第十届中国
国际丝绸会议 (ISC 2022)

The 10th China International Silk Conference (ISC 2022)

“创新合作 振兴丝绸”

“INNOVATION AND COOPERATION”, REVITALIZATION FOR SILK

会议手册

MEETING PROGRAM

2022 年 12 月 9-11 日 , 中国 · 河池

Dec 9-11th, 2022, Hechi, Guangxi, China

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WELCOME MESSAGE

由中国丝绸协会主办，苏州大学、河池学院、广西农村投资集团和河池市宜州区人民政府承办的“第十届中国国际丝绸会议（ISC 2022）”将于 2022 年 12 月 9-11 日在广西河池举行。我们将邀请丝绸领域的世界知名专家交流和探讨丝绸相关前沿科技与文化历史。作为国际丝绸界的传统盛会，中国国际丝绸会议旨在为全球丝绸相关的科研人员、行业专家、企业家和政府官员提供一个重要的交流平台，成为深入推进丝绸及其交叉学科国际合作的学术窗口。

今年大会将围绕新型丝绸纤维材料及应用、丝绸绿色染整加工技术、丝绸服装智能制造、时尚设计与文化历史，以及桑资源研究及其在生物医学领域的应用这四个议题，通过来自不同学科和领域的同行交流，激发创新火花，实现创新合作，共同促进丝绸科学、技术和产业的高质量全球化发展。

The 2022 China International Silk Conference (ISC 2022) is an international conference hosted by China Silk Association, and co-organized by Soochow University, Hechi University, Guangxi Rural Investment Group Co., Ltd., and Yizhou District People's Government of Hechi City. The 10th China International Silk Conference will be held in Hechi, Guangxi Zhuang Automomous Region, on December 9th to 11th, 2022. Many well-known worldwide experts on silk will be invited to present and discuss silk related state-of-the-art research, history and cultural discoveries. As a traditional grand event in international silk community, ISC is an important communicating platform for global researchers, silk industry experts, relevant entrepreneurs and government officials, which can also provide new opportunities to promote multidisciplinary collaborations between various parties.

ISC 2022 will be focusing on four main themes: Innovation in Silk Fibers and Their Applications; Sustainable Dyeing and Finishing Technologies; Silk Culture, Fashion Design and Intelligent manufacturing; Research on Sericulture Resources and its Biomedical Applications. We sincerely invite the experts and scholars in related fields from all over the world to participate in this conference, we truly believe that efficient communication can inspire more sparkles in the scientific and technological advances, realize more innovative collaborations, and cooperatively promote the high-quality global development of silk science, technology and industry.

Welcome to ISC 2022, your participation will be a great honor for us!

第十届国际丝绸会议组委会
Organization Committee of the 10th China International Silk Conference (ISC 2022)

ORGANIZATION

主办单位： 中国丝绸协会
China Silk Association

承办单位： 苏州大学
Soochow University
河池学院
Hechi University
广西农村投资集团
Guangxi Rural investment Group Co., LTD
河池市宜州区人民政府
Yizhou District People's Government of Hechi City

协办单位： 广西茧丝绸行业协会
Guangxi Cocoon and Silk Industry Association
家蚕基因组生物学国家重点实验室
State Key Laboratory of Silkworm Genome Biology
浙江省蚕蜂资源利用与创新研究重点实验室
Key Laboratory of Silkworm and Bee Resource Utilization and Innovation of Zhejiang Province
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Guangxi Zhuang Automomous Region Sericulture Technology Promotion
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广西科技大学生物与化学工程学院
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广西蚕桑生态学与智能化技术应用重点实验室
Guangxi Key Laboratory of Sericulture Ecology and Applied Intelligent Technology
河池市茧丝绸行业协会
Hechi Cocoon and Silk Industry Association
环江毛南族自治县人民政府
Huanjiang Maonan Autonomous County Government
广西农投时宜农业科技有限公司
G.R.I.G. & Shi Yi Agricultural Science & Technology Corporation Ltd.

会议官网： http://www.cisc-suda.com

ACADEMIC COMMITTEE

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武汉纺织大学校长
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现代丝绸国家工程实验室主任
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Xuehong REN	Wuhan Textile University
Wanling TONG	Southwest University
Quan WAN	Zhejiang University
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Junliang WANG	Donghua University
Xungai WANG	The Hong Kong Polytechnic University
Jianmei XU	Soochow University
Zongpu XU	Zhejiang University
Kenjiro YAZAWA	Shinshu University
Xianyi ZENG	École Nationale Supérieure Des Arts Et Industries Textiles (ENSAIT)
Keqin ZHANG	Soochow University
Yingying ZHANG	Tsinghua University

Members (alphabetical order by family name)

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Deputy Chairman: Jinping GUAN(关晋平)

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Kai WEI (魏凯)	Ping WANG (王萍)	Yan HONG (洪岩)
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Jiansheng PENG (彭建盛)	Yue QIN (覃玥)	Lixia GAO (高丽霞)

Chairmen of Parallel Sessions:

Parallel Session 1: Innovation in Silk Fibers and Their Applications
分会场 1：新型丝绸纤维材料及应用

Jian FANG (方剑)　　Xiaoqiao WANG (汪晓巧)

Parallel Session 2: Sustainable Dyeing and Finishing Technologies
分会场 2：丝绸绿色染整加工技术

Tieling XING (邢铁玲)　　Jinping GUAN (关晋平)

