14:00			Lunch	

# SESSION 13, Room 3, Online

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate	
	8:30-8:55	Invited Speaker	Huining Xiao	Functional-modified cellulose nanofibers and exopolysaccharide nanoparticles: characteristics and applications	University of New Brunswick, Canada	
	8:55-9:20	Invited Speaker	Ning Yan	Application of lignin containing nanocellulose fibrils in high performance sensors and flexible energy storage devices	University of Toronto, Canada	
Zhong Liu, TUST	9:20-9:45	Invited Speaker	Wenshuai Chen	Cellulose Nanofiber Gels for Collecting Water from Air	Northeast Forestry University, China	
	9:45-10:05	Oral	Jin Gu	Cellulose nanofibrils as reducing and stabilizing agents in the synthesis of noble metal nanoparticles and their applications in catalysts and sensors	South China Agricultural University, China	
	10:05-10:25	Oral	Xin Gao	Agriculture-residual parenchyma cells for nanocellulose: an alternative to conventional fibrous resources	Kunming University of Science and Technology, China	
	10:25-10:35	Tea Break (10 min)				

# **SESSION 14, Room 3, Online**

	10:35-11:00	Invited Speaker	Chunyu Chang	Controlled arrangement of cellulose nanocrystals in hydrogel networks: From reinforcement to functionality	Wuhan University, China
Qingxi Hou, <b>TUST</b>	11:00-11:25	Invited Speaker	Bin Li	Core-shell filaments of cellulose nanofibrils and guar gum produced by interfacial polyelectrolyte complexation	Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences, China
	11:25-11:50	Invited Speaker	Wei Liu	Fabrication and application of lignin-containing cellulose nanofibrils	Tianjin University of Science and Technology, China
	11:50-12:10	Oral	Dan Qu	Circularly polarized laser with chiral nematic cellulose nanocrystal cavity	Technion-Israel Institute of Technology, Israel
	12:10-14:00			Lunch	

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

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate	
	14:00-14:25	Invited Speaker	Xiaoying Wang	3D printing nanocellulose-based materials and their application in food	South China University of Technology, China	
Ju Fang, <b>SUSTech</b>	14:25-14:50	Invited Speaker	Jun Xu	Two novel pretreatment methods for nanocelluloses preparation: lignin-based solid acid catalysis and dilute sulfuric acid hydrolysis	South China University of Technology, China	
	14:50-15:15	Invited Speaker	Cheng Zhong	Regulation of bacterial cellulose biosynthesis and its application	Tianjin University of Science and Technology, China	
	15:15-15:35	Oral	Meichun Li	Rheological properties of cellulose nanomaterials and their application in drilling fluids	Nanjing Forestry University, China	
	15:55-16:00	Tea Break (5 min)				

# **SESSION 16, Room 2, Online**

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate	
	14:00-14:25	Invited Speaker	Jin Huang	New cellulose nanocrystal-based materials: From surface chemistry to materials fabrication	Southwest University, China	
	14:25-14:50	Invited Speaker	Dagang Liu	Sustainable iridescence of cast and shear coatings of cellulose nanocrystals	Nanjing University of Information Science & Technology, China	
Qinghua Xu, <b>QLU</b>	14:50-15:15 (9:50 am, Nov.21, Kenya time)	Oral	Sabella Kiprono	Preparation and evaluation of hydrogel capsules for surface modification of Lactobacillus plantarum for oral delivery of Bovine Serum Albumin	Masinde Muliro University of science and Technology, Kenya	
	15:15-15:35	Oral	Xiao Feng	Sulfated Nanocellulose-Based Conductive Composite Materials	South China University of Technology	
	15:55-16:00	Tea Break (5 min)				

# **SESSION 17, Room 3, Online**

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate	
	14:00-14:25	Invited Speaker	Feng Xu	Lignocellulose-based functional materials: Fabrication, properties, and applications	Beijing Forest University, China	
	14:25-14:50	Invited Speaker	Wei Hu	Application of nanocellulose in membranes of batteries	Northeast Normal University, China	
Haiqiang Shi, <b>DLPU</b>	14:50-15:15	Invited Speaker	Zhouyang Xiang	Hemicellulose Nanocrystals: Preparations and Applications	South China University of Technology, China	
	15:15-15:35 (9:15, Nov.21 Finland time)	Oral	Liqiu Hu	Preparation of nanocellulose via interfering fiber-fiber interaction with polysaccharides and its redispersibility	Åbo Akademi university, Finland	
	15:55-16:00	Tea Break (5 min)				

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

Moderator	Time (GMT +8.00)	Program	Speaker	Title	Affiliate
Xiaohui Wang, <b>SCUT</b>	16:00-16:30	Plenary Speech 7	Lars Berglund	Pulp fibers and wood as nanocellulose materials	KTH Royal Inst of Techn, Sweden
Lars Berglund, <b>KTH</b>	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, <b>BOKU</b>	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		<ol> <li>Award for excellent posters</li> <li>Closing Remark</li> <li>Professor Feng Xu gives a notice for next meeting</li> </ol>	