

Plenary Medal Lectures - Wednesday, August 23, 2023

Topic of the Speech:

Functional Hybrid Fibers for Sustainable Development

Academician Professor Meifang Zhu

Dean of the College of Materials Science and Engineering,
Director of the State Key Laboratory for Modification of Chemical Fibers and
Polymer Materials
Donghua University
China



Academician Professor Meifang Zhu (Ph.D, 1999, Donghua University) is member of the Chinese Academy of Sciences, TWAS Fellow. She has long been engaged in the research of functional fibers, nanofibers and intelligent fiber materials, organic /inorganic hybrid materials. She is renowned for both her fundamental and technological contributions to the design and development of polymer-based nanocomposites and their fiber processing. She published more than 500 papers in peer-review journals and 10 books (chapters), was granted more than 300 National Invention Patents. She received many honors and awards, including Second Prize of National Award for Technological Inventions, Second Prize of National Award for Progress in Science and Technology, First Prize of Shanghai Natural Science Award, etc.

Topic of the Speech:

Mechanical Properties of Bamboo Fiber Reinforced Composites

Professor Seung Kook An

Pusan National University
Korea



Prof. Seung Kook An obtained his Ph.D. at the Fiber and Polymer Science Program, North Carolina State University in 1992. After working at National Industrial Research Institute for two years, he had been a professor of the department of Organic Material Science and Engineering at Pusan National University until 2020. He served as a director of Research Institute of Industrial Technology from 2011 to 2013, and has been the director of RIS in textile material for transportation vehicle from 2011. He has been the chairman of Korea Association of Tech Textile Industry (KATTI) from 2017. He served as the Korean delegate for ISO TC94/SC13 and ISO TC94/ SC14 for 20 years. He served as a Vice President of Korean Fiber Society in 2010 and 2018. His research areas are protective clothing, physical properties of industrial textile products, comfort properties of industrial fabrics.

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Topic of the Speech:

Development of Intelligent Garments for Online Monitoring of Human Health

Professor Xianyi Zeng

Director of the GEMTEX Laboratory
The ENSAIT Textile Engineer School, University of Lille
France



Prof. Xianyi Zeng is a full professor (exceptional class) in ENSAIT Textile Engineer School – University of Lille, France, Director of the GEMTEX National Laboratory, and also a guest professor of Donghua University, Soochow University, Nankai University and Wuhan Textile University. His main research interests include artificial intelligence applied to textiles, fashion and textile digitalization, sensory analysis, intelligent wearable systems, computerized garment design and customized production management. He has published more than 160 papers in peer-reviewed international journals and presented more than 250 papers at international conferences, and supervised more than 40 PhD students. In addition, as project coordinator, he has conducted three European projects such as FBD_BModel (H2020 Program) and a number of national and regional research projects as well as industrial projects in cooperation with international groups in France and Europe.

Topic of the Speech:

3D Hybrid Construction Materials with the Utilization of Agro-waste Fibers and Biomass for Thermal and Acoustic Insulation

Professor Rajesh Mishra

Czech University of Life Sciences Prague
Czech Republic



Prof. Rajesh Mishra works at the Czech University of Life Sciences Prague, Czech Republic. His research areas are nanomaterials and nano-textiles, textile structural composites, green composites, nanocomposites, biomechanical engineering of fibrous structures, thermo-mechanical characterization of materials etc. He has about 200 publications in international journals and about 300 presentations in international conferences. His teaching and research activities include subjects based on nanotechnology, biomaterials, structural mechanics of fibrous structures in general and 3D woven structures in particular, textile quality characterization, engineering of textile structures, biomechanics of apparel textiles etc. He is responsible for international students' education and research at the faculty of engineering. Till date he has successfully guided 7 PhD candidates leading to award of title. The graduates are highly placed in academia and industry around the world. At present a few more are continuing research in leading areas of technology. He has also developed educational and research cooperation with many organizations around the globe.

Plenary Medal Lectures - Wednesday, August 23, 2023

Topic of the Speech:

Optical Metafabric for Passive Thermal Management

Professor Guangming Tao

Wuhan National Laboratory of Optoelectronics and the School of Materials Science and Engineering
Huazhong University of Science and Technology
China



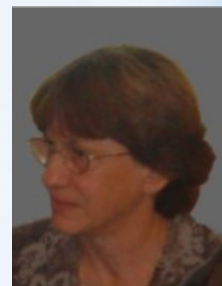
Prof. Guangming Tao works at Wuhan National Laboratory of Optoelectronics, and the School of Materials Science and Engineering. He is the Director of the Sports and Health Initiative, Optics Valley Laboratory, the Chief Scientist in the Biomedical Materials and Life Support Equipment Division of Institute of Medical Equipment Science and Engineering, Huazhong University of Science and Technology. He is committed to interdisciplinary research of fiber optoelectronics. He has published nearly 90 papers including Science (1), Nature (2), holds 37 granted and 45 pending patents (9 licensed/transferred). Prof Tao's group received the 2021 Award for China's Top 10 Optical Breakthroughs, Top 10 Social Impact Events in China's Optics Field in 2021 (Light10), and the Candidate Projects of China Issues Top 10 Scientific Advances of 2021, etc. His research on Fiber Optoelectronics has been widely reported by mainstream media, such as People's Daily, Xinhua News, CCTV, Science News, the American Chemical Society.

Topic of the Speech:

Key Aspects in the Evaluation of the Performance of Clothing Materials

Professor Jelka Geršak

University of Maribor
Faculty of Mechanical Engineering
Slovenia



Prof. Jelka Geršak is a university professor of Clothing science at the University of Maribor. She has extensive experience in clothing science related to textile structure behaviour, fabric mechanics, and comfort. Her research focuses on clothing science, mechanics of textile structures, and human thermal physiology based on the study of complex aspects of clothing system, textile material performance, and wearing comfort. She is the author of 2 books, 4 monographs, 2 patents, about 85 scientific papers published in international journals and more than 150 scientific contributions in international conferences. She is an expert on the European Technology Platform for the Future of Textiles and Clothing and an expert for Quality Assessment in Higher Education. She is also a member of numerous editorial boards of scientific journals. She has been a member of the Croatian Academy of Engineering Sciences since 2009. She has received several awards for her research activities.