Parallel Session 3: Silk Culture, Fashion Design and Intelligent manufacturing
分会场 3：丝绸服装智能制造、时尚设计与文化历史

Yan HONG (洪岩).　　Xiaoqun DAI (戴晓群)

Parallel Session 4: Research on Sericulture Resources and its Biomedical Applications
分会场 4：蚕桑资源研究及其在生物医学领域的应用

Huijing ZHAO (赵荟菁)　　Gang LI (李刚)

Opening Ceremony

2022 年 12 月 10 日　Dec. 10, 2022　08:30-09:00

ID: 466 903 556　Passcode: 221210

主持：苏州大学纺织与服装工程学院张克勤院长

Presided over by Prof. Keqin ZHANG, Dean of College of Textile and Clothing Engineering, Soochow University

流程：

1. 河池学院校长苗剑致欢迎辞

Welcome speech by Mr. Jian MIAO, President of Hechi University

2. 广西农村投资集团有限公司董事长廖应灿致辞

Speech by Mr. Yingcan LIAO, Chairman of Guangxi Rural Investment Group Co., Ltd.

3. 河池市副市长陆景宇致辞

Speech by Mr. Jingyu LU, Vice Mayor of Hechi City

4. 苏州大学副校长沈明荣致辞

Speech by Prof. Mingrong SHEN, Vice President of Soochow University

5. 日本信州大学校长特别助理、国际纤维研究所所长金翼水教授致辞

Speech by Prof. Icksoo KIM, Special Advisor to the President of Shinshu University, Director of the Institute for Fiber Engineering (IFES)

6. 中国丝绸协会会长唐琳先生致辞

Opening Speech by Mr. Lin TANG, Chairman of China Silk Association

PROGRAM OVERVIEW

Date	Time	Activity	Conference ID
Dec. 9, 2022	12:00-20:00	Registration (大会注册)	—
Dec 10, 2022	08:30-09:00	Opening Ceremony(开幕式)	466 903 556
	09:00-12:00	Plenary Lecture(大会报告)	466 903 556
	13:00-17:00	Parallel Sessions 1	366 123 413
		Parallel Sessions 2	672 361 7039
		Parallel Sessions 3	335 106 9530
		Parallel Sessions 4	689 3354 2414
Dec 11, 2022	08:30-12:00	Parallel Sessions 1	366 123 413
		Parallel Sessions 2	672 361 7039
		Parallel Sessions 3	335 106 9530
		Parallel Sessions 4	689 3354 2414

PLENARY LECTURE

2022 年 12 月 10 日 Dec. 10, 2022
9:00-12:00
主席：苏州大学关晋平教授
Chairman: Prof. Jinping GUAN, Soochow University, China
ID: 466 903 556 Passcode: 221210

时间 Time	报告专家 Lecturer	报告题目 Presentation Title
09:00-09:30	**Prof. David L. KAPLAN** *Tufts University, USA*	Recent advances with silk biomaterials and technologies
09:30-10:00	**Prof. Xungai WANG** *The Hong Kong Polytechnic University, China*	Silk from glorious past to sustainable future
10:00-10:30	**Prof. Kenjiro YAZAWA** *Shinshu University, Japan*	Silkworm cocoon waste conversion into tough regenerated silk fibers by solution spinning
10:30-11:00	**Prof. Xiaoling TONG** *Southwest University, China*	A super pan-genomic landscape of silkworm
11:00-11:30	**Prof. Keqin ZHANG** *Soochow University, China*	Silk fibroin based biomimetic materials
11:30-12:00	**Mr. Guomin CHEN** *G.R.I.G.& Shi Yi Agricultural Science & Technology Co.,Ltd*	Discussion on the development of standardization and digitalization of Guangxi silkworm industry

PLENARY SPEAKERS

David L. KAPLAN

Stern Family Endowed Professor of Tufts University, USA

美国塔夫茨大学终身荣誉教授

Xungai WANG 王训该

the Chair Professor of the Hong Kong Polytechnic University, China

香港理工大学首席教授

Kenjiro YAZAWA

Assistant professor of Shinshu University, Japan

日本信州大学助理教授

Xiaoling TONG 童晓玲

Professor of Southwest University, China

西南大学教授

Keqin ZHANG 张克勤

Professor of Soochow University

苏州大学教授

Guomin CHEN 陈国民

General Manager of G. R. I. G. & Shi Yi Agricultural Science & Technology Corporation Ltd.

广西农投时宜农业科技有限公司总经理

David L. KAPLAN

Stern Family Endowed Professor of Tufts University, USA

美国塔夫茨大学终身荣誉教授

Presentation Title:

Recent advances with silk biomaterials and technologies

Biography:

David Kaplan is the Stern Family Endowed Professor of Engineering at Tufts University, a Distinguished University Professor, and Professor in the Department of Biomedical Engineering. He also holds faculty appointments in the School of Medicine, School of Dental Medicine, and the Departments of Chemistry and Chemical and Biological Engineering. His research focus is on biopolymer engineering, tissue engineering, regenerative medicine and cellular agriculture. He has published over 1,000 peer reviewed papers, is editor-in-chief of ACS Biomaterials Science and Engineering and he serves on many editorial boards and programs for journals and universities. He directed the NIH P41 Tissue Engineering Resource Center (TERC) that involves Tufts University and Columbia University for 15 years. His lab has been responsible for over 150 patents issued or allowed, and numerous start-up companies. He has also received a number of awards for his research and teaching and was elected Fellow of the American Institute of Medical and Biological Engineering and to the National Academy of Engineering.

