

International Symposium and Seminar on Global Nuclear Human Resource Development for Safety, Security and Safeguards

February 25 – March 7, 2014

Hotel Nikko Tokyo and Tokyo International Exchange Center, Tokyo, Japan



Atomic Bomb Dome, Hiroshima

Organized by

Academy for Global Nuclear Safety and Security Agent,
Tokyo Institute of Technology

In Cooperation with

Nuclear Security Science & Policy Institute (NSSPI), Texas A&M University
Embassy of France in Japan
Japan Atomic Energy Agency (JAEA)
Institute of Nuclear Materials Management (INMM) Japan Chapter
International Nuclear Research Collaboration Center, Tokyo Tech.



PROGRAM at a Glance

Time	8	9	10	11	12	13	14	15	16	17	18	19	20	21
2/24 Mon									Orientation (Conference Room 1)				Speakers' Meeting (Ocean Dining)	
25 Tue		Registration ("Apollon", Hotel Nikko Tokyo)												
		Opening & Keynote Speeches ("Apollon")				Photo			Plenary Session 1 ("Apollon")			Evening Session ("Sirius")		
26 Wed		Registration (International Conference Hall, Tokyo International Exchange Center)												
		Plenary Session 2 (International Conference Hall)						Cont'd	Plenary Session 3 (International Conference Hall)					
27 Thu		Registration							Move to Hiroshima (Only Invited Students and Young Professionals)					
		Plenary Session 4 (International Conference Hall)		Closing Remarks										
28 Fri			Field Education 1											
		Move	RERF (Radiation Effects Research Foundation)					Hiroshima Peace Memorial Museum		Special Lecture				
3/1 Sat			Miyajima						Move to Kyoto					
2 Sun										Move to Tsuruga				
3 Mon			Field Education 2											
		Move	Facilities Experience of MONJU Fast Breeder Reactor			Q&A (Lunch)	Photo	Move to Tokyo						
4 Tue			Lecture Session 1 (Media Hall)						Lecture Session 2 (Media Hall)					
			Lectures 1 and 2		Group Discussion and Q&A				Lectures 3 and 4		Group Discussion and Q&A			
5 Wed			Lecture Session 3 (Media Hall)						Lecture Session 4 (Media Hall)					
			Lectures 5 and 6		Group Discussion and Q&A				Lectures 7 and 8		Group Discussion and Q&A			
6 Thu			Student Session 1 (Media Hall)						Student Session 2 (Media Hall)					
7 Fri			Student Session 3 (Media Hall)						Student Session 3 Continued (Media Hall)		Closing (Media Hall)			

Symposium on Nuclear Non-Proliferation and Security

Opening (Feb. 25)

Chair : Masayuki IGASHIRA (*Tokyo Tech., Japan*)

Welcome Address :

Yoshinao MISHIMA (*Tokyo Tech., Japan*)

William CHARLTON (*Texas A&M Univ., USA*)

Opening Address :

Fumitaka WATANABE (*IAEA*)

Masaki SAITO (*Tokyo Tech., Japan*)

Keynote Speeches (Feb. 25)

Chair : Tomihiro TANIGUCHI (*Tokyo Tech., Japan*)

Keynote Speakers :

Fumitaka WATANABE (*IAEA*)

Genxin LI (*CTBTO*)

Christian MASSET (*Embassy of France in Japan*)

Tetsuya ENDO (*JIIA, Japan*)

Plenary Session 1 (Feb. 25)

Chair : Akira OMOTO (*Tokyo Tech., Japan*)

Speakers :

Jor-Shan CHOI (*UC Berkeley Nuclear Research Center, USA*)

Vladimir ARTISIUK (*ROSATOM CICE&T, Russia*)

Jacques BOUCHARD (*France*)

Masaki SAITO (*Tokyo Tech., Japan*)

Plenary Session 2 (Feb. 26)

Chair : Toshiro MOCHIIJI (*IAEA, Japan*)

Speakers :

William CHARLTON (*Texas A&M Univ., USA*)

Genxin LI (*CTBTO*)