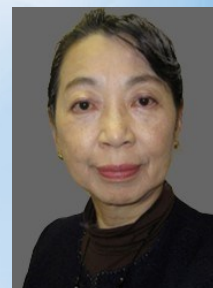
Plenary Medal Lectures - Wednesday, August 23, 2023

Topic of the Speech:

Effect of Support Wear on Burning of Body Fat

Professor Tamaki Mitsuno

Shinshu University
Japan



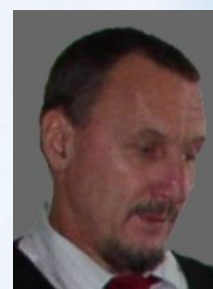
Prof. Tamaki Mitsuno received her Ph.D. degree in human life science, Specialist, at clothing physiology from Graduate school of Kyoritsu Women's University. Tokyo, Japan in 1996. She is currently a professor, head of the Home Economics course in Faculty of Education and in Graduate School of Medicine, Science and Technology (Doctor's Program). Her research interests include clothing wearing comfort, clothing pressure and its pressure sense, and supported wear for burning body fat and reducing swelling. So far, she has published over 70 peer reviewed journal articles. Currently, she is a Member of the Asian Regional Association for Home Economics, The Society of Fiber Science and Technology, Japan, The Japan Research Association for textile end-uses.

Topic of the Speech:

Light Weight Sandwich Structures with Extraordinary EMI Shielding

Professor Jiri Militky

Textile Faculty
Technical University of Liberec
Czech Republic



Prof. Jiri Militky, Prof. MSc. PhD., EURING, FEA. Born 16/06/1949, employment: Technical University of Liberec, Czech Republic. Work experience: 2019 – head of PhD studies board at Textile Faculty, 2012 head of Department of Material Engineering, 2009 - 2011 Vice dean for foreign affairs, 2003-2008 Dean of Textile Faculty, 2000 - 2002 Vice rector for science and foreign affairs at TU Liberec, 1994 - 1999 Dean of Textile Faculty, 1991- 1993 Vice rector for foreign affairs at TU Liberec, 1991 head of Department of textile materials, 1976 - 1989 Research Institute of Textile Finishing, head of scientific development dept., 1973- 1976 State Textile Research Institute Liberec – research worker. Scientific orientation: Modeling of fibrous structures, textile metrology, statistical data treatment, quality control, textile material engineering. Publication activities: 32 books, 563 articles, H index (SCOPUS) 36

Plenary Medal Lectures - Wednesday, August 23, 2023

Topic of the Speech:

Relationship between Heat Generation Mechanism of Hygroscopic and Exothermic Fibers and Heat Retention Parameters Estimated by the JIS Method

Professor Chiyomi Mizutani

Otsuma Women's University
Japan



Prof. Chiyomi Mizutani received Ph.D. degree from Shinshu University in Textile Engineering. She is a professor in department of clothing and Textile at Otsuma Women's University in Japan. She is interested in the effects of functional fibers on the human body, related to odors and deodorant fibers, antibacterial fibers and itchy of skin, etc.

Topic of the Speech:

Innovative Mosquito Repellent Technology for Textiles and Clothing

Dr. Kai-chiu Ho

Hansk New Materials Holdings Limited
Hong Kong, China



Dr. Kai-chiu Ho has more than 45 years' work experience in textiles and clothing industry, on innovation and technology, R & D strategy, project design, management and commercialization, technology management, project funding support, etc. He is the former Director, Research and Development of the Hong Kong Research Institute of Textiles and Clothing which is funded by Hong Kong SAR Government and a Distinguished Professor of Zhijiang College of Zhejiang University of Technology, China (2016 -2019). Dr. Ho is also a Fellow Member of the Textile Institute, UK; a Senior Member of China Textile Engineering Society;; an Adjunct Professor of Institute of Textiles and Clothing of The Hong Kong Polytechnic University (2013 - 2019); Honorary Associate Professor of the Faculty of Dentistry at the University of Hong Kong; Visiting Professor at both Donghua University, Zhejiang Sci-Tech University, Soochow University, etc., as well as Honorary Consultant of the Hong Kong General Chamber of Textiles; and the Hong Kong Federation of Invention and Innovation. Dr. Ho joined Hansk New Material Holdings Limited in 2016 as the R&D Director.

Plenary Medal Lectures - Wednesday, August 23, 2023

Topic of the Speech:

Simplifying Fabric Flammability Measurements for use in Public Health Practice

Professor Uwe Reischl

Boise State University
USA



Prof. Uwe Reischl is a Professor in the Department of Public Health and Populations Science at Boise State University, USA. Dr. Uwe Reischl is a public health physician with research interests in occupational health, ergonomics and human factors. He received his undergraduate and graduate training at the University of California at Berkeley obtaining the Ph.D. degree in Environmental Health Sciences from the School of Public Health. He received his medical training at the University of Ulm in Germany where he obtained the M.D./Ph.D. degrees in clinical medicine. Professor Uwe Reischl's current international research collaborations include projects with the University of Zagreb in Croatia and Khalifa University in Abu Dhabi, United Arab Emirates.