Xungai WANG 王训该

Chair Professor of the Hong Kong Polytechnic University, China

香港理工大学首席教授

Presentation Title:

Silk from glorious past to sustainable future

Biography:

Professor Wang Xungai is the Chair Professor of Fiber Science and Technology at the Hong Kong Polytechnic University (HKPU). Before joining HKPU, Professor Wang was Alfred Deakin Professor, Pro Vice-Chancellor (Future Fibers), and Director of ARC Research Hub for Future Fibers at Deakin University in Australia.

Professor Wang received the Fiber Society Award for Distinguished Achievement in Fiber Science and the H&M Foundation Global Change Award in 2005 and 2017 respectively. In 2019, the ARC Research Hub for Future Fibers led by Professor Wang received the Vice-Chancellor's Award for Outstanding Contribution to Industry and Employer Partnerships.

Professor Wang's research interests include sustainable and functional fibers and textiles, natural fiber materials and yarn technology. He is the Editor-in-Chief of the Journal of the Textile Institute (UK).

Kenjiro YAZAWA

Assistant professor of Shinshu University, Japan

日本信州大学助理教授

Presentation Title:

Silkworm cocoon waste conversion into tough regenerated silk fibers by solution spinning

Biography:

Kenjiro Yazawa earned his Ph.D. (2013) at Tokyo Institute of Technology with a thesis focused on protein disulfide bond formation system in prokaryotes. He worked as a postdoctoral researcher at RIKEN (Japan) where he studied structural and mechanical properties of silk-based polymers as well as enzymatic synthesis of peptides in the laboratory of Prof. Keiji Numata. He moved to Shinshu University as an assistant professor in 2018 and started up his laboratory to investigate the spinning mechanisms spiders and silkworms and artificial spinning of regenerated silk fibers.

Xiaoling TONG 童晓玲

Professor of Southwest University, China

西南大学教授

Presentation Title:

A super pan-genomic landscape of silkworm

Biography:

Xiaoling Tong, Ph.D., is a professor in the State Key Laboratory of Silkworm Genome Biology at Southwest University, China. She received her Ph.D. from Southwest University and completed her postdoctoral work in Department of Evolutionary Biology at Yale University in UAS. Currently, her laboratory focus on the genetics and developmental biology in silkworm. Using bioinformatics, molecular, and forward and reverse genetic approaches to address fundamental questions in developmental biology and conduct applied research on silkworm breeding.

Keqin ZHANG 张克勤

Professor of Soochow University

苏州大学教授

Presentation Title:

Silk fibroin based biomimetic materials

Biography:

Professor Ke-Qin Zhang is the distinguished professor of College of Textile and Clothing Engineering of Soochow University and National Engineering Laboratory for Modern Silk. His research focus is on sustainable and functional fibers, silk-based biomaterials and biomass fibers and applications. He has published over 120 peer reviewed papers, is editorial member of *Biomaterials Translational* and *Materials Review*. He also filed more than 50 patents in China and other counties. He is the dean of College of Textile and Clothing Engineering of Soochow University currently. And he was the awardee of the thousand talents recruiting programme issued by the central government of China in 2010. He has also received a number of awards for his research and teaching. He has been named in the list of Clarivate Highly Cited Researchers from 2020 to 2022.

Guomin CHEN 陈国民

General Management of G. R. I. G. & Shi Yi Agricultural Science & Technology Corporation Ltd.

广西农投时宜农业科技有限公司总经理

Presentation Title:

Discussion on the development of standardization and digitalization of Guangxi silkworm industry

Biography:

Chen Guomin, the general manager of G.R.I.G.& Shi Yi Agricultural Science & Technology Co.,Ltd. Born in a family that has been engaged in silkworm industry for generations, he is committed to use modern scientific concepts and technologies to change the traditional rearing mode of silkworm industry for thousands of years.

He experimented, promoted and copied the scientific rearing mode of silkworm industry in Guangxi and has built demonstration bases in many places. He is committed to the innovation and high-quality development of silkworm industry, and drives almost 40,000 silkworm raisers to increase income through scientific rearing.

Parallel Session 1

Innovation in Silk Fibers and Their Applications

会场一

新型丝绸纤维材料及应用

2022 年 12 月 10 日 Dec. 10, 2022
13:00-17:00
ID: 366 123 413 Passcode: 202212

Time	Lecturer	Title
	***Chairman*: Prof. Xiaoqiao WANG, Soochow University**	
13:00-13:30	**Yingying ZHANG** *Tsinghua University, China*	Silk-based flexible electronic materials and devices
13:30-14:00	**Quan WAN** *Zhejiang University, China*	Tuning silk spinning strain accumulation for stronger artificial hierarchical silk
14:00-14:20	**Liangjun XIA** *Wuhan Textile University, China*	Fabrication of high toughness polyurethane composites using waste silk fibroin
14:20-14:40	**Haiyan ZHANG** *Soochow University, China*	Silk fiber-based bioinspired structure for efficient passive radiative cooling
14:40-15:00		**Coffee Break**
15:00-15:30	**Sean J BLAMIRES** *University of New South Wales, Australia*	Silk variability at the nanoscale: methodologies and challenges
15:30-15:50	**Wasim AKRAM** *Soochow University, China*	Facile preparation of sodium alginate/ silk fibroin blended microspheres for drug delivery
15:50-16:10	**Wenqin ZHANG** *Soochow University, China*	Silk fabric derived carbon as a self-supported electrocatalyst for hydrogen evolution reaction
16:10-16:30	**Caihong WANG** *Nantong University, China*	Universal preparation strategy for ultradurable antibacterial fabrics through coating an adhesive nanosilver glue