Kathryn HUFF (*UC Berkeley, USA*)

Yosuke NAOI (*IAEA, Japan*)

Vladimir ARTISIUK (*ROSATOM CICE&T, Russia*)

Masaki SAITO (*Tokyo Tech., Japan*)

Plenary Session 3 (Feb. 26)

Chair : William CHARLTON (*Texas A&M Univ., USA*)

Speakers :

Tomihiro TANIGUCHI (*Tokyo Tech., Japan*)

Roger HOWSLEY (*WINS*) *Video*

Kenzo OSHIMA (*Nuclear Regulation Authority, Japan*)

Plenary Session 4 (Feb. 27)

Moderator : Masaki SAITO (*Tokyo Tech., Japan*)

Panelists :

Vladimir ARTISIUK (*ROSATOM CICE&T, Russia*)

Shin-ichi KOYAMA (*IAEA, Japan*)

Kosaku FUKUDA (*Tokyo Tech., Japan*)

Chaitanyamoy GANGULY (*Indian Institute of Technology, India*)

Gary DYCK (*IAEA*)

Seminar on Nuclear Security (Closed)

Lecture Session 1 (Mar. 4)

Moderator : Hideo NAGASAKA (*Tokyo Tech., Japan*)

Speakers :

Joseph STAINBACK IV (*The Univ. of Tennessee, USA*)

Richard MAC NAMEE (*Texas A&M Univ., USA*)

Lecture Session 2 (Mar. 4)

Moderator : Yoshihiro NISHIWAKI (*Tokyo Tech., Japan*)

Speakers :

Mitsutoshi SUZUKI (*IAEA, Japan*)

William CHARLTON (*Texas A&M Univ., USA*)

Lecture Session 3 (Mar. 5)

Moderator : Chi Young HAN (*Tokyo Tech., Japan*)

Speakers :

Colin OKADA (*Remote Sensing Laboratory, USA*)

Robbie YORK (*Culmen International, USA*)

Lecture Session 4 (Mar. 5)

Moderator : Kyoko OBA (*Tokyo Tech., Japan*)

Speakers :

Miroslav GREGORIC (*Slovenia*)

William CHARLTON (*Texas A&M Univ., USA*)

Student Session 1 (Mar. 6)

Chairs : *Students and Young Professionals*

Speakers :

Noramly Bin Muslim (*Universiti Tenaga Malaysia, Malaysia*)

Kenji TATEIWA (*TEPCO Washington Office, USA*)

Naoko NAKASHIMA (*CTBTO*)

Akira OMOTO (*Tokyo Tech., Japan*)

Student Session 2 (Mar. 6)

Chairs : *Students and Young Professionals*

Speakers :

Yoshitalia Meiliza (*IAEA*)

Robert ZEDRIC (*Texas A&M Univ., USA*)

Christopher BLASDEL (*Temple University, Japan*)

Student Session 3 (Mar. 7)

Chairs : *Students and Young Professionals*

Speakers : *Students and Young Professionals*

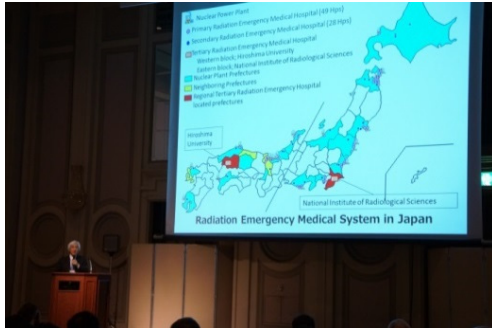
Closing (Mar. 7)

Chairs : William CHARLTON and Masaki SAITO

Speaker :

Bonnie JENKINS (*The U.S. Department of State, USA*)

PROGRAM



The 2nd International Seminar on Global Nuclear Human Resource Development for Safety, Security and Safeguards, February 18 – 26, 2013, Tokyo, Japan

February 24 (Mon)

Orientation (Only for Invited Students and Young Professionals)

(Conference Room 1, 4F, Plaza HEISEI, Tokyo International Exchange Center)

