The 1st AIRC-ISIR International Symposium

Program

Registration 8:30 – 9:00

General MC: Dr. Kentaro Imamura (ISIR, Osaka University)

9:00 **Opening address**

Dr. Katsuaki Suganuma, Director of ISIR

9:05 **Opening address**

Dr. Shojiro Nishio, President of Osaka University

9:10 **Opening address**

Dr. Takao Onoye, Executive Vice-president of Osaka University

9:15 **Opening address**

Dr. Yasushi Yagi, Professor of ISIR

Chair: Dr. Masayuki Numao (ISIR, Osaka University)

9:20 Dr. Peter Flach

Professor of Artificial Intelligence Machine Learning and Data Mining, University of Bristol

Plenary lecture - From Data Mining Processes to Data Science Trajectories

10:05 Dr. Yuichiro Anzai

Director of the Science Information Analysis, Japan Society for the Promotion of Science, and Chairperson of the Council for AI Strategy, the Cabinet Office

Plenary lecture - The AI Strategy of Japan and Unsolved Problems in Applications

Chair: Dr. Akira Oiwa (ISIR, Osaka University)

10:50 Dr. Keisuke Fujii

Professor Graduate School of Engineering Science, Osaka University

Invited lecture - State-of-the-art Quantum Computing Technology and Its Application for Machine Learning

Chair: Dr. Takeharu Nagai (ISIR, Osaka University)

11:20 Dr. Keisuke Goda

Professor Graduate School of Science, The University of Tokyo

Invited lecture - AI Cell Sorting

11:50 **Lunch**

Chair: Dr. Yasushi Sakurai (ISIR, Osaka University)

13:00 Dr. Naonori Ueda

Fellow, Head of Ueda Research Laboratory, Director of Machine Learning/Data Science Center NTT Communication Science Laboratories, and Deputy Director, RIKEN Center of Advance Intelligence Project

Plenary lecture - Integration of Inductive and Deductive Inferences- Simulation-based Machine Learning -

Chair: Dr. Tamio Oguchi (ISIR, Osaka University)

13:45 Dr. Koji Tsuda

Professor Graduate School of Frontier Sciences, The University of Tokyo

Invited lecture - Machine Learning Methods for Designing New Materials

Chair: Dr. Tohru Sekino (ISIR, Osaka University)

14:15 Dr. Hiroki Moriwake

Group Leader Nanosimulation group,

Nanostructures Research Laboratory Japan Fine Ceramics Center Invited lecture - Ceramics Materials Research by Collaboration between Theoretical Calculations and Experiments

14:45 **Coffee break**

AIRC-ISIR lecture	
Chair: Dr. Ayumu Asai (ISIR, Osaka University)	
15:00	Dr. Shun'ichi Kuroda, Director of AIRC-ISIR
	Introduction of AI Research Center, ISIR
15:15	Dr. Takashi Washio
	Measurement Informatics for Advanced Sensing
15:30	Dr. Tamio Oguchi
	Interpretable Modeling in Materials Informatics
15:45	Dr. Kazunori Komatani
	Human-Agent Interaction with High Dimensional Data
16:00	Dr. Kunihiko Nishino
	Antibiotic-Resistant Bacteria: Biggest Threats and Data
16:15	Dr. Yuki Komoto
	Single-Molecule Discrimination of Neurotransmitters with
	Machine Learning
16:30	Dr. Yasushi Sakurai
	Real-time Forecasting of IoT Big Data: Foundations and
	Challenges
16:45	Closing address
	Dr. Yasushi Sakurai, Vice Director of AIRC-ISIR
	Dr. Yuki Noda (ISIR, Osaka University)
17:00	Banquet at Restaurant Grande Toque
19:00	Closing

Organizing Committee

Shun'ichi Kuroda, Yasushi Sakurai, Takashi Washio, Masayuki Numao, Tsuyoshi Sekitani, Tohru Sekino, Hiroaki Sasai, Tamio Oguchi, Kazunori Komatani, Hisaaki Kato, Yasushi Makihara, Yasuko Matsubara, Yuki Noda, Kentaro Imamura, Sho Sato, Ayumu Asai, Koichi Sudoh, Takafumi Fujita, Kazumasa Okamoto, Shinobu Takizawa, Mitsuko Nishino, Yuki Komoto

Information for Participants

Fees

Registration: Free

Banquet: Invited Free

Participant 1,000 yen

Student Free

Symposium Venue

Grand Cube Osaka (Osaka International Convention Center)

12th Floor 'Conference Room 1203'

5-3-51, Nakanoshima Kita-ku, Osaka 530-0005 JAPAN

Tel: 06-4803-5555

Banquet

Restaurant Grande Toque

12th Floor of Grand Cube Osaka (Osaka International Convention Center)

