

14th Japanese-American Frontiers of Science (JAFoS) Symposium

U.S. National Academy of Sciences (NAS)
and
Japan Society for the Promotion of Science (JSPS)

Hotel New Otani, Tokyo, Japan
December 4-7, 2014

= Program =

Thursday, December 4, 2014

Afternoon Shuttle Buses
(from Narita/Haneda International Airport to Hotel New Otani)
Check in and Registration

7:00 p.m. **Welcome Reception**
–9:00 p.m. (Banquet Hall "Suiho", Garden Tower Banquet Floor)
Jumpei Watanabe, Executive Director, JSPS
Edward Patte, Director, Kavli Frontiers of Science, NAS

Friday, December 5, 2014

7:00 a.m. Breakfast

- SATSUKI (Lobby Floor, The Main)
- Top of the Tower (40th Floor, Garden Tower)
- Garden Lounge (Lobby Floor, Garden Tower)
- Kioi Nadaman (Lobby Floor, Garden Tower)

9:00 a.m. **Opening Session**
(Banquet Hall "Orizuru Mai", The Main Bldg. Arcade Floor)
Yuichiro Anzai, President, JSPS
Edward Patte, Director, Kavli Frontiers of Science, NAS
Toshihiko Hosoya, Planning Group Co-chair
Joy K. Ward, Planning Group Co-chair

9:30 a.m. **Session I:**
Climate Change and Food Security
(Banquet Hall "Orizuru Mai", The Main Bldg. Arcade Floor)
PGMs: David McNear and Yusuke Yokoyama
Chair: Jennifer Anne Burney, University of California, San Diego
Speakers: Marshall Burke, Stanford University
Kiyoshi Takahashi, The National Institute for Environmental Studies

11:30 a.m. Photo session

11:45 a.m. Lunch (Banquet Hall "Orizuru Yu", The Main Bldg. Arcade Floor)

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- 1:00 p.m. **Session II:**
 Cells in Computers
 (Banquet Hall “Orizuru Mai”, The Main Bldg. Arcade Floor)
 PGMs: Joy K. Ward and Kazuhiro Maeshima
 Chair: Akira Funahashi, Keio University
 Speakers: Jonathan Karr, Mount Sinai Hospital
 Koichi Takahashi, RIKEN
- 3:00 p.m. **Flash Poster Talks I << Odd numbers>>**
 (Banquet Hall “Orizuru Mai”, The Main Bldg. Arcade Floor)
- 3:30 p.m. **Poster Session I <<Odd numbers>>**
 (Waiting Room of “Orizuru Mai”)
- 5:00 p.m. **Session III:**
 Metrology and Standards
 (Banquet Hall “Orizuru Mai”, The Main Bldg. Arcade Floor)
 PGMs: Emilia Morosan and Kensuke Kobayashi
 Chair: Mark Keller, U.S. National Institute of Standards and Technology (NIST)
 Speakers: Naoki Kuramoto, National Institute of Advanced Industrial
 Science and Technology (AIST)
 Jon R. Pratt, U.S. National Institute of Standards and Technology (NIST)
- 7:00 p.m. Dinner (Banquet Hall "Sirius", Garden Court Banquet Floor)
 –9:00 p.m.

Saturday, December 6, 2014

- 7:00 a.m. Breakfast
 • SATSUKI (Lobby Floor, The Main)
 • Top of the Tower (40th Floor, Garden Tower)
 • Garden Lounge (Lobby Floor, Garden Tower)
 • Kioi Nadaman (Lobby Floor, Garden Tower)
- 8:30 a.m. **Session IV:**
 Biomimickry/Biomimetics
 (Banquet Hall “Orizuru Mai”, The Main Bldg. Arcade Floor)
 PGMs: LaShanda Korley and Shinya Yoshioka
 Chair: Mathias Kolle, Massachusetts Institute of Technology
 Speakers: Kaori Kamata, Tokyo Institute of Technology
 Jeffrey Karp, Harvard Medical School / Brigham Women’s Hospital
- 10:30 a.m. Coffee Break (Banquet Hall “Orizuru Mai”, The Main Bldg. Arcade Floor)
- 11:00 a.m. **Session V:**
 The Metabolism of Cities: Energy, Scalability and Well-Being
 (Banquet Hall “Orizuru Mai”, The Main Bldg. Arcade Floor)
 PGMs: Peter Dodds and Daiji Kawaguchi
 Chair: Yasuhiro Sato, Osaka University
 Speakers: Luis Bettencourt, Santa Fe Institute
 Kentaro Nakajima, Tohoku University

