

The 2nd Uppsala University – Tokyo Tech Joint Symposium
Emerging Technologies and Systems for a Sustainable Society
November 16–17, 2015

Day 1: Monday, Nov. 16, 2015 (Place: Royal Blue Hall, Tokyo Tech Front)

9:30	Opening session (Chair: Makoto Ando)	
9:30-9:50	Opening Address: Dr. Yoshinao Mishima, President of Tokyo Tech (TT)	"Progress of collaboration between Tokyo Tech and Uppsala University"
9:50-10:30	Keynote Speech: Prof. Marika Edoff, Pro-dean of science and engineering faculty, Uppsala University (UU)	"Thin film solar cells and experiences from research to business"
10:30-10:40	Message from Embassy of Sweden: Ms. Victoria Forslund Bellas, Minister Counsellor, Deputy Head of Mission, Embassy of Sweden	
10:40	Coffee Break	
11:00	Plenary session 1: Solar energy technologies and systems (Chair: Makoto Ando/Manabu Ihara)	
11:00-11:30	Prof. Manabu Ihara, Department of Chemical Engineering, TT	"Plasmonic solar cells and smart energy system ' <i>Ene-Swallow</i> ' at Tokyo Tech"
11:30-12:00	Senior Prof. Claes-Göran Granqvist, Department of Engineering Sciences, UU	"Toward a new paradigm for energy efficient buildings: Thermochromics and electrochromics"
12:00-12:30	Prof. Lars Österlund, Department of Engineering Sciences, UU	"Photocatalytic materials for green buildings: Indoor air cleaning and self-cleaning surfaces"
12:30	Lunch (Obento)	
13:30	13:30-14:10	Keynote Speech: Prof. Ken Okazaki, Research Unit for Global Hydrogen Energy, Solution Development Laboratory, TT "Toward the hydrogen society — innovations and globalization"
	14:10-14:40	Prof. Peter Lindblad, Department of Chemistry-Ångström and Dean for Collaboration, Faculty of Science and Technology, UU "Synthetic biology for advanced genetic engineering of cyanobacteria for direct production of solar fuels"
	14:40-15:10	Prof. Yuji Wada, Department of Applied Chemistry, TT "Innovative trend in research on dye sensitized solar cell succeeded by perovskite one"
15:10	Coffee Break	
15:50	Plenary session 2: Energy conversion devices based on electrochemistry (Chair: Manabu Ihara)	
15:50-16:20	Prof. Takeo Yamaguchi, Chemical Resources Laboratory, TT	"Systematic material design for polymer electrolyte fuel cells"
16:20-17:00	Prof. Martin Sjödin, Division of Nanotechnology and Functional Materials, UU	"Organic matter based batteries"
17:00-17:30	Prof. Shuichiro Hirai, Department of Mechanical and Control Engineering, TT	"Visualization of water in fuel cell and lithium in secondary battery"
17:30	Day 1 Closing	
18:00	Reception (Venue: Tejima Room)	
20:00		

Day 2: Tuesday, Nov. 17, 2015 (Place: EEI & W8, Tokyo Tech)

9:30	Breakout Sessions (Environmental Energy Innovation Building (EEI))	
	Session 1: Environment & Energy Technology (EEI, 6 FI)	Moderator: Associate Prof. Takashi Sasabe (TT) Co-Moderator: Prof. Marika Edoff (UU)
	Session 2: Materials Science (EEI, 4 FI)	Moderator: Prof. Satoru Fujitsu (TT) Co-Moderator: Prof. Claes-Göran Granqvist (UU)
	Session 3: Environment & Energy Analysis (EEI, 2 FI)	Moderator: Prof. Masako Ikegami (TT) Co-Moderator: Associate Prof. Mikael Höök (UU)
	Session 4: Entrepreneurship & Innovation (Ishikawadai Building 5, 3 FI)	Moderator: Prof. Junichi Iijima (TT) Co-Moderator: Prof. Marcus Lindhal (UU)
	Session 5: Game Design and Human Interface (H2 Building, Meeting Room 1, Suzukakedai Campus)	Moderator: Prof. Masayuki Nakajima (UU) Co-Moderator: Prof. Takamichi Nakamoto (TT)
	Session 6: Mathematics (EEI, 4 FI, Refresh Room)	Moderator: Prof. Fumiharu Kato (TT) Co-Moderator: Senior Lecturer Denis Gaidashev (UU)
12:00	Lunch (EEI, 1 FI, Open Space)	Lunch Meeting on Student Exchange (EEI, 1 FI, Room 101) Moderator: Hidetoshi Sekiguchi, Vice President for International Affairs, TT
14:00	Plenary session 3: Innovation and industrial collaboration (West Building 8, 10 FI, Room E1001, Chair: Mitsuhiro Oi)	
	14:00-14:30	Prof. Marcus Lindahl, Chair of Industrial Engineering and Management, UU "Innovation and industrial collaboration"
	14:30-14:50	Prof. Mitsuhiro Oi, Office of Industry Liaison, TT "IP management and industry collaboration activities in Tokyo Tech"
	14:50-15:10	Mr. Claes Djurberg, Associate Director, Uppsala University Innovation, IP Support "IP strategy in academic research"
	15:10-15:30	Prof. Kazumichi Araki, Solutions Research Laboratory, TT "Concept of smart heat grid for urban area"
	15:30-16:00	Dr. Setsuo Takatani, President and CEO, MedTech Heart, Inc., a Tokyo-Tech launched venture company "Development of a single-use, magnetically levitated centrifugal ventricular assist device, MT-Mag: Toward getting a CE-certification and clinical applications in Europe"
16:00	Closing session (Chair: Makoto Ando)	
	Closing Remarks: Prof. Peter Lindblad, Department of Chemistry - Ångström Laboratory and Dean for Collaboration, Faculty of Science and Technology, UU	
	Closing Remarks: Makoto Ando, Executive Vice President for Research, TT	
16:30	End of Session	
18:30	Dinner (Venue: HAPPO-EN)	
20:30		