



# SICE 2020

**September 15-18, 2020**  
The Empress Chiang Mai Hotel  
Chiang Mai, Thailand

## CALL FOR PAPERS

The Society of Instrument and Control Engineers (SICE) Annual Conference 2020

### SICE 2020

The SICE Annual Conference 2020 (SICE 2020), organized by the Society of Instrument and Control Engineer (SICE) and the Electrical Engineering / Electronics, Computer, Telecommunications and Information Technology (ECTI) Association, will be held in September 15 - 18, 2020, in Chiang Mai, Thailand. The SICE Annual Conference 2020 is an international conference covering a broad range of fields from control theory and applications, mechatronics, industrial automation, transportation and communication, biological and medical systems, Artificial intelligence, cyber-physical systems, smart grids, educational and social contributions. The technical program of SICE 2020 will consist of plenary and invited talks, tutorial courses, and workshops, as well as oral and interactive sessions.

### Important Dates (Tentative)

Paper Submission Webpage Open	January 1, 2020
Deadline for Paper Submission	March 15, 2020
Notification of Paper Acceptance	June 1, 2020
Submission of Final Camera-ready Papers	July 1, 2020
Early Bird Registration	July 1, 2020

### MAIN TOPICS

#### Measurement

Sensors and Transducers  
Signal and/or Image Processing  
Identification and Estimation  
Opto-Electronic Measurement  
Remote Sensing  
Mass and Force Measurement  
Temperature Measurement  
Ultra-High Precision Measurement  
Analytical Measurement  
Standard of Measurement  
Flow Measurement  
Flow Measurement and Control  
Networked Sensor System

#### Control

Multivariable Control  
Nonlinear Control  
Robust Control  
Adaptive and Optimal Control Intelligent control  
Computer Aided Design  
Modeling, System Identification and Estimation  
Process Control  
Mechanical Systems Control  
Guidance and Flight Control  
Power Systems Control

#### Systems and Information Industrial Applications

System Engineering  
Human-Machine Systems  
Intelligent Systems  
Autonomous Decentralized Systems  
Computational Intelligence  
Discrete Event Systems  
Social Systems  
Hypercomputes  
Molecular Robotics  
Relationality-Oriented Systems Science  
Smart Mobility Systems

Process Automation  
Factory Automation  
Laboratory Automation  
Information Management Systems  
SCADA and Network Systems  
Manufacturing Systems  
Transportation Systems  
Micro and Nano Devices  
Components and Devices

#### System Integration

Mechatronics Systems  
Robotic and Automation Systems  
Human Interfaces  
Virtual Reality Systems  
Entertainment Systems  
Medical and Welfare Systems  
Safety, Environment and Eco-Systems  
Agricultural and Bio-Systems  
Rescue Systems  
Simulation of Large Systems  
Network System Integration

#### Life Engineering

Integrative Biophysical Engineering and Informatics  
Biological and Physiological Engineering  
Electrophysiology and Kinesiology  
Ubiquitous Healthcare

#### Others

### Conference Venue

SICE 2020 will be held at The Empress Hotel and Convention Center, located at the heart of the city of Chiang Mai, Thailand. Chiang Mai is a Northern Thai city known for its rich history, Lanna culture, and numerous tourist attractions of great historical and religious significance. In walking distance to the hotel lie the iconic Night Bazaar Market and the Old City.

### Technical Co-Sponsors (Tentative)

IEEE Control Systems Society (CSS); IEEE Robotics and Automation Society (RAS); IEEE Industrial Engineering Society (IES); Institute of Control, Robotics and Systems (ICROS); International Society of Automation (ISA); Technical Committee on Control Theory (TCCT); Chinese Association of Automation (CAA); Japan Electric Measuring Instruments Manufacturers' Association (JEMIMA); Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI) Association

### In Association with (Tentative)

Rajamangala University of Technology Lanna (RMUTL); Gunma University;  
The Chinese Association of Automation (CAA); China Instrument and Control Society (CIS)  
Asian Control Association (ACA)

**Organizers:** **For more information:**





## Chiang Mai, Thailand 15 - 18 September 2020

### Organized Sessions, Workshop and Tutorials

The goal of organized session is to provide focused discussions on a new topic or innovative applications of a new approach. Each session consists of 6 papers, which reviewed via the normal review process. Both regular and position papers can be included in a session. For session proposals, it is recommended to include a brief statement of the session focus, together with the submission of the individual papers. We also encourage proposals for workshops or tutorials that address technical topics with highly anticipated level of interest, impact, and creativity.

## Committee

### Advisory Committee Chair

SICE President

### General Co-Chairs

Kou Yamada (Gunma U., Japan)  
Kosin Chamnongthai (KMUTT, Thailand)

### Program Co-Chairs

Noboru Sakamoto (Nanzan U., Japan)  
David Banjerdpongchai  
(Chulalongkorn U., Thailand)

### Organizing Committee Chairs

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### Publication Co-Chairs

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Pollakrit Toonkum (RMUTL, Thailand)  
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### Registration Co-Chairs

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### Tutorial/Workshop Co-Chairs

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### SICE Week Chair

Napasool Wongvanich (KMUTL, Thailand)

### Secretariats

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Gou Nishida (Nihon U., Japan)  
Koichi Suzuki (SICE, Japan)  
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## Paper Submission

The SICE Annual Conference 2020 accepts two types of submissions for review:

**Regular paper:** Full papers (6 pages in conference format) must be submitted for review. The accepted papers will be submitted to the **IEEE Xplore Digital Library**. Normal length for the final manuscript of the regular paper is 6 pages. Paper exceeding 6 pages may be submitted upon payment of overlength page charges. A maximum of 2 extra pages above 6 pages are permitted.

**Position paper:** Extended abstracts (2-4 pages in conference format) must be submitted for review. This category is provided for authors who want to present a timely review of research, a case study, and so on. This type of paper will **NOT be included** in the IEEE Xplore Digital Library.

Both types of papers should be written in English, and will be included in the conference proceedings. The detailed submission policy is found on the conference web page.

## Program Committee

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### Members

Yoshio Zama (Gunma U., Japan)  
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Contact: