

# Tokyo Institute of Technology - RWTH Aachen University Joint Workshop

## 東工大-アーヘン工科大学合同ワークショップ Interfaces of Biological and Bio-inspired Materials for Future BioDevices

**日 時:** 2023年2月9日(木) 9:20~17:30  
**開 催:** ハイフレックス開催 (Zoom ウェビナー) ・事前申込制  
**会 場:** 東工大レクチャーシアター<大岡山西講義棟 1 (W531)>

### 開催趣旨:

東工大とアーヘン工科大学との「博士課程学生共同指導プログラム」を学内に広く知っていただくために、アーヘン工科大学の複数の先生をお招きして、ワークショップを開催します。



テーマは、ポストコロナの世界にとって非常に重要な、私たちの体に寄り添う物質やデバイスの最新の研究です。東京医科歯科大学の先生にもご講演いただきます。

\*「博士課程学生共同指導プログラム」は、東工大物質理工学院とアーヘン工科大学電気工学・情報技術学部のプログラムです。

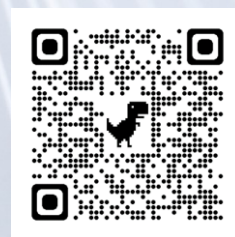
### スケジュール

- 9:20~ 東工大及びアーヘン工科大学の研究者による講演会
- 16:10~ 「博士課程学生共同指導プログラム」の説明
- 17:00~ 東工大及びアーヘン工科大学の学生によるポスター発表会

\* ポスター発表の学生を募集中です。奮ってご参加ください。

参加申し込みはこちら  

<https://forms.gle/hqDAb64feM6uxL4H7>



【主催】東京工業大学物質理工学院・アーヘン工科大学

お問い合わせ先

物質理工学院運営事務グループ E-Mail: [mct.intl.adm@jim.titech.ac.jp](mailto:mct.intl.adm@jim.titech.ac.jp)

※IRFI (国際先駆研究機構)、ANNEX Aachen 及びスーパーグローバル大学創成支援事業からの支援により実施

**Tokyo Institute of Technology - RWTH Aachen University: Joint Workshop on "Interfaces of Biological and Bioinspired Materials for Future BioDevices"**

Time		Name	Affiliation	Title
Japan	Germany			
9:20	1:20	Prof. Hidetoshi Sekiguchi	School of Materials and Chemical Technology, Tokyo Institute of Technology	Opening Remark
9:30	1:30	Prof. Sven Ingebrandt	Electrical Engineering and Information Technology, RWTH Aachen University	Biosensor concepts based on silicon field-effect transistor devices
9:55	1:55	Assoc. Prof. Masayoshi Tanaka	School of Materials and Chemical Technology, Tokyo Institute of Technology	Technique Development for Proteomic Exploration of Membrane Curvature Sensors using Spherical Supported Lipid Bilayers
10:20	2:20	Dr. Akram Idrissi	ITA Group International Centre for Sustainable Textiles, RWTH Aachen University	Medical Smart Textiles: Material and Technology Innovations for Wearable Healthcare
10:45	2:45	Break		
11:00	3:00	Assoc. Prof. Toshiki Sawada	School of Materials and Chemical Technology, Tokyo Institute of Technology	Surface engineering of biopolymers toward functional soft materials
11:25	3:25	Dr. Sikandar Hayat	Institute of Experimental Medicine and Systems Biology, Uniklinik RWTH Aachen	Using novel single-cell multi-omics approaches to find biomarkers for patient stratification
11:50	3:50	Prof. Junko Morikawa	School of Materials and Chemical Technology, Tokyo Institute of Technology	Measurement methods of nano/micro-thermal interface and prospects for biosensing applications
12:15	4:15	Lunch time		
13:30	5:30	Dr. Vivek Pachauri	Institute of Materials in Electrical Engineering 1, RWTH Aachen University	Bioinspired system-integration for future computing and biosensor platforms
13:55	5:55	Assoc. Prof. Yuhei Hayamizu	School of Materials and Chemical Technology, Tokyo Institute of Technology	Characterization of Nano-Bio interfaces of 2D materials Toward Novel Biosensing
14:20	6:20	Prof. Dr. Maria Fyta	Mathematics, Computer Science and Natural Sciences RWTH Aachen University	Computational interrogation of the bio/material interface: the case of DNA and gas sensing
14:45	6:45	Prof. Yuji Miyahara	Institute of Biomaterials and Bioengineering, Tokyo Medical & Dental University (TMDU)	Detection of biomolecular recognition and cell function using bio-transistors
15:10	7:10	Break		
15:20	7:20	Prof. Katsunori Tanaka	School of Materials and Chemical Technology, Tokyo Institute of Technology	Therapeutic In Vivo Synthetic Chemistry
15:45	7:45	Prof. Dr. César Rodríguez-Emmenegger	DWI-Leibniz Institute for Interactive Materials, RWTH Aachen University	Using Nature's engineering principles to design biointerfaces and synthetic cells for biomedicine
16:10	8:10	Prof. Ji Shi	School of Materials and Chemical Technology, Tokyo Institute of Technology	Introduction of the "Doctoral Students Exchange Program Between RWTH and Tokyo Tech"
16:20	8:20	Dr. Meguya Ryu	AIST (Former student at Tokyo Institute of Technology)	Experiences of the Exchange program at Aachen
16:30	8:30	Chishu Homma	School of Materials and Chemical Technology, Tokyo Institute of Technology	Experiences of the Exchange program at Aachen
16:35	8:35	Prof. Yoshitaka Kitamoto	School of Materials and Chemical Technology, Tokyo Institute of Technology	Closing Remark
16:40	8:40	Move to the poster session location		
17:00	9:00	Poster session @ Tokyotech Front		