Name: Yingying Zhang

Affiliation: Tsinghua University

Country: P R China

Presentation Title: Silk-based flexible electronic materials and devices

Personal Profile: Yingying Zhang is a tenured professor at the department of chemistry in Tsinghua University. She received her Ph.D. degree in physical chemistry from Peking University in 2007. Then, she worked in Los Alamos National Laboratory as a postdoctoral research associate. In July of 2011, she joined Tsinghua University. Her research focuses on the design and controlled preparation of nanocarbon, silk, and their hybrid materials, aiming to develop high performance flexible electronics and wearable systems. Currently, she serves as the Topic Editor of Accounts of Materials Research and is on the board of journals such as Matter and Advanced Materials Technologies.

Name: Quan Wan

Affiliation: Zhejiang University College of Animal Science

Country: China

Presentation Title: Tuning silk spinning strain accumulation for stronger artificial hierarchical silk

Personal Profile: His researches has visualized the dynamic process of crystalline nanofibril assembly in nanoscale and linked the rheological parameters to the assembly of silk hierarchical structure, which has been published in scientific journals such as Advanced Materials and Nature Communications.

Name: Sean J Blamires

Affiliation: University of New South Wales, University of Technology

Country: Australia

Presentation Title: Silk variability at the nanoscale: methodologies and challenges

Personal Profile: Dr Sean Blamires is a Research Fellow at UNSW and Visiting Fellow at the Centre for Audio, Acoustics and Vibration at the University of Technology, Sydney. His research is on the biochemistry, and biomechanics of spider and insect silks.

2022 年 12 月 11 日 Dec. 11, 2022
08:30-12:10
ID: 366 123 413 Passcode: 202212

Time	Lecturer	Title
	***Chairman*: Prof. Jian FANG, Soochow University**	
08:30-09:00	**Shengjie LING** *Shanghai Tech University, China*	Structure-property-function relationship of animal silk and their functional applications
09:00-09:30	**Zongpu XU** *Zhejiang University, China*	Silk-based bioinspired materials
09:30-09:50	**Ruifan XI** *Soochow University, China*	Application of silk fiber in electrocatalytic hydrogen evolution
09:50-10:10	**Yuhao TAN** *Zhongyuan University of Technology, China*	Integrated fiber electrodes based on silk fibers for robust and washable flexible electrochemical sensors
10:10-10:30		**Coffee Break**
10:30-11:00	**Jingliang LI** **Deakin University, Australia**	Silk-bioglass hydrogel: formation kinetics, structure, and bioactivity
11:00-11:20	**Shidong MA** *Soochow University, China*	A multi-model, large-range flexible strain sensor based on carbonized silk habotai for human health monitoring
11:20-11:40	**Changmei JIANG** *Nantong Univeristy, China*	A facile approach for potential large-scale production of polylactide nanofiber membrane with enhanced hydrophilic properties
11:40-12:00	**Jing LIU** *Soochow University, China*	A silk-based negative-response strain sensor for wearable microclimate changes measurement

Name: Shengjie Ling

Affiliation: ShanghaiTech University

Country: China

Presentation Title: Structure-property-function Relationship of Animal Silk and Their Functional Applications

Personal Profile: Shengjie Ling is an assistant professor in the School of Physical Science and Technology at ShanghaiTech University. He obtained his B.S. degree from the Zhejiang University of Technology (2009) and Ph.D. from Fudan University (2014). During 2012-2013, He awarded the State Scholarship Fund of China to pursue his study at ETH Zurich, Switzerland, as a joint Ph.D. student. Prior to joining ShanghaiTech University, he worked as a postdoctoral associate at MIT and Tufts University (2014-2017). His research focus is on silk engineering to understand structure-function relationships, with emphasis on studies related to self-assembly, biomaterials engineering and regenerative medicine.

Name: Zongpu XU

Affiliation: Zhejiang University College of Animal Science

Country: China

Presentation Title: Silk-based bioinspired materials

Personal Profile: He obtained his B.S. degree from Nanchang University (2013) and Ph.D. from Zhejiang University (2018). During 2017–2018, he studied in University of Colorado Boulder, USA, as a visiting scholar. Prior to the current position, he worked as a postdoctoral research fellow at Zhejiang University (2018–2020).

Name: Jingliang Li

Affiliation: Deakin University

Country: Australia

Presentation Title: Silk-bioglass hydrogel: formation kinetics, structure, and bioactivity

Personal Profile:: Dr. Jingliang Li received his PhD from the Chemical and Biomolecular Engineering Department of the National University of Singapore. After three years postdoctoral research at the physics department of this university, he moved to Australia at the end of 2006 to continue his research. He is currently an associate professor at the Institute for Frontier Materials of Deakin University. The focus of his research is using molecular self-assembly approach to fabricate functional materials for biomedical (e.g., tissue scaffolds) and energy applications (photovoltaics). He is a recipient of the Future Fellowship from the Australian Research Council and has been selected to be Fellow of the Royal Society of Chemistry.

