

# Webinar: 2022 Tokyo Tech Research Showcase “Automation, Robotics and Intelligent Systems”

**Date: Monday, March 7, 2022**

**Time: 9:00 - 11:00 (THA), 11:00 - 13:00 (JST)**

**Free of charge / Advance registration required.**

Tokyo Institute of Technology (Tokyo Tech), in cooperation with the National Science and Technology Development Agency (NSTDA), will host the 2022 Tokyo Tech Research Showcase online on Monday, March 7.

This event will focus on research relevant to automation, robotics, and intelligent systems. Leading researchers from Tokyo Tech and NSTDA will present their research on said subjects, introducing cutting-edge technology that will be applicable to “smart and sustainable manufacturing”, which is one of the goals of ARIPOLIS in EECi.

Q&A will follow each presentation.

Tokyo Tech Research Showcase is organized by Tokyo Tech ANNEX Bangkok, co-sponsored by Tokyo Tech and NSTDA, and supported by Tokyo Tech Alumni Association Thailand (Thai Kuramae Kogyokai).

# Registration

[https://us06web.zoom.us/webinar/register/WN\\_yb3p-c1IQEeWsiyuGuAUuQ](https://us06web.zoom.us/webinar/register/WN_yb3p-c1IQEeWsiyuGuAUuQ)



Please register through the link above by Sunday, March 6, 2022. Only those registered will be sent the webinar link. This event will be conducted in English.

**Notice: This workshop will be recorded and will be opened later on NSTDA and Tokyo Tech website**

## TAIST-Tokyo Tech

Tokyo Tech, NSTDA, and partner universities in Thailand have administered Thailand Advanced Institute of Science and Technology-Tokyo Tech (TAIST-Tokyo Tech) since 2007. Based on this network, Tokyo Tech has established strong links with industry and academia in Thailand.

## Tokyo Tech ANNEX

To further advance academia-industry collaborations, Tokyo Tech established Tokyo Tech ANNEX Bangkok at Thailand Science Park in March 2018. Tokyo Tech ANNEX Bangkok facilitates the identification of potential seeds for international collaborative research with companies and organizations in Thailand and the surrounding region.

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Tokyo Tech VR is available here. You can obtain more information about speakers at the main lobby.

# 2022 Tokyo Tech Research Showcase

Monday, March 7, 2022

## Program

9:00 - 9:10

Opening remarks  
Prof. Jun-ichi Takada  
Tokyo Tech Vice President  
Dr. Chadamas Thuvasethakul  
NSTDA Executive Vice President

9:10 - 9:35

Prof. Koichi Suzumori  
School of Engineering, Tokyo Tech  
*“Soft Robotics Leading to a Smart Society and Future”*

9:35 - 10:00

Assoc. Prof. Takeshi Hatanaka  
School of Engineering, Tokyo Tech  
*“Coordinated Control of Multiple Robots/ Drones”*

10:00 - 10:25

Dr. Jartuwat Rajruangrabin  
Researcher, Intelligent Technology for  
Mobility Research Team Leader, Rail  
and Modern Transports Research Center,  
NSTDA  
*“Localization of Autonomous Vehicles in Thailand”*

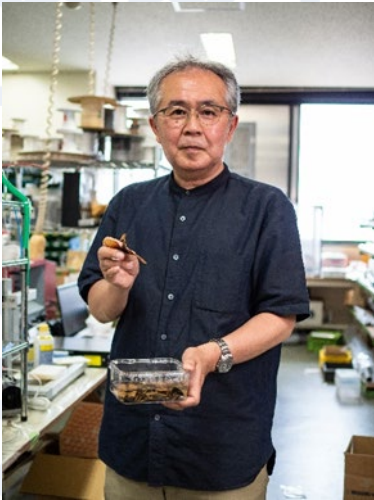
10:25 - 10:50

Specially Appointed Assoc. Prof.  
Kazuki Maruta  
Academy for Super Smart Society, Tokyo  
Tech  
*“Next Generation ITS for Safe Automated Driving”*

10:50 - 11:00

Closing remarks

# *Speakers' Profile*



**Koichi SUZUMORI**  
Professor  
School of Engineering  
Tokyo Institute of Technology

Koichi Suzumori received his B.S., M.S., and Ph.D. degrees in mechanical engineering from Yokohama National University in Japan in 1982, 1984, and 1990, respectively.

