

# The IFES East Asia Special Symposium on “Advanced Functional Materials” by Internationally Recognized Scholars Program

---

Day 1 Jan. 24<sup>th</sup>, 2024(Wed.) Registration

---

Day 2 Jan. 25<sup>th</sup>, 2024(Thu.) Symposium @ Auditorium

9:00~9:15      Opening Ceremony  
Welcome speech  
Distinguished Professor Ick Soo Kim, Director of the Institute for  
Fiber Engineering, Shinshu University

Professor Hideaki Morikawa, Dean of Faculty of Textile Science and  
Technology, Shinshu University

9:15~9:45      Invited Speech  
**Title:** Design and applications of functional DNA oligomer  
**Speaker:** Professor Seung Pil Park, Department of Biotechnology  
and Bioinformatics, Korea University & Director of  
Biological Clock-based Anti-Aging Convergence RLRC,  
NRF

9:45~10:15    Invited Speech  
**Title:** Purinergic receptors and chronic pain  
**Speaker:** Professor Guang-yin Xu, Executive Dean of Suzhou  
Medical College, Soochow University

10:15~10:30   **Break**

10:30~11:00   Invited Speech  
**Title:** Mechanical properties of carbon nanotube (CNT) and CNT-  
based nanomechanical sensors  
**Speaker:** Professor Toshiaki Natsuki, Shinshu University

11:00~11:30   Invited Speech  
**Title:** Antimicrobial polymeric materials for biomedical applications

**Speaker:** Professor Xuehong Ren, Wuhan Textile University

11:30~12:00 Invited Speech

**Title:** Spontaneous transition of intrinsically disordered protein (IDP)-based coacervates for vesicle-like compartments

**Speaker:** Professor Yoo Seong Choi, Chungnam National University

12:00~13:00 *Lunch*

13:00~13:30 Invited Speech

**Title:** Nanospectroscopic investigation and electrical modification of individual free-standing semiconductor nanocrystals using in-situ nanoprobe-cathodoluminescence technique

**Speaker:** Associate Professor Kentaro Watanabe, Shinshu University

13:30~14:00 Invited Speech

**Title:** Research progress on functional fiber and biomaterials

**Speaker:** Professor Keqin Zhang, Dean of College of Textile and Clothing Engineering, Soochow University

14:00~14:30 Invited Speech

**Title:** A new strategy for developing the orphan drug of patients with Sjögren syndrome

**Speaker:** Professor Sang Ho Jun, Korea University Anam Hospital

14:30~15:00 Invited Speech

**Title:** Introduction of our laser-assisted polymer melt-electrospinning system

**Speaker:** Professor Koji Nakane, University of Fukui

18:00~21:00 *Banquet* (Ueda Onsen Shouen)

---

Day 3 Jan. 26<sup>th</sup>, 2024(Fri.) Symposium @ Auditorium

9:00~9:30 Invited Speech

**Title:** Preparation of needled nonwoven enhanced silica aerogel for thermal insulation

**Speaker:** Professor Wei Zhang, Dean of School of Textile and Clothing, Nantong University

9:30~10:00 Invited Speech

**Title:** Application of nanofiber nonwoven fabric to solid-liquid

separation

**Speaker:** Associate Professor Yasuhito Mukai, Nagoya University

10:00~10:30 Invited Speech

**Title:** Investigation of parameters affecting the drape coefficient of silk fabric for Hanbok on 3D virtual image realization

**Speaker:** Professor Jungsoon Lee, Chungnam National University

10:30~10:45 *Break*

10:45~11:15 Invited Speech

**Title:** Exploring the potential of microchannel wet-spinning process

**Speaker:** Professor Tsutomu Ono, Okayama University

11:15~11:45 Invited Speech

**Title:** History and development of dental zirconia

**Speaker:** Professor Jinsoo Ahn, Seoul National University School of Dentistry

11:45~13:00 *Lunch*

13:00~13:30 Invited Speech

**Title:** Functional nanofibrous materials: controllable fabrication and applications

**Speaker:** Professor Bin Ding, Dean of Institute of Science and Technology, Donghua University

13:30~14:00 Invited Speech

**Title:** Adhesive proteinic nanofibrous mats for effective hemostasis and tissue regeneration

**Speaker:** Professor Hyung Joon Cha, Dean of Engineering, Pohang University of Science and Technology (POSTECH)

14:00~14:30 Free Discussion

14:30~15:00 Closing Ceremony

---

Day 4 Jan. 27<sup>th</sup>, 2024(Sat.) Campus Tour

---

# The IFES East Asia Special Symposium on "Advanced Functional Materials" by Internationally Recognized Scholars



**Hyung Joon CHA**  
**SeAH Chair Professor**  
 Dean of Engineering  
 Head, Dept. of Chemical Engineering  
 Director, Biomaterials Research Center  
**Pohang University of Science and Technology (POSTECH), Korea**  
 Specialties: Marine Biomaterials, Tissue Engineering, Drug Delivery