1:00 p.m. Lunch (Banquet Hall " Suiho", Garden Tower Banquet Floor)
 << PGM Meeting (LAPIS 1, The Main Bldg. 16F)>>
 (only for PGMs for the 15th JAFoS)

2:30 p.m. **Cultural tour incl. Dinner**
 – 9:00 p.m.

Sunday, December 7, 2014

7:00 a.m. Breakfast

- SATSUKI (Lobby Floor, The Main)
- Top of the Tower (40th Floor, Garden Tower)
- Garden Lounge (Lobby Floor, Garden Tower)
- Kioi Nadaman (Lobby Floor, Garden Tower)

8:30 a.m. **Session VI:**

Origami: Paper Folding and Its Generalization

(Banquet Hall "Orizuru Mai", The Main Bldg. Arcade Floor)

PGMs: Sebastien Lahaie and Kazuhisa Makino

Chair: Ryuhei Uehara, Japan Advanced Institute of Science and Technology (JAIST)

Speakers: Thomas Hull, Western New England University

Tomohiro Tachi, The University of Tokyo

10:30 a.m. **Flash Poster Talks II** << Even numbers>>

(Banquet Hall "Orizuru Mai", The Main Bldg. Arcade Floor)

11:00 a.m. **Poster Session II** <<Even numbers>>

(Waiting Room of "Orizuru Mai")

12:30 p.m. Lunch (Banquet Hall "Orizuru Yu", The Main Bldg. Arcade Floor)

<< PGM Meeting (LAPIS 1, The Main Bldg. 16F)>>

(only for PGMs for the 15th JAFoS)

2:00 p.m. **Session VII:**

Advanced Chemical Imaging

– Molecular Imaging Probes & BioPhotonics

(Banquet Hall "Orizuru Mai", The Main Bldg. Arcade Floor)

PGMs: Jacob Hooker and Miya Ishihara

Chair: Etsuko Kiyokawa, Kanazawa Medical University

Speakers: Masaru Ishii, Osaka University

Alan Pradip Jasanoff, Massachusetts Institute of Technology

4:00 p.m. Coffee Break

4:30 p.m. **Session VIII:**

Human Microbiome – Links to Health and Disease

(Banquet Hall "Orizuru Mai", The Main Bldg. Arcade Floor)

PGMs: Gonzalo Torres and Toshihiko Hosoya

Chair: Dan Knights, University of Minnesota

Speakers: Laura M. Cox, New York University Langone Medical Center

Shinji Fukuda, Keio University

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6:30 p.m. **Closing Session**
 (Banquet Hall "Orizuru Mai", The Main Bldg. Arcade Floor)
 Toshihiko Hosoya, PGM Co-chair
 Joy K. Ward, PGM Co-chair
 Shigeo Koyasu, chair of JSPS FoS Advisory Board

7:00 p.m. Dinner (Banquet Hall "Suiho", Garden Tower Banquet Floor)
-9:00 p.m.

Monday, December 8, 2014

7:00 a.m. Breakfast
 • SATSUKI (Lobby Floor, The Main)
 • Top of the Tower (40th Floor, Garden Tower)
 • Garden Lounge (Lobby Floor, Garden Tower)
 • Kioi Nadaman (Lobby Floor, Garden Tower)

Morning Shuttle Buses
(to be announced)

(from Hotel New Otani to Narita/Haneda International Airport)
(available only for the US participants)