Parallel Session 2

Sustainable Dyeing and Finishing Technologies

会场二

丝绸绿色染整加工技术

2022 年 12 月 10 日 Dec. 10, 2022
13:00-17:00
ID: 672 361 7039, Passcode: 123456

Time	Lecturer	Title
	***Chairman*: Prof. Tieling XING, Soochow University**	
13:00-13:30	**Weiguo CHEN** *Zhejiang Sci-Tech University, China*	The chemical modification and reactive dyeing of silk
13:30-13:50	**Sohail YASIN** *Zhejiang University, China*	Polymeric waste minimalization with selective sustainable fillers
13:50-14:10	**Qiujin LI** *Tiangong University, China*	Application of gold nanostructures in functional textile materials
14:10-14:30	**Peixin TANG** *Donghua University, China*	Functional fiber materials for chemical and biological protection
14:30-15:00		**Coffee Break**
15:00-15:30	**Jianmei XU** *Soochow University, China*	Environmental footprint of dyed or printed silk fabrics: methodology and strategies
15:30-15:50	**Xianwei CHENG** *Soochow University, China*	Sustainable flame retardant silk fabric: biomass phytic acid based approaches
15:50-16:10	**Yufa SUN** *University of California, Davis, USA*	Dihydroxyacetone-inspired eco-friendly dyeing of wool via Maillard reaction
16:10-16:30	**Xinpeng CHEN** *Soochow University, China*	Preparation of superhydrophobic cotton fabric based on thiol-ene click chemistry
16:30-16:50	**Sweta IYER** *University of Borås, Sweden*	Application of FMN as a biobased dye on silk fabric

Name: Weiguo Chen

Affiliation: Zhejiang Sci-Tech University

Country: P R China

Presentation Title: The Chemical Modification and Reactive Dyeing of Silk

Personal Profile: Dr. Weiguo Chen graduated from Donghua University and Xi'an Polytechnic University majoring in Textile Chemistry and Dyeing and Finishing. He is now a Professor and PhD supervisor in College of Textile Science and Engineering, Zhejiang Sci-Tech University. Dr. Chen has been working in research and development of textile dyeing and finishing for 39 years. More than 150 papers have been published and about 40 invention patents of China have been awarded. His research areas are related to digital technology for textile dyeing and printing, new type dyes and functional textile chemicals, and modification and functional processing of protein fibres, etc.

Name: Jianmei Xu

Affiliation: Soochow University

Country: P R China

Presentation Title: Environmental footprint of dyed or printed silk fabrics: methodology and strategies

Personal Profile: Dr. Jianmei Xu graduated from Soochow University majoring in Textile Engineering. She is now an associate professor in the College of Textile and Clothing Engineering, Soochow University. Dr. Xu has been working in the silk industry for over 20 years, especially on the standardization work of silk inspection. She has been involved in the establishment and publication of 2 ISO standards, 2 national standards, and 1 group standard. Additionally, she published over 50 papers on her research interests. Recently, she was conducting environmental footprint research of the whole industry chain of silk products, collaborating with Italian experts under the support of the International Silk Union.

2022 年 12 月 11 日 Dec. 11, 2022
08:30-12:10
ID: 672 361 7039, Passcode: 123456

Time	Lecturer	Title
	***Chairman*: Prof. Jinping GUAN, Soochow University**	
08:30-09:00	**Long LIN** *Natura Colour and Polymer Research Ltd., UK*	Sustainable dyeing and fibre recycling
09:00-09:20	**Yuyang ZHOU** *Soochow University, China*	Taking advantage of bio-based molecules for sustainable fabrication of coloristic and functional silk materials
09:20-09:40	**Jingtian LU** *North Carolina State University, USA*	Evaluation of repellency and flammability of PFAS and PFAS-free turnout gear outer shell materials
09:40-10:00	**Meilin CHENG** *Tiangong University, China*	Indigo bio-reduction dyeing of protein fibers
10:00-10:30		**Coffee Break**
10:30-11:00	**Xuehong REN** *Wuhan Textile University, China*	Preparation of antimicrobial textiles by finishing and dyeing processes
11:00-11:20	**Yanfei REN** *Qingdao University, China*	Application of bacterial nano prodigiosins on textiles dyeing
11:20-11:40	**Yichen LI** *Soochow University, China*	Colloid-assembled photonic crystals for structural coloration of textiles
11:40-12:00	**Biaobiao YAN** *Jiangnan University, China*	Green preparation of MXene covalently-grafted silk for visualization of dual-driven heating smart textile

Name: Long LIN

Affiliation: Natura Colour and Polymer Research Ltd.

Country: UK

Presentation Title: Sustainable Dyeing and Fibre Recycling

Personal Profile: PhD (Colour Chemistry and Dyeing, Leeds, 1994). Professor of *Colour and Polymer Science* (Leeds, 2006). Head of Colour Science (Leeds, 2009). Editors-in-Chief (2003, Pigment & Resin Technology – *The International Journal of Colourants, Polymers and Colour Applications* and China Coatings Journal). Council member and Technical Advisor (*China Association of Dyers and Printers*, 2013). *Honorary Member and Liveryman* of the Worshipful Company of Clothworkers of the City of London and a *Freeman of the City of London* (2013). Served as Vice President of *OCCA; Vice Chairman* of the Board of Trustees of the SDC; and a *Director* of SDC Enterprise Ltd.