**Bin DING**  
**Professor**  
 Dean of the Research Institute  
**Donghua University, China**  
 Specialties: Molding theory and structural design of functional fiber materials and their applications in protective clothing, environmental protection, flexible energy, biomedicine, food safety and so on



**Tsutomu ONO**  
**Professor**  
 Applied Chemistry and Biotechnology Program,  
 School of Engineering  
**Okayama University, Japan**  
 Specialties: Microfluidics, Microcapsule, Nanofiber, Soft matter, Diffusion separation engineering



**Seung Pil PACK**  
**Professor**  
 Dept. of Biotechnology and Bioinformatics  
 Director, Biological Clock-based Anti-aging  
 Convergence RLRC  
**Korea University, Korea**  
 Specialties: Nano-medicine & Biologics, Anti-aging & Healthcare, Biomineral & Biomaterials, Liquid Biocondensation



**Guangyin XU**  
**Professor**  
 Executive Dean of Suzhou Medical College  
 Team Leader of the Institute of Neuroscience  
 Director of the Translational Pain Medicine Laboratory  
**Soochow University, China**  
 Specialties: Pain Translational Medicine, Pain mechanism and analgesic principle, Gastrointestinal nerve function and diseases



**Koji NAKANE**  
**Professor**  
 Faculty of Engineering Division of Engineering Frontier  
 Fiber Technology and Science  
**Fukui University, Japan**  
 Specialties: Polymer materials, Structural materials and functional materials, Composite materials and interfaces



**Yoo Seong Choi**  
**Professor**  
 Dept. of Chemical Engineering & Applied Chemistry  
**Chungnam National University(CNU), Korea**  
 Specialties: Intrinsically Disordered Proteins (IDPs), IDP-based biomaterials, Marine tyrosinases



**Xuehong Ren**  
**Professor**  
 School of Textile Science and Engineering  
**Wuhan Textile University, China**  
 Specialties: Preparation of N-halamines/metal oxides hybrid nanoparticles and application in antibacterial textiles



**Yasuhito MUKAI**  
**Associate Professor**  
 Dept. of Materials science and Engineering  
 School of Engineering  
**Nagoya University, Japan**  
 Specialties: Solid-liquid separation engineering, Membrane separation engineering, Water treatment engineering, Colloid engineering



**Sang Ho JUN**  
**Professor**  
 DDS, MS, Ph.D  
 Dept. of Oral & Maxillofacial Surgery  
**Korea University Anam Hospital, Korea**  
 Specialties: Applications of Mussel Protein Bio-adhesives in Bone Regeneration



**Ke-Qin ZHANG**  
**Professor**  
 National Engineering Laboratory for Modern Silk  
 Dean of College of Textile and Clothing Engineering  
 Dept. of Polymer Chemistry and Physics  
**Soochow University, China**  
 Specialties: Structurally colored fibers: from photonic to quasi-ordered structures



**Toshiaki NATSUKI**  
**Professor**  
 Institute for Fiber Engineering  
 Faculty of Textile Science & Technology  
**Shinshu University, Japan**  
 Specialties: Composite materials, physical properties, material mechanics



**Jungsoon LEE**  
**Professor**  
 Former Dean of College of Human Ecology  
 Dept. of Clothing & Textiles, College of Human Ecology  
**Chungnam National University, Korea**  
 Specialties: Textile Materials



**Wei ZHANG**  
**Professor**  
 Dean of School of Textile and Clothing  
**Nantong University, China**  
 Specialties: advanced fibers and nonwoven materials, dedicated to the fields of biomedical fiber materials, construction fibers and geotechnical materials



**Kentaro WATANABE**  
**Associate Professor**  
 Dept. of Mechanical Engineering and Robotics  
 Faculty of Textile Science and Technology  
**Shinshu University, Japan**  
 Specialties: nanomaterial science, nanostructure physics, crystal engineering, applied physical properties, thin film, surface and interface properties



**Jinsoo AHN**  
**Professor**  
 Dept. of Dental Biomaterials Science  
 School of Dentistry  
**Seoul National University, Korea**  
 Specialties: Dental Engineering, Esthetic and Physical Properties of Dental Biomaterials