He worked for Toshiba R&D Center from 1984 to 2001, and for Micromachine Center from 1999 to 2001. He became a professor of the Division of Industrial Innovation Sciences of Okayama University in 2001. He has been a professor of Department of Mechanical Engineering at Tokyo Institute of Technology since 2014. He is mainly engaged in the research fields of new actuators and their applications. He is also a fellow member of the Japan Society of Mechanical Engineers, a fellow member of the Robotics Society of Japan, project manager of MEXT Kakenhi Grant-in-Aid for Scientific Research on Innovative Areas on Science of Soft Robots, and president of s-muscle Co., Ltd. and H-MUSCLE Co., Ltd.



**Takeshi HATANAKA**  
Associate Professor  
School of Engineering  
Tokyo Institute of Technology

Takeshi Hatanaka received a Ph.D. in applied mathematics and physics from Kyoto University in 2007. He then became part of the faculty at Tokyo Institute of Technology and then at Osaka University. Since April 2020, he has been an associate professor at Tokyo Institute of Technology. His research interests include cyber-physical-human

systems (CPHS) and networked robotics. He is coauthor of “Passivity-Based Control and Estimation in Networked Robotics” (Springer, 2015) and coeditor of "Economically-Enabled Energy Management" (Springer Nature, 2020). He has received the Kimura Award (2017), Pioneer Award (2014), Outstanding Book Award (2016), Control Division Conference Award (2018), Takeda Prize (2020), and four Outstanding Paper Awards (in 2009, 2015, 2020, 2021) all from The Society of Instrument and Control Engineers (SICE). He also received the third IFAC CPHS Best Research Paper Award (2020) and the 10th Asian Control Conference Best Paper Prize Award (2015). He is a senior member of IEEE.



**JARTUWAT RAJRUANGRABIN**  
**Researcher, Intelligent Technology for  
Mobility Research Team Leader, Rail and  
Modern Transports Research Center  
National Science and Technology Development  
Agency**

Jartuwat RAJRUANGRABIN attained a B.E. in control engineering from King Mongkut’s Institute of Technology Ladkrabang, as well as a M.S. from University of Southern California and a Ph.D. from the University of Texas at Arlington, both in electrical engineering, in 2002, 2005, and 2010, respectively. He subsequently gained professional working experience as a researcher at the National Electronics and Computer Technology Center in the Image Technology Laboratory (2011-2012) and the X-ray CT and Medical Imaging Laboratory (2012-2015). Since 2016, he has been conducting research in the Advanced Automation and Electronics Research Unit.”



**Kazuki MARUTA**  
**Specially Appointed Associate Professor,**  
**Academy for Super Smart Society**  
**Tokyo Institute of Technology**

Kazuki Maruta received his B.E., M.E., and Ph.D. degrees in engineering from Kyushu University in Japan in 2006, 2008 and 2016, respectively. From 2008 to 2017, he was with NTT Access Network Service Systems Laboratories where he was engaged in the research and development of interference compensation techniques for future wireless communication systems. From 2017 to 2020, he was an assistant professor in the Graduate School of Engineering at Chiba University. He is currently a specially appointed associate professor in the Academy for Super Smart Society at Tokyo Institute of Technology. His research interests include array antenna signal processing, channel estimation, medium access control protocols, and moving networks. He is a senior member of IEEE and IEICE, and he has received the IEICE Radio Communication Systems (RCS) Outstanding Researcher Award, IEICE Best Paper Award in 2018, and the IEEE ICCE Excellent Paper Award in 2021.