Name: Xuehong Ren

Affiliation: Wuhan Textile University

Country: China

Presentation Title: Preparation of Antimicrobial Textiles by Finishing and Dyeing Processes

Personal Profile: Dr. Xuehong Ren is a professor of the College of Textile Science and Clothing at Wuhan Textile University. Professor Ren graduated with PhD from the Department of Polymer and Fiber Engineering at Auburn University. His research is focusing on the following areas: antimicrobial textiles and polymers; functional finishing of textiles; biomedical materials; surface modification of fibers and polymers. He has published over 160 peer reviewed papers in SCI journals. He was awarded 40 patents. He is Associate Editor of AATCC Journal of Research. He received J. William Weaver Paper of the Year Award from AATCC in 2021.

Parallel Session 3

Silk Culture, Fashion Design & Intelligent Manufacturing

会场三

丝绸服装智能制造、时尚设计与文化历史

2022 年 12 月 10 日 Dec. 10, 2022
13:00-17:00
ID: 335 106 9530, Passcode: 060089

Time	Lecturer	Title
***Chairman*: Associate prof. Yan HONG, Soochow University**		
13:00-13:30	**Lilly LI** *The Hong Kong Polytechnic University, China*	The road of design in technology-dominated world: Aesthetics in design science research
13:30-13:50	**Xi LU** *Zhejiang Sci-Tech University, China*	Kaleidoscope: science communication of silk from history to industry
13:50-14:10	**Anlu LIU** *Soochow University, China*	A math model of improving physical effect of cloths of ancient Chinese gowns in virtual environment
14:10-14:30	**Ruilin LI** *Beijing Institute of Fashion and Technology, China*	Study on size recommendation of H-profile men's shirt
14:30-14:50		**Coffee Break**
14:50-15:20	**Xianyi ZENG** *École Nationale Supérieure Des Arts Et Industries Textiles (ENSAIT), France*	Creating a metaverse ecosystem for supporting textile/fashion design by combining digital simulation and AI-based human-product interactions
15:20-15:40	**Pengpeng CHENG** *École Nationale Supérieure Des Arts Et Industries Textiles (ENSAIT), France*	Research on application of ergonomics in sportswear
15:40-16:00	**Ao JIANG** *Imperial College London, UK*	HCC-based human-computer interaction design process for lunar mission spacesuits
16:00-16:20	**Jing YAN** *Inner Mongolia University of Technology, China*	Research on sustainable design method of Mongolian clothing
16:20-16:40	**Peihua LAI** *University of Leeds, UK*	Data-driven colour forecasting in fashion
16:40-17:00	**Yufei XUE** *Cranfield University, UK*	IoT in supply chain management: its impact on the relationship between information integration and decision-making uncertainty - a case study in fast fashion industry

Name: Prof. Li Li, Lilly

Affiliation: The Hong Kong Polytechnic University

Country: China

Presentation Title: The Road of Design in Technology-dominated World: Aesthetics in Design Science Research

Personal profile: Prof. Li Li, Lilly is a Professor in the School of Fashion and Textile of The Hong Kong Polytechnic University, Board of Director of The Hong Kong Research Institute of Textiles and Apparel, Associate Director of PolyU Academy for Interdisciplinary Research and Fellow of Royal Society of Arts. In addition to her academic qualifications, she has acquired many years of practical experience as a senior designer and eventually as the design director of a company before coming to PolyU. Her research is characterized by a creative economy, design thinking, and interdisciplinary design methods, which she applied to a variety of issues including the implementation of smart functional textile technologies and advanced manufacturing processes.

Name: Xianyi Zeng

Affiliation: ENSAIT

Country: France

Presentation Title: Creating A Metaverse Ecosystem for Supporting Textile/Fashion Design by Combining Digital Simulation And AI-Based Human-Product Interactions

Personal profile: Xianyi Zeng received the B.Eng. degree from Tsinghua University, Beijing, China, in 1986, and the Ph.D. degree from the Centre d'Automatique, Université des Sciences et Technologies de Lille, Villeneuve-d'Ascq, France, in 1992. He is currently a Professor with the Ecole Nationale Supérieure des Arts et Industries Textiles, Roubaix, France. His research interests include intelligent decision support systems for fashion and material design, and modeling and analysis of human perception and cognition on industrial products and their integration into virtual products.

2022 年 12 月 11 日 Dec. 11, 2022
08:30-12:10
ID: 335 106 9530, Passcode: 060089

Time	Lecturer	Title
***Chairman*: Associate prof. Xiaoqun DAI, Soochow University**		
08:30-09:00	**Xiaofen JI** *Zhejiang Sci-Tech University, China*	The influence of southern song philosophy on the ritual dress in southern song dynasty
09:00-09:20	**Yue JI** *Taiyuan University of Technology, China*	Study on the intangible cultural heritage and sustainable development value of Jin Embroidery
09:20-09:40	**Lingling ZHANG** *Zhejiang Sci-Tech University, China*	Color analysis of brocade from the 4th to 8th centuries Driven by image-based matching network modeling
09:40-10:00	**Qian ZHANG** *Soochow University, China*	Rejuvenation design of traditional cheongsam——Innovative sports cheongsam design
10:00-10:20	**Coffee Break**	
10:20-10:50	**Junliang WANG** *Donghua University, China*	Big data analytics for textile intelligent manufacturing
10:50-11:10	**Lingwen WEI** *Soochow University, China*	Research on conflict rule handling mechanism in clothing design knowledge base and its application in personalized recommendation
11:10-11:30	**Rongrong LI** *Inner Mongolia University of Technology, China*	Research on online personalized customized Mongolian clothing service marketing model
11:30-11:50	**Xutian WANG** *Soochow University, China*	Construction of fabric texture cognitive model and its application in apparel design decision support system
内页内页 11:50-12:10	**Tianbiao LIANG** *Donghua University, China*	Causal inference-guided deep learning for vision-based defect detection method for complex patterned fabrics

