TOP GLOBAL UNIVERSITY JAPAN

## International Symposium on Electrospinning Nanofibers 2021 - ISEN2021

# FUTURE PERSPECTIVES in

# **ELECTROSPINNING NANOFIBERS**

This symposium will focus on "challenges and innovations in electrospinning and electrowriting of polymeric nanofibers and microfibers." Electrospinning is a globally recognized method for producing threads from polymer solutions or polymer melts. It enables the creation of fiber with diameters in the hundreds of nanometers, and non-woven mats from nanofibers. These are broadly used for biomedical and environmental cleanup applications. Recently, in addition to the non-designed fabricates, geometrically designed structures are being manufactured using melt electrowriting. We believe that the symposium will be a great opportunity for all audiences to have an inspired and fruitful discussion on new approaches and fresh findings with these innovative textiles.

# **11 MARCH 2021** Join us on Zoom! 17:00 -19:20 JST / 09:00 -11:20 CET

#### **SPEAKERS**

Prof. Paul Dalton University of Würzburg

> "High-resolution 3D printing of biomedical textiles using melt electrowriting"

#### **REGISTRATION & MORE INFO**

Please access our website from the QR code or URL below **DEADLINE** 

### MARCH 11, 12:00 JST

https://www.kit.ac.jp/2021/02/ symposium20210311/



Asst. Prof. Huaizhong Xu Kyoto Institute of Technology

"Melt electrowriting: current work and future plan"



#### ORGANIZER



Assoc. Prof. Takashi Aoki Kyoto Institute of Technology



Asst. Prof. Yuya Ishii Kyoto Institute of Technology

"Electromechanically active aselectrospun polymer fiber mats"







## International Symposium on Electrospinning Nanofibers 2021 Program

TIME TABLE			
	JST	CET	
	17:00	9:00	Opening Address & Overview Prof. Shinichi Sakurai - Kyoto Institute of Technology
			Chair Assoc. Prof. Takashi Aoki - Kyoto Institute of Technology
			LECTURE 1
	17:05	9:05	Prof. Paul Dalton - University of Würzburg "High-resolution 3D printing of biomedical textiles using melt electrowriting"
			This lecture will describe the development of a distinct class of electrohydrodynamic 3D printing, termed melt electrowriting (MEW), for biomedical applications. MEW has been developed with biomaterials in mind and builds on many decades of melt processing for medical devices and textiles from the regulatory perspective. MEW has several perspectives that make it a fascinating high-resolution 3D printing technology for fibers, including the ability to alter the diameter on demand and the exceptional ability to monitor important information during manufacture. The benefit for the biomaterials and biomedical engineering community is a robust, reproducible and low-cost manufacturing technology that will be widely used over the next decade.
			Check his tweet 💟 @meltelectrospin or https://twitter.com/meltelectrospin
	17:50	9:50	Q&A Session
			LECTURE 2
	18:00	10:00	Asst. Prof. Huaizhong Xu – Kyoto Institute of Technology "Melt electrowriting: current work and future plan"
			The work related to the additive manufacturing technology of melt electrowriting that XU is currently dealing with will be introduced. He will also point out the issues that melt electrowriting are facing.
	18:30	10:30	Q&A Session
			LECTURE 3
	18:40	10:40	Asst. Prof. Yuya Ishii – Kyoto Institute of Technology "Electromechanically active as-electrospun polymer fiber mats"
			Significant direct/converse electromechanical responses from as-electrospun fiber mats composed of non-piezoelectric polymers, which do not show electromechanical properties in their film form, are demonstrated.
	19:10	11:10	Q&A Session
	19:15	11:15	Concluding Remarks: Prof. Pezzotti Giuseppe / Vice President of Kyoto Institute of Technology