



TOHOKU
UNIVERSITY

Tohoku Forum for Creativity Emerging Perspectives Programs 2021
The 5th FRIS-TFC Collaboration Event

HYBRID EVENT

Departing the Ivory Tower: A workshop on Entrepreneurial Research

2021, July 15

16:00 – 18:00 (JST)

TOKYO ELECTRON House of Creativity and Online

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Multi-material Fibers: from Fundamentals to Applications

Fabien Sorin

Associate Professor, EPFL, Switzerland

With the recent progress on materials and processes associated with polymer fibers, advanced fiber-based devices are envisioned to be promising candidates for the next generation of optical probes for sensing, monitoring and minimally invasive surgical tools. In this invited contribution, I will discuss the materials and physical processes at play to realize complex multi-material fiber geometries with advanced functionalities. I will show how one can design novel functionalities, in particular the applications of photonic bandgap fibers for non-invasive surgeries, textured active fibers for diagnosis, and soft mechanical sensor fibers for smart medical textiles, highlighting what it entails to go from a lab demonstrator, to a product.



センダストに係る産学連携の変遷 Vicissitude of industry-academia collaboration on Sendust™

Shigeyoshi Yoshida

Professor, Material Solutions Center, Tohoku University

The famous Sendust™ alloy, having an excellent soft magnetic property, was discovered in 1932 by Dr. Hakaru Masumoto and Dr. Tatsuji Yamamoto of the Institute for Materials Research, Tohoku University.

Sendust™ is a unique material that has been used in the industry for 90 years as a practical material as well as pioneering industry-academia collaboration. In this talk, I'd like to look back on the history of industry-academia collaboration on Sendust™, and introduce the process from the development of electromagnetic noise suppression sheets made of Sendust™ to industrialization.

| Registration |

Registration deadline : July 14, 2021, 16:00 (JST)

(first-come-first-served basis, registration required)

www.tfc.tohoku.ac.jp/emerging-perspectives-programs/event/6028.html



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Hosted by Tohoku Forum for Creativity, Organization for Research Promotion, Tohoku University
Frontier Research Institute for Interdisciplinary Sciences (FRIS), Tohoku University
Co-hosted by Tohoku Initiative for Fostering Global Researchers for Interdisciplinary Sciences (TI-FRIS)



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