Name: Xiaofen Ji

Afiliation: China National Silk Museum (NSM), Zhejiang Sci-Tech University (ZSTU)

Country: China

Presentation Title: The Influence of Southern Song Philosophy on the Ritual Dress in Southern Song Dynasty

Personal Profile: Dr. Ji is the leading talent of the “Ten Thousand Talents Project” and the second level talent of the “151 Talent Project” of Zhejiang Province, member of the Teaching Advisory Committee for Design at the Ministry of Education of the People’s Republic of China, the Secretary-General of Zhejiang International Education and Teaching Advisory Committee, and the Secretary-General of Zhejiang Teaching Advisory Committee for Light Industry, Textile and Food. Dr. Ji has also been a visiting scholar at the Fashion Institute of Technology (FIT) in the New York City, U.S., the Faculty of Business and Economics at the University of Lausanne (HEC Lausanne) in Switzerland, College of Human Ecology at the Cornell University and Wilson College of Textiles at the North Carolina State University in the U.S.

Name: Junliang Wang

Affiliation: Donghua University

Country: China

Presentation Title: Big data analytics for textile intelligent manufacturing

Personal Profile: Junliang Wang is an associate professor at Institute of Artificial Intelligence, Donghua University (DHU). He is the deputy director of Textile Industry Production Big Data Research Center of CTES. His research interests mostly lie in the big data and intelligent manufacturing fields, by leveraging cutting-edge information technology and artificial intelligence techniques, to enable industries digital and intelligent transformation. He has continued to conduct in-depth research in the field of industrial big data analytics and has been funded by the Young Elite Scientists Sponsorship Program by CAST, the Natural Science Foundation of China, the Shanghai Sailing Program, the Shanghai Science and Technology Project and the Shanghai Chenguang Program. After receiving basic research fund, he has published more than 40 journal papers, authorized 11 Chinese patents and 11 software copyright.

Parallel Session 4

Research on Sericulture Resources and its Biomedical Applications

分会场 4

蚕桑资源研究及其在生物医学领域的应用

2022 年 12 月 10 日 Dec. 10, 2022
13:00-17:00
ID: 689 3354 2414 Password: 123123

Time	Lecturer	Title
	***Chairman*: Prof. Huijing ZHAO, Soochow University**	
13:00-13:30	**Hongbin FAN** *Xi-jing Hospital, the Fourth Military Medical University, China*	Silk scaffolds for tissue-engineered ligament and ligament-bone junction
13:30-14:00	**Haitao LIN** *Guangxi University of Science and Technology, China*	Application of micro nano silk fibroin in cosmetics
14:00-14:20	**Yue QIN** *Hechi University, China*	Isolation and Primary Identification of Fungal Pathogens Causing Root Rot Disease of Mulberry Trees in Guangxi
14:20-14:40	**Fengjiao BAI** *Soochow University, China*	Effect of silk-based biotextiles woven parameters on cell behavior and wound healing
14:40-15:00		**Coffee Break**
15:00-15:30	**Chris HOLLAND** *The University of Sheffield, England*	Silk innovation is a life and death situation
15:30-16:00	**Yuqing ZHANG & Zhenzhen WEI** *Soochow University, China*	Preparation of degradable sericin and its hypoglycemic effect
16:00-16:20	**Lixia GAO** *Hechi University, China*	Establishment of mulberry in vitro SUMOylation assay and detection SUMOylation in mulberry anti-digestive protein for silkworm
16:20-16:40	**Xueping LIU** *Soochow University, China*	Preparation of thermosensitive hydroxybutyl chitosan/silk fibroin hybrid hydrogels
16:40-17:00	**Yan QIAN** *Soochow University, China*	Silk fibroin/chitosan/modified-halloysite composite hydrogel used as multi-functional wound dressing

Name: Hongbin Fan

Affiliation: Dept. Orthopaedic Surgery, Xi-jing Hospital, the Fourth Military Medical University

Country: China

Presentation Title: Silk scaffolds for tissue-engineered ligament and ligament-bone junction

Personal Profile: Chief physician and professor of Orthopaedics. The primary research interests are the clinical application of biomaterials in musculoskeletal oncology and joint reconstruction. These center on research of the design and application of 3D printing titanium prostheses, PEEK prosthesis, and silk mesh to enhance limb salvage procedures. In addition, the biomechanical analysis of functional recovery following implantation of biomaterials is included. Multidisciplinary research projects in collaboration with bioengineering team and materials team in bone and soft tissue tumors.