Plenary Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Textile-Based Flexible Pressure Sensors for Smart Wearable Electronics Applications

Professor Lijing Wang

RMIT University
Australia



Prof. Lijing Wang works at RMIT School of Fashion and Textiles, Australia. He received his PhD degree from the University of New South Wales, Australia. He worked as a Postdoctoral Research Fellow at RMIT University in 1999 and 2000, followed by more than 8 years working at Deakin University as the Research Academic, then Senior Research Fellow. Since 2009, he returned to RMIT University. Prof Lijing Wang currently leads the Smart Textiles research cluster and Saving Lives research stream at the Centre for Materials Innovation and Future Fashion. He has been the chief investigator in more than 30 funded research projects, and his publications reached more than 240. His key research areas of interest are smart and high-performance textiles; wearable technology; protective garments; clothing comfort; fibres and polymers material science, engineering and modelling; material functional design; and clothing supply chain sustainability.

Plenary Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Passive Sensing with Functionalized Fibers for Body-Area Networks

Professor Terry Ye

Department of Electrical and Electronic Engineering
Southern University of Science and Technology (SUSTech)
China



Prof. Terry Ye is the Professor at the Department of Electrical and Electronics Engineering (EEE) of Southern University of Science and Technology (SUSTech), and by courtesy, an Adjunct Professor at the Department of Electrical and Computer Engineering (ECE) of Carnegie Mellon University. Dr. Ye is active in academic research as well as industrial applications in many engineering areas that include IC Designs, Neuromorphic Computing ICs, Internet-of-Things (IOT) and Wireless Sensor Devices. Dr. Ye received his Ph.D. in Electrical Engineering from Stanford University and the Bachelor of Science in Electronic Engineering from Tsinghua University (Beijing). Prior to SUSTech, Dr. Ye had been the Professor of CMU-SYSU Joint Institute of Engineering since 2014, as well as the Director of Research and Technology Development of Hong Kong R&D Center for Logistics and Supply Chain Management (LSCM) since the center's inception in 2007. He also serves as the research fellow at the University of Hong Kong and the Chief Scientist of IOT Lab at Hong Kong University of Science and Technology. Beside his academic activities, Dr. Ye is keen on industry-academic collaborations. He had held various engineering and consulting roles in China Academy of Science, Impinj Inc., Synopsys Inc., Analog Device Inc., Magma Design Automation Inc., Silicon Architects Inc. and many other Silicon Valley companies.

Topic of the Speech:

How Far Can Wearable Devices Read Our Mental and Physical States? —
Representation Method of Autonomic Nerve Activity Index Based on Heartbeat
Information Obtained from Wearable Devices

Dr. Satoshi Maeda

Toyobo Co., Ltd.
Japan



Dr. Satoshi Maeda is a researcher working at Toyobo Co., Ltd. After obtaining a master's degree in electrical engineering, he joined Toyobo Co., Ltd., where he was assigned to the research center. He has long research and developing carrier in flexible electronics field (FPC materials and processing, color printing materials, High heat resistant ultra low CTE polyimide film, Printed electronics and wearable e-smart textiles. He is also active at international standardization, his activities include IEC, ISO, IPC, SEMI and the corresponding mirror committees in Japan. He is Co-Convenor for IEC/TC124/WG2 (e-textiles)

Plenary Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Silk Fiber-based Wearable Smart Textiles

Professor Gang Li

College of Textile and Clothing Engineering,
Soochow University
China



Prof. Gang Li is a full professor at the National Engineering Laboratory for Modern Silk, Soochow University of China. He is the 15th high level talent of “Top six talent peaks” in Jiangsu province of China. He received MEng. from Donghua University of China, and obtained his Ph.D. in Biomedical textiles and Engineering from the Hong Kong Polytechnic University. He is also a visiting professor of Tufts University in USA. He published over 100 academic articles and issued 40 patents between 2006 and 2023. His research interests focus on biomedical materials, functional and smart textiles by combining silk-based materials, biomedical materials and textile engineering.

Topic of the Speech:

Impacts of Covid-19 Policies on Patterns of Outdoor Physical Exercise: Challenges for Resilient Infrastructure

Dr. Jianquan Cheng

Reader of Urban Studies
deputy director of MMU Crime and Well-being Big Data Centre
Manchester Metropolitan University
UK



Dr. Jianquan Cheng is a Reader in Urban Studies and deputy director of the Manchester Metropolitan Crime and Wellbeing Big Data Center. Research experiences and expertise include urban growth, geographical mobility, spatial accessibility, and sustainable healthy city, using GIS and big data approaches. His recent projects focus on analysing and modelling how physical and built-environment impacts on public health and well-being at a variety of scales in Chinese and British cities, which aim to generate data driven evidence and frameworks for spatial planning and governance.

Plenary Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Modeling and Simulation of Graphene Solution Penetration and Particle Deposition in Yarn

Dr. Fengzhi Li

Nanjing University of Aeronautics and Astronautics
China



Dr. Fengzhi Li serves as an associate Prof (Dec. 2006 to present) at the department of Man-Machine and Environment Engineering, College of Aerospace Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, China. Prior to working at NUAA, he worked as a Research Assistant, Associate in Hong Kong Polytechnic University, Hong Kong. He served as a Research Associate of Department of the Material, The University of Manchester, UK, 2020. In the past, he proposed the model of heat and moisture transfer in clothed human body system by the FEM to consider the 3-D real geometry of human body. Also he proposed a mask model of heat moisture and virus transfer, etc. And he published more than thirty papers in these fields, meanwhile, he chaired and participated in many of the National Natural Science Foundation.

Topic of the Speech:

Smart Textiles for Self-management of Health and Wellbeing

Professor Huiru Zheng

Ulster University
UK



Prof. Huiru Zheng is a Professor of Computer Science at the School of Computing, Ulster University. She is currently leading the Data Analytics and Systems Theme in AI Research Centre at Ulster University. Within her broad interests in machine learning, Prof. Zheng has research interests and expertise in integrative data analysis, complex network analysis, pattern recognition, and applications to biology, medicine, and healthcare. Her current research includes network analysis in metagenomics, agriculture, FinTech and similar diseases, mHealth in gait analysis, mental health, and self-management of chronic diseases. Her research has been supported by a number of funding bodies, such as the European Commission, COST Action, UK Research Council, Innovate UK, Invest NI, Depart of Economy, and industries.

