

A MEXT-funded INTER-UNIVERSITY EXCHANGE PROJECT:

## JoinTECH Laboratories

for Smart Materials Leader Development

New global opportunities from KYOTO INSTITUTE OF TECHNOLOGY

- Establishing JoinTECH Laboratories between each European partner and Kyoto Institute of Technology (KIT), based on joint collaborative research Enabling students to expand on their home-institution research at the partner's laboratory abroad in a seamless, uninterrupted way.
- Implementing research-oriented student mobility catered to each student's scientific background and interests
  - Offering exposure to diverse research approaches, broadening students' perspectives and helping them build a global network of researchers and peers.
- Developing Materials TECH LEADERs who will lead the next generation Materials R&D in both Japan and Europe

Developing human resources capable of leading innovation in semiconductor and other advanced, highly functional cutting-edge materials through proactive exploration and development.

Project period: October 2024 - March 2029

### Join**TECH**-Online Join**TECH**-Visit

JoinTECH-Lab JoinTECH-Seminar

Building a foundation for collaboration

Experiencing global teamwork Integrating thesis research from home and abroad

Connecting with cutting edge researchers worldwide

Practical specialized step-by-step research experience at the master's level

#### Partners and fields of collaboration



Prof. TAKAHASHI Kazuo Electrical Engineering and Electronics Plasma processing

University of Orléans



Assoc. Prof. TAKAHASHI Shun Electrical Engineering and Electronics Nano-optoelectronics

University of Twente



Prof. NISHINAKA Hiroyuki Electrical Engineering and Electronics Semiconductor engineering

University of Valencia



Materials Science and Engineering

University of Udine







Ca' Foscari University of Venice

Prof. KUMADA Yoichi

Molecular Chemistry and Engineering

Bio-nanotechnology & Bio-molecular engineering





## Materials **TECH LEADERS** who will lead the next-generation materials field

## Join**TECH**-Online

#### Building a foundation for collaboration

- Triggers the desire to study abroad and take part in an international collaboration
- An introductory opportunity to examine a suitable lab for further research

## 4 Join**TECH**-Seminar

#### Connecting with cutting edge researchers worldwide

- Once a year opportunity
- Knowledge sharing among laboratories
- Interdisciplinary networking



# 2 JoinTECH-Visit

#### Experiencing global teamwork

- Several weeks mobility
- Collaboration with students of the host lab through specific topics
- Preparation for study and research abroad for a longer period

## 3 Join**TECH**-Lab

#### Integrating thesis research from home and abroad

- Several months mobility
- Participation in a collaborative research project aiming at scientific results

#### What's a TECH LEADER?

It is the type of human resource KIT aims to foster.

Through international collaboration, KIT cultivates individuals who can successfully lead projects in the global arena, backed by professional skills, leadership, foreign language proficiency, and the ability to establish individuality rooted in cultural identity.

Achievement is assessed using a 26-item, 9-level rubric evaluation in accordance with KIT's original "TECH LEADER Index."

Expertise

Foreign language fluency

Leadership experience

Individuality



#### JoinTECH-Online with University of Udine

It was a meaningful opportunity for me to maintain my motivation to study abroad. The topic was very relevant to the research I'm planning to pursue in the master's program, so I was able to create a vivid image of what I'll do. I also learnt what level of language skills I'll need to improve for studying abroad.

KIT undergraduate student



#### JoinTECH-Visit at University of Valencia

The academic experience of the KIT students has been complemented by the opportunity to live in a new country and to interact with peers who share similar aspirations and ambitions while coming from different cultural backgrounds. I am sure that this learning experience has been enriching for them.

Host professor



#### JoinTECH-Visit at KIT from University of Venice

It is definitely formative to get out of your own comfort bubble and interact with a totally new and different culture. I was able to discover a passion for research and work in the Japanese environment, and to satisfy my curiosity, my desire to discover and deepen.

Student from University of Venice



#### JoinTECH-Visit at University of Orléans

I gave a presentation on the research I am working on. I received various comments from researchers working on different topics and learned about experimental techniques and knowledge that could be applied to my research. This program's focus on research motivated my research even more.

KIT master's student

Find more about the program and activities on the project website at:



Information and lectures of JoinTECH Laboratories are also available on JV-Campus, an online learning platform.



Our first JoinTECH-Seminar is coming in November 2025! Join us in Kyoto or online!



https://www.kit.ac.jp/international\_index/sekaitenkai/

https://www.jv-campus.org/jvc-provider/360434/