Name: Haitao LIN

Affiliation: Guangxi University of Science and Technology

Country: China

Presentation Title: Application of micro nano silk fibroin in cosmetics

Personal Profile: Lin Haitao, male, professor, master's supervisor, top talent in Liuzhou, visiting scholar of the School of Materials Engineering of Georgia Institute of Technology, leader of textile science and engineering of Guangxi University of Science and Technology, director of the Chinese Textile Engineering Society，the expert of the Textile Ecological Additive Expert Group of the Standardization Technical Committee of the Chinese Textile Engineering Society, mainly studies the research and development of new processes, equipment and products of cocoon silk. In recent years, he has presided over and participated in 2 national projects, presided over 3 major projects in Guangxi. In 2018, he won the first prize of Guangxi Science and Technology Progress, the third prize of Guangxi Science and Technology Progress, and the third prize of Guangxi Technological Inventions in 2015.

Name: Chris Holland

Affiliation: The University of Sheffield

Country: UK

Presentation Title: Silk innovation is a life and death situation

Personal Profile: Dr Chris Holland is a Senior Lecturer in the Department of Materials Science and Engineering at the University of Sheffield. Prior to this he studied Biology and obtained his doctorate from Oxford University. His group's research uses tools developed for the physical sciences to better understand how processing effects performance in natural materials, with a focus on relating protein hydration to function (www.naturalmaterialsgroup.com). Outside the lab, he is an Associate Editor for ACS Biomaterials Science and Engineering and Chair of the IoM3 Natural Materials Group.

2022 年 12 月 11 日 Dec. 11, 2022
08:30-12:10
ID: 689 3354 2414 Password: 123123

Time	Lecturer	Title
***Chairman*: Prof. Gang LI & Prof. Huijing ZHAO, Soochow University**		
08:30-09:00	**Xiumei MO** *Donghua University, China*	Electrospun nanofibers and nanoyarn for soft and hard tissue regeneration
09:00-09:30	**Gang LI** *Soochow University, China*	Silk-based implantable biomedical devices
09:30-09:50	**Guiqiu LIANG** *Guangxi Zhuang Autonomous Region Extension Station of Sericultural Technology, China*	Research progress of Guangxi edible -medicinal mulberry resource
09:50-10:10	**Zhenzhen QI** *Soochow University, China*	Silk fibroin microneedles for controlled release of insulin
10:10-10:30		**Coffee Break**
10:30-11:00	**Xili DING** *Beihang University, China*	Silk fibroin biomaterials for vascular tissue regeneration
11:00-11:30	**Wei WEI** *Guangxi Zhuang Autonomous Region Extension Station of Sericultural Technology, China*	Guangxi research achievements and prospects of transforming feed with mulberry
11:30-11:50	**Mingyue LIU** *Donghua University, China*	Preparation of composite nanofibers containing silicon/magnesium and their application in skin/bone tissue regeneration
11:50-12:10	**Xuchen WANG** *Soochow University, China*	Antibacterial and anti-inflammatory silk medical suture for the prevention of surgical site infections

Name: Xiumei Mo

Affiliation: Donghua University

Country: China

Presentation Title: Electrospun Nanofibers and Nanoyarn for Soft and Hard Tissue Regeneration

Personal Profile: Prof. Xiumei MO is a professor of Biomaterials in Donghua University. Her research work is electrospinning nanofiber and nanoyarn for different tissue regeneration, including skin, tendon, nerve, blood vessel, bone and cartilage tissue regeneration. She has published more than 450 papers, the papers were cited more than 11,000 times, her H-index is 55. She edited 11 books/chapters, she got the Science Technical Invention Awards from Shanghai Municipality(2008) , Science and Technology Progress Awards from State Department of People's Republic of China(2009), and Nature Science Awards from Shanghai Government(2015). She is the Committee Members of China Biomaterials Society and Vice Chairman of China Composite Materials Society Super-fine Fiber Branch.

Name: Xili Ding

Affiliation: Beihang University

Country: China

Presentation Title: Silk fibroin biomaterials for vascular tissue regeneration

Personal Profile: Dr. Xili Ding received her Ph.D. degree from Beihang University majoring in biomedical engineering in 2019 and continued to work as a postdoctoral fellow at Beihang University. In October 2017, she went to Dr. Song Li's lab at university of California, Los Angeles and worked as a visiting scholar for one and a half years. Dr. Ding is currently an assistant professor in school of engineering medicine at Beihang University. Her research focuses on the development of small-diameter vascular grafts based on silk fibroin biomaterials and the mechanism of vascular neointima formation using single-cell RNA sequencing technology. She is also the Managing Editor for Medicine in Novel Technology and Devices.

Name: Wei WEI

Affiliation: Guangxi Zhuang Autonomous Region Extension Station of Sericultural Technology

Country: China

Presentation Title: Guangxi research achievements and prospects of transforming feed with mulberry

Personal Profile: Wei Wei, agricultural extension researcher, agricultural extension master and managerial economics master . Current deputy station master of Guangxi Extension Station of Sericultural Technology, current chief expert of Guangxi innovation team of National Modern Agricultural Industry Technology System. Mainly engaged in researching and popularizing new variety and technology of mulberry and silkworm in subtropical zone. Drove or major participated in 15 key scientific and research projects successively, awarded 8 national or provincial science and technology prizes in total, participated in breeding more than 10 new varieties of silkworm and mulberry, authorized more than 30 patents, published more than 60 papers. Won honorary tiles like “Advanced Worker of Guangxi Zhuang Autonomous Region” “Guangxi Youth Science and Technology Award” etc. Selected as the second level candidate of the 15th batch of new century “ten,Hundred and thousand talents program” in Guangxi.

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China Silk Association

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