Plenary Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

The Construction mechanism of Distributed Clothing Flexible Supply Chain

Dr. Aris Rui Huang

Founder of Chengdu SwiftChain Technology Co., Ltd.

Visiting Associate Professor of Xihua University

China



Dr. Aris Rui Huang, Founder of Chengdu Swiftchain Technology Co., Ltd., Senior system architect, Visiting associate professor of Xihua University, Columnist of "JINSE" and "8BTC" and "WHOSHIPM" and "WEIYANGX", Blockchain expert of AISINO Co., Ltd, Blockchain expert of Beijing Informationization and Industrialization International Information Technology Research Institute, The initiator and technical leader of the project "Application of Blockchain Technology to Improve China's Infectious Disease Surveillance System" of NSSFC, and the initiator and solution writer of "Blockchain-based Industrial Products Anti-counterfeit Traceability Platform" of 2020 Industrial Internet Innovation and Development Project-Blockchain Public Service Platform Project of MIIT, core team member of "Non-Bank Financial Business Credit Technology Path Research" (2019) of Baihang Credit, and former CRM system expert of AsialInfo (China) Co., Ltd. He has participated in more than 20 large-scale domestic and foreign large-scale telecommunications, finance and blockchain industry application projects, and published many high-quality, industry-influential papers and Internet articles.

Topic of the Speech:

Electrospun Nanofiber for Hard and Soft Tissue Engineering

Professor Xiumei Mo

Donghua University

China



Prof. Xiumei Mo is a professor of Biomaterials in Donghua University. She had two years Postdoc experience in Kyoto University, three years research fellow experience in National University of Singapore, one year visiting professor experience in Aachen University of Applied Science and Technology. 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 57. 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), Nature Science Awards from Shanghai Government(2015), and Science Technical Invention Awards from China National Textile Industry Council(2022). She is the Committee Members of China Biomaterials Society and Vice Chairman of China Composite Materials Society Super-fine Fiber Branch.

Plenary Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Recent Advances, Sustainable Developments and Challenges in Medical Textiles Post Covid-19 Pandemic

Dr. Prabhuraj Venkatrman

Manchester Fashion Institute
Manchester Metropolitan University
Manchester, UK



Dr. Prabhuraj Venkatrman is a textile technologist and a Chartered Fellow of the Textile Institute. Research interests include innovative sustainable materials and fashion, functional apparel and technical textiles. He recently completed a GCRF-funded project with the Institute of Chemical Technology, Mumbai, India, that developed antimicrobial textiles using plant-based nano-emulsions that are durable and environmentally friendly. Other interdisciplinary collaborations include projects with colleagues from Science and Engineering at Manchester Met University with the Department of Life Sciences and Institute of Sport in evaluating antimicrobial finishing of textiles and developing smart socks for monitoring diabetic patients' feet. In addition, he works on the sustainable manufacturing of natural polymers with colleagues from Cranfield University, UK., developing alginate nano fibres for medical applications, and he is currently working with Pangaia, London, to explore sustainable biopolymers for activewear applications. He also serves as research degree coordinator for MFI and supervises UG, postgraduate taught dissertations and doctoral researchers.

Topic of the Speech:

Decellularized Extracellular Matrix-based Porous Microspheres for Drug Screening and Tissue Engineering.

Professor Aizheng Chen

Huaqiao University
China



Prof. Aizheng Chen received his Ph.D. degree in Biomedical Engineering from Sichuan University in 2007. After postdoctoral research at The Hong Kong Polytechnic University for two years, he joined Huaqiao University, where he is now a professor and vice dean of College of Chemical Engineering, and director of Institute of Biomaterials and Tissue Engineering. He also serves as a committee member of Chinese Society for Biomaterials, and the secretary-general of Chinese Society for Biomaterial-Composite Materials Branch. He was a visiting research professor for a year in Prof. Ali Khademhosseini Lab at Harvard medical school. He has been granted 9 National projects, and has published more than 150 peer-reviewed publications; His research interests are the application of biomaterials for drug delivery systems using supercritical fluid technology, tissue engineering and regenerative medicine. He was listed in 2020 National Hundred, Thousand and Ten Thousand Talent Project and awarded with an honorary title "Young and mid-aged expert with outstanding contribution".

Plenary Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Design and Evaluation of Clothing Comfort for Men's Suit

Professor Hiroyuki Kanai

Shinshu University
Japan



Dr. Hiroyuki Kanai, Ph. D. is Professor of Faculty of Textile Science and Technology, Shinshu University, Japan. Kanai received Bachelor's and Master's degrees from Shinshu University in KANSEI Engineering Course and his Ph.D. from Shinshu University in Textile Engineering. He is interested in the comfort assessment of textile products, especially the monitoring of psycho-physiological response when the persons use some textile products, and suggesting the novel textile testing, the optimizing the specification of textile product for satisfaction of consumer's demands. His recent research activities include the development of sportswear activating muscle activity and promoting exercise effect; and the development of sleeping thermal comfort assessment system. He is a recipient of Society Academic Award by The Textile Machinery Society of Japan, and Outstanding Research Papers Competition by Textile Bioengineering and Informatics Society 2012. Kanai currently serves for Director of The Textile Machinery Society of Japan, and serves on the Vice Editor-in-Chief for Journal of Textile Engineering.

Topic of the Speech:

The Technology and Road Map of Low Carbon Development of Wool Products

Professor Yan Chen

Soochow University
China



Prof. Yan Chen received her PhD degree in textile engineering, School of Textile and Clothing Engineering, Soochow University. Currently she is the professor in Department of Clothing Design and Engineering; the reviewer of Journal of Global Fashion Marketing, Journal of Industrial Textile, Textile Research Journal, Journal of Textile Research; the committee member of SMDTex, ERAMUS. The research work of Yan Chen involves textile and garment design, garment manufacture management, sensory evaluation of textile and clothing. She has published more than 20 papers in key textile journals in the recent 5 years and supervised 5 PhD students and more than 15 master students. She has conducted one national research project (silk fabric performance research) and a number of provincial research projects in the area of interactive garment design system, evaluation and prediction of textiles and fashion products using intelligent system and management of clothing manufacture processes.

Plenary Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Quality and Reliability for E-Textiles Wearables

Professor Vladan Koncar

ENSAIT, University of Lille
France



Prof. Vladan Koncar is a Professor at the ENSAIT (National Graduate School of Arts and Textile Industries) in Roubaix, France at the University of Lille (Exceptional Class 2). He obtained his PhD in 1991 from the University of Lille 1 in Villeneuve d'Ascq. From November 2009 to November 2015, he was a research director at ENSAIT and director of the GEMTEX research laboratory. Professor Koncar was the President of AUTEX (Association of Universities for Textiles, www.autex.org) from June 2007 to June 2010. He is currently the director of international relations at the GEMTEX laboratory. He was awarded an Honorary Doctorate from the University of Iasi, Romania in January 2010. He has served as president of 10 international scientific conferences and is a member of numerous editorial boards of scientific journals. Professor Koncar is the author of over 300 scientific articles (ISI Web of Science references, book chapters, books, conference proceedings, and patents). His research interests cover the field of flexible textile sensors and actuators, smart clothing and e-textiles, and modeling and control of complex systems. He teaches in the field of automation, computer networks, virtual reality, and smart textiles. He has been the coordinator of several ANR and FUI projects and scientific coordinator of two European projects (MAPIC 3D 7th PCRD) and (ETEXWELD Marie Curie RISE, HORIZON 2020).

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Topic of the Speech:

The Thermo-responsive Gelling Mechanism of Catechol Modified Chitosan

Dr. Liping Zhu

Donghua University
China



Dr. Liping Zhu, the associate professor in Donghua University, obtained her Ph.D degree in Materials Science from Colorado School of Mines, Golden, USA in 2015. From 2015 to 2017, she worked as an adjunct professor in the Department of Chemistry at University of Southern Indiana. Then she started her postdoc research in Donghua University (DHU), Shanghai, China and joined the College of Materials and Science Engineering at DHU as an associate professor in 2021. Her research focuses on design and development of fibers, membranes and capsules with bio-based and responsive polymer materials for applications in water treatment, tissue engineering and controlled adsorption and release.

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Topic of the Speech:

Fiber Aerogel and Aerogel Fiber for Functional and Smart Wearable Application

Professor Ronghui Guo

College of Biomass Science and Engineering
Sichuan University
China



Prof. Ronghui Guo is a professor of College of Biomass Science and Engineering at Sichuan University. She is candidate for academic and technical leaders of Sichuan Province, and overseas talents of Sichuan University. She obtained PhD from Hong Kong Polytechnic University. She is a member of the steering committee on textile and clothing of the Ministry of Education, member of the council for dyeing and finishing of the Chinese Society of textile engineering, director of the council of Sichuan textile engineering society and member of technical expert committee of energy conservation and environmental protection industry of Sichuan energy conservation association. She mostly focuses on researches of functional and smart fiber materials, flexible wearable sensor and textile recycling and utilization etc. In recent years, her researches have been supported by National Natural Science Foundation of China, Sichuan Science and Technology Program, Chengdu Science and Technology Bureau, Ningbo Science and Technology Bureau, etc. She has over 150 scientific publications including over 100 SCI papers and she owns more than 10 invention patents.

Topic of the Speech:

Breathable and Flexible Fibrous Membranes for Personal Thermal Management

Dr. Chunhong Zhu

Faculty of Textile Science and Technology
Shinshu University
Japan



Dr. Chunhong Zhu is an Associate Professor in the Institute for Fiber Engineering (IFES), Interdisciplinary Cluster for Cutting Edge Research (ICCER), as well as the Department of Advanced Textile and Kansei Engineering, Faculty of Textile Science and Technology, Shinshu University, Japan. She obtained her Master's degree from Soochow University, China majored in Textile Materials and Design in 2010. After that, she received her Ph.D. from Shinshu University in 2014. From 2014 to 2015, she worked as a R&D in a Japanese company and returned to Shinshu University as a faculty member in 2015. Her research interests include three-dimensional fabrics, functional and smart textiles.

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Topic of the Speech:

Printed Flexible Electrodes for Wearable Strain Sensors

Dr. Hui Huang

Singapore Institute of Manufacturing Technology
A*STAR
Singapore



Dr. Hui Huang is a Scientist in Printed Intelligent Devices at Singapore Institute of Manufacturing Technology (SIMTech), A*STAR, and an Assistant Professor in Electronics at Singapore Institute of Technology. Dr Huang obtained his PhD degree in Microelectronics from Xi'an Jiaotong University, China. Prior to joining SIMTech, Dr Huang was a Lee Kuan Yew Postdoctoral Fellow in the School of Electrical and Electronic Engineering at Nanyang Technological University, Singapore. He was the recipient of Singapore Millennium Foundation Scholar in 2008. He has extensive R&D experience in nanomaterials, functional coatings and flexible devices with particular emphasis with particular emphasis in printed electronics, energy efficient, energy conversion and storage. He published over 100 peer-reviewed journal papers (including Adv. Mater., Adv. Energy Mater., Adv. Funct. Mater., Soft Robotics) and conference articles, one book, 3 book chapters and 4 patents.

Topic of the Speech:

Development of a Wearable Knee Protector by Novel Knitting Spacer Fabric

Dr. Annie Yu

Kyoto Institute of Technology
Japan



Dr. Annie Yu is an Assistant Professor in the Faculty of Fiber Science and Engineering, Kyoto Institute of Technology, Japan. She obtained her Ph.D. from the Institute of Textiles and Clothing, the Hong Kong Polytechnic University in 2015. Her main research interests include the design of novel knitted fabrics and functional textiles. She also specialises in experimental design and evaluation of clothing fit and comfort, physiological and psychological responses of human participants to different types of textiles and clothing products, as well as formulation of simulation models to predict garment-skin pressures.

Medal Lectures - Wednesday, August 23, 2023

Topic of the Speech:

Wireless and Wearable Humidity Sensors with Enhanced Stability and Sensitivity made with Water-based Hexagonal Boron Nitride Inks

Professor Xiuju Song

Zhejiang University
China



Prof. Xiuju Song is currently a Professor of School of Mechanical Engineering in Zhejiang University. She received her Doctor degree from Peking University on July, 2016. After that she has two years Postdoc experience in Prof. Manish Chhowalla's group from Rutgers University. Two year later she moved to University of Manchester as a Marie Curie Fellow and joined Prof. Cinzia Casiraghi's group. In May 2023, she joined in the Zhejiang University. She has over 30 peer-reviewed publications on high impact journals including Nature, Nature Materials, Nature Communications, ACS Nano, etc. Her H index is 24 and her works have collected 4000 citations. She is the Youth editor of the international journal of The Innovation and the Frontiers of Nanotechnology. She is also co-inventor in one patent filed in China. Her research mainly focuses on synthesis of 2D materials for wearable electronics.

Topic of the Speech:

Wearable Sensors based on Advanced Fibers Towards Future Digital Health

Dr. Zekun Liu

University of Oxford
UK



Dr. Zeku Liu receives his Ph.D. degree at Department of Materials, The University of Manchester in 2022. He is now working as a Research Associate at Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford. During the Ph.D. study, his research focused on functionalized fiber materials for developing wearable strain, pressure, and strain sensors, which are utilized for body area sensing networks with improved sensing reliability. His current research mainly refers to flexible and biocompatible soft robots for tissue engineering. He published several peer-reviewed journal papers in Advanced Functional Materials, Nano Energy, Nano-Micro Letters, Bioactive Materials, Chemical Engineering Journal and ACS Applied Materials & Interfaces, etc. His research interests include nanomaterials and functionalized materials for the development of advanced composites, functional clothes, biomedical devices, and flexible electronics such as sensors, batteries, solar cells, and generators.

Medal Lectures - Wednesday, August 23, 2023

Topic of the Speech:

Highly Porous Poly(L Lactic Acid) Nano Fibres and Applications

Dr. Jiashen Li

The University of Manchester
UK



Dr. Jiashen Li is a Lecturer in Textile Science & Engineering in the Department of Materials. His research interests involve the science and technology underpinning processing-structure-property relationships in functional fibers and textiles; including nano fibres, bio-functional fibres, smart fibres and textiles, e-textile, and structural fibre-composites. With more than ten years' experience on fibre spinning, he has significantly expanded his studies of advanced functional polymer fibres and textiles. Dr. Jiashen Li obtained his PhD in Polymer Materials (Physics) from Tianjin University (China) in 2001. He then spent thirteen years conducting biomaterials and fibre spinning in The Hong Kong Polytechnic University (Hong Kong), before joining the University of Manchester in 2015.

Topic of the Speech:

Volumetric (Bio)printing of Silk-Based (Bio)inks

Professor Maobin Xie

Guangzhou Medical University
China



Prof. Maobin Xie received his PhD degree of biomedical engineering from The Hong Kong Polytechnic University, Hong Kong, China in 2016, and then works as post-doc research fellow at Harvard University, Boston, USA from 2019-2021. He is now a professor at Guangzhou Medical University, Guangzhou, China. His research interests include 3D (bio)printing and biomaterials, especially focuses on the technology and (bio) inks development of volumetric additive manufacturing as well as the related biomedical applications. He has published over 30 peer-reviewed research work include Nature Communications, Science Translational Medicine, Proceedings of the National Academy of Sciences USA, Advanced Materials, Advanced Functional Materials, STAR Protocols, Biomaterials, etc. He has applied for 16 Chinese patents and 2 PCT patents. He serves as reviewers for over 10 international journals include Advanced Science, Advanced Healthcare Materials, ACS Nano, Applied Materials Today, Nanoscale, etc.

Medal Lectures - Wednesday, August 23, 2023

Topic of the Speech:

Designing Nanofibrous Structure with unique Mechanical Properties for Small-Diameter Vascular Grafts

Dr. Xin Wang

Centre for Materials Innovation and Future Fashion
School of Fashion and Textiles
RMIT University
Australia



Dr. Xin Wang is a Senior Lecturer in the School of Fashion and Textiles, RMIT University. He is a key member of the Advanced Materials and Smart Textiles research clusters in the Centre for Materials Innovation and Future Fashion, and he is leading a research group focusing on nanotextiles. Dr Wang is the coordinator of several courses in the Fashion and Textiles programs, such as Fashion and Textiles Materials, Material Alchemy, Smart and Active Materials. Dr. Xin Wang obtained his B.E. and M.E. in Textile Science and Engineering from Wuhan Textile University, China, and he received his PhD in Materials Engineering from Deakin University, Australia. He has won several fellowships including the 'CHUTIAN Scholar' program and Vice-Chancellor's Senior Research Fellowship to establish his academic career. Dr. Xin Wang has research interests in advanced fibrous materials with performance and comfort, and his research has resulted in advanced textile fabrication technology and advanced fibrous materials. Dr. Xin Wang's research has impact on a broad community of academia and industry, evidenced by patented IP of large-scale production of nanofibres from needleless electrospinning, commercialised products and technology, and high citation records of published work. Dr. Xin Wang has led several projects funded by both government and industry including the National Natural Science Foundation of China, Cotton Research and Development Corporation of Australia, and Australian Research Council. He has successfully supervised more than 10 Masters and PhD students.

Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

3D Printed Flexible Materials with Novel 3D Cellular Structures for Protective Clothing

Dr. Danmei Sun

Heriot-Watt University
UK



Dr. Danmei Sun is an Associate Professor in Advanced Textile Materials & Engineering at the School of Textiles and Design, Heriot-Watt University. She was a textile engineer before her PhD, and a Post-Doctoral Research Associate at the School of Materials, Manchester University before joining the School of Textiles and Design, Heriot-Watt University in 2010. Dr Sun's research interests lie in the areas of functional fibres/filaments for performance textile and clothing systems, eco-friendly printing and dyeing, impact resistance materials for protective textiles, understanding material properties through Finite Element Analysis, etc. Her research activities are supported by various research projects that are funded by government funding bodies such as UK Dstl/MoD and Oil & Gas Innovation Centre and Scottish Funding Council, and company partners such as Harris Tweed, Iron and Ocean Ltd., etc.

Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Research on the Application of 3D Printing Technology in Bra Cup Customization

Dr. Long Wu

School of Apparel and Art Design

Xi'an Polytechnic University

China



Dr. Long Wu obtained his Ph.D. degree from the Hong Kong Polytechnic University in 2013. He is currently serving as an associate professor in the School of Apparel and Art Design of Xi'an Polytechnic University. He teaches subjects about Apparel Production Technique, Apparel Machinery, Anthropometric Technology and Application, etc. As the main participant of the National Natural Science Foundation of China in 2013 (61303120), Dr. Wu carried out research work in Shaanxi Union Research Center of University and Enterprise for Apparel Intelligent Design and Manufacturing. Over the last several years, he received an outstanding student papers competition award in TBIS 2011 and an outstanding research papers competition award in TBIS 2014. Also, Dr. Wu was a member of the expert committees of the Garment Industry Association in Shaanxi Province between 2016 and 2019. Funded by China Scholarship Council in 2019, Dr. WU became a visiting scholar in the School of Fashion and Textiles at RMIT University in Melbourne, Australia from October 2019 to May 2020. In 2021, he was appointed the vice director of the Garment Customization Committee of China National Garment Association (CNGA).

Topic of the Speech:

Color Construction of Textile Materials

Dr. Liangjun Xia

Wuhan Textile University

China



Dr. Liangjun Xia received his master degree from Wuhan Textile University under the supervision of Prof. Weilin Xu, and obtained Ph.D. degree from Deakin University, Australia. His current research interests mainly include the color and functionalization construction of textile fiber materials for industrial applications. He was honored with the Hundred Talents Program of Hubei Province, China. Recently, Dr. Liangjun Xia has hosted and participated more than 10 research projects. He also has an extensive track records of 1 edited book and more than 30 publications in advanced textile materials and engineering journals including Nano Energy, Chemical Engineering Journal, Green Chemistry, Journal of Cleaner Production, ACS Applied Materials & Interfaces, Carbohydrate Polymers, and Separation and Purification Technology.

TBIS Workshop Speaker - Thursday, August 24, 2023

Topic of the Speech:

Combination of Peroxide Bleaching and Disperse Dyeing of Cotton/polyester Fabric in One Bath by Synthesizing Novel Disperse Dyes

Professor Changhai Xu

Qingdao University
China



Prof. Changhai Xu obtained his Ph.D. at the Fiber and Polymer Science Program, North Carolina State University in 2009. After working at North Carolina State University as a postdoctoral researcher for two years, he had been a professor in the College of Textiles and Clothing at Jiangnan University until 2020. He has served as the dean of the College of Textiles and Clothing at Qingdao University from 2020, as well as served as the principal of the first-level discipline of Textile Science and Engineering. He has served as an associate editorial board member at Mini-Reviews in Organic Chemistry from 2019. He serves as a council member of China Textile Engineering Society and a Vice President of the 5th Council of the Shandong Textile and Clothing Industry Association. His research areas are ecological dyeing and finishing technology, dye synthesis and application, textile color matching technology.

Topic of the Speech:

Sustainable Fashion and Green and Low-carbon Transformation of the Textile Industry

Dr. Qing Zhu

Sr. Project Section Head of Global Softlines Technical Service and China R&D, Connectivity and Products Department
SGS Shanghai
China



Dr. Qing Zhu Ph.D. majored in Textile Chemistry and Dyeing & Finishing Engineering, Donghua University. ISO 9001 Quality Management System Internal Auditor, ISO 14001 Environmental Management System Internal Auditor and SA 8000 Social Accountability Management System Internal Auditor. Much experience in the industry and experience in the development and implementation of innovative sustainability and chemical management (SCM) solutions and projects in the global textile and footwear supply chain. Familiar with major international regulations (e.g. REACH, CPSIA, etc), standards and certifications (e.g. GHS, bluesign®, ZDHC, GRS, PPE). Proficient in testing standards in various countries (e.g. GB, ISO, AATCC etc.) as well as the improvement of textile quality problems. She also participated as the drafter of international, national and industry and association standards. She also helped many clients to draft their enterprise standard.

TBIS Workshop Speaker - Thursday, August 24, 2023

Topic of the Speech:

Size Matters: The Adoption of Textile Informatics, Supply Chain Transparency and the Digital Economy in Large and Small Scale Fashion Enterprises

Dr. Hilde Heim

Manchester Metropolitan University
UK



Dr. Hilde Heim is a designer, educator, and researcher. She holds a post as a senior lecturer and deputy division head of the Fashion Communications division in the Manchester Fashion Institute at the Manchester Metropolitan University. Originally from Sydney, Dr. Heim worked for fashion magazines Elle, Vogue and Madame Figaro in Germany and France. Prior to transferring into academia, she was an award-winning fashion designer and entrepreneur, running her own high-end label nationally, and internationally for around 25 years. Dr. Heim's research interests today lie in supply chain transparency and small-scale fashion enterprise. She leads a team of researchers that facilitates the adoption of smart technologies for tracking and tracing textile products as well as blockchain enabled platformisation. Since 2021 she has convened several knowledge exchange events for supply chain transparency in collaboration with the UNECE and the OECD. She is also working with international tech start-ups in bringing industry partners together. This research activity builds on her reputation as innovations advocate for fashion technology.

Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Advanced Fibrous Structures for Enhanced Thermal Insulation

Dr. Mohanapriya Venkataraman

Technical University of Liberec
Czech Republic



Dr. Mohanapriya Venkataraman is a passionate textile material scientist working as an Assistant Professor at the Department of Material Engineering, Faculty of Textile Engineering, Technical University of Liberec, Czech Republic. Her research areas include Textile Materials, Thermodynamic Analysis, Micro and Nanoporous Materials, Heat Transfer, Polymers, and Composites. She is a leader of multiple international projects funded by the EU, the Technology Agency of the Czech Republic (TA ČR), and the Czech Science Foundation (GA ČR). She has authored over 90 scientific papers; 100 conference publications; 20 keynote speeches; 35 book chapters, and 4 books and is a Guest Editor for two journals and an Associate Editor for JFBI. She is a nominee to be a panel member of the Czech Science Foundation (GA ČR). She was profiled in TA.DI magazine of Technology Agency of the Czech Republic (TA ČR) as a female researcher breaking the stereotype of a traditional scientist.

Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Exploring the Influencing Mechanism of Apparel Green Consumption Behavior of Chinese Generation Z

Professor Jianfang Liang

Xi'an Polytechnic University
China



Prof. Jianfang Liang, as a professor of Xi'an Polytechnic University, was honored as a “Distinguished Educator” of universities and won the National Social Science Fund project. With an impressive academic background, she has served as a review expert of the Ministry of Education Degree and Postgraduate Education Development Center, a member of the International Scientific Committee (ISC), a member of the Academic Committee, China Academy of Management Science, an expert in the Shaanxi Province Philosophy and Social Science Expert Database. Prof. Liang leads research teams focused on Fashion Trade and Sustainable Development and currently serves as the director of the Fashion Trade and Media Research Team. Dedicated to researching and teaching in the areas of Fashion Product and Market Development, Green Supply Chain Management, Sustainable Fashion Consumption Patterns, and New Retail Business Models. She has completed 24 national and provincial research projects and more than 30 projects commissioned by famous enterprises in China, awarded 3 items provincial-level science and technology progress awards and 5 provincial-level teaching achievement. Prof. Liang has published over 80 professional research papers in international journals, served as the Editor-in-Chief/Participant of 9 national professional textbooks and presided over 5 items of national first-class course, provincial first-class course, etc.

Topic of the Speech:

The Development of Summer Uniforms for Cleansing Workers in Hot and Humid Weather

Dr. Yueping Guo

Novel Protective Textiles Limited
Hong Kong, China



Dr. Yueping Guo earned her Ph.D. degrees at Institute of Textiles and Clothing, The Hong Kong Polytechnic University. Then she consecutively joined The Hong Kong Polytechnic University and was a Fellow, Project Manager, Project Deputy Coordinator and Lecturer. She established Novel Protective Textiles Limited and is a Responsible Official of the company. She supervised M. Phil. and PhD students. She has authored and co-authored more than 100 journal publications, conference papers/presentations, technical reports, book chapters and patents. She has more than 10 awards on outstanding research papers, patent inventions and technology transfer. The inventions from the research projects have been successfully commercialized, including Nano-facemasks, High Performance Sportswear, Anti-Heat Stress Clothing for construction workers, and Summer Uniforms for cleansing workers, which won many international and regional invention/innovation awards. She served as an editor for Journal of Fiber Bioengineering and Informatics, and is the reviewers for CMAJ and Textile Research Journal etc.

Medal Lectures - Thursday, August 24, 2023

Topic of the Speech:

Research on the Costume Structure and 3D Restoration of the Tomb Mural of YanFei

Professor Yongmei Deng

Xi 'an Polytechnic University
China



Prof. Yongmei Deng, from the Department of Fashion Engineering, School of Fashion and Art Design, Xi'an Polytechnic University, focuses on smart wearable clothing research and development, cultural and creative product design and research and development. Won the second prize of Outstanding Achievement Award of Humanities and Social Sciences Research in Shaanxi Colleges and Universities. There are 2 first prizes and 1 second prize of provincial and ministerial teaching achievement prizes. She has undertaken more than 10 provincial and ministerial vertical projects and published more than 70 academic papers. She served as chairman of Silk Professional Committee of Shaanxi Textile Engineering Society, executive deputy director of Shaanxi Education Statistics Research Center, member of Shaanxi Provincial Political Consultative Conference, member of the Central Committee of the Chinese Revolutionary Committee and other social positions.

Topic of the Speech:

Similarities and Differences Between Virtual and Actual Clothing

Dr. KyoungOk Kim

Faculty of Textile Science and Technology
Shinshu University
Japan



Dr. KyoungOk Kim is an Associate Professor in Department of Advanced Textile and Kansei Engineering, Faculty of Textile Science and Technology, Shinshu University and Division of Fabrics & Production, Institute for Fiber Engineering (IFES), Interdisciplinary Cluster for Cutting Edge Research (ICCER), Shinshu University, Japan. She received her Ph.D. from Shinshu University in Textile Engineering. Her research interests are clothing engineering, textile engineering, and kansei engineering for both apparel and textile fields.