15:00-15:10 **Welcome Address**

Masaki SAITO (Professor and Director, Academy for Global Nuclear Safety and Security Agent, Tokyo Institute of Technology, Japan)

15:10-15:40 **Registration and Grouping**

15:40-16:00 **Self Introduction**

16:00-18:00 **Orientation**

Speakers' Meeting (Only for Overseas Speakers)

(Ocean Dining, 3F, Hotel Nikko Tokyo)

19:00-21:00 **Program Meeting**

Symposium on Nuclear Non-Proliferation and Security

February 25 (Tue)

(Room "Apollon", 1F, Hotel Nikko Tokyo)

Registration

08:30-

Opening

Chaired by Masayuki IGASHIRA (Professor and Vice-Director, Academy for Global Nuclear Safety and Security Agent, Tokyo Institute of Technology, Japan)

Welcome Address

09:00-09:10 **Yoshinao MISHIMA** (President, Tokyo Institute of Technology, Japan)

09:10-09:20 **William CHARLTON** (Director, Nuclear Security Science & Policy Institute, Texas A&M University, USA)

Opening Address

09:20-09:30 **Fumitaka WATANABE** (Nuclear Security Officer, IAEA)

09:30-09:40 **Masaki SAITO** (Professor and Director, Academy for Global Nuclear Safety and Security Agent, Tokyo Institute of Technology, Japan)

Keynote Speeches

Chaired by Tomihiro TANIGUCHI (Professor, Tokyo Institute of Technology, Japan)

09:40-10:20 **Keynote Speech 1**

Fumitaka WATANABE (Nuclear Security Officer, IAEA)

10:20-11:00 **Keynote Speech 2**

Genxin LI (Director, Legal and External Relations Division, CTBTO)

11:00-11:10 **Tea Break**

11:10-11:50 **Keynote Speech 3**

Christian MASSET (Ambassador Extraordinary and Plenipotentiary of France to Japan, Embassy of France in Japan)

11:50-12:30 **Keynote Speech 4**

Tetsuya ENDO (Ambassador and Adjunct Senior Fellow, The Japan Institute of International Affairs)

12:30-14:30 **Group Photo and Lunch**

February 25 (Tue)

(Room "Apollon", 1F, Hotel Nikko Tokyo)

Plenary Session 1:

Nuclear Energy in Future and Non-Proliferation Issues

Chaired by Akira OMOTO (Professor, Tokyo Institute of Technology, Japan)

14:30-15:10 **Invited Speech 1**

"Nuclear Governance: The Role of Nuclear 3S (Safety, Security, and Safeguards) in the Aftermath of Fukushima"

Jor-Shan CHOI (Associate Director, UC Berkeley Nuclear Research Center, USA)

15:10-15:50 **Invited Speech 2**

"Current Trends in Nuclear Power Development in Russia and Non-Proliferation Issues"

Vladimir ARTISIUK (Professor and Vice-Rector, ROSATOM Central Institute for Continuing Education&Training, Russia)

15:50-16:00 **Tea Break**

16:00-16:40 **Invited Speech 3**

"Nuclear Energy in France and Non-Proliferation Issues (*Tentative*)"

Jacques BOUCHARD (Special Advisor to the French Atomic Energy Commission, France)

16:40-17:30 **Special Lecture 1: Plutonium Issues (I)**

"Protected Plutonium Production (P³)"

Masaki SAITO (Professor and Director, Academy for Global Nuclear Safety and Security Agent, Tokyo Institute of Technology, Japan)

Evening Session

(Room "Sirius", 1F, Hotel Nikko Tokyo)

Chaired by Masaki OZAWA (Professor, Tokyo Institute of Technology, Japan)

18:00-20:00 **Discussions of the Key Issues of Mutual Concern**

February 26 (Wed)

(Int'l Conference Hall, 3F, Plaza HEISEI, Tokyo International Exchange Center)

Plenary Session 2:

Nuclear Education and Training

Chaired by Toshiro MOCHIIJI (Director, Department of Science and Technology for Nuclear Material Management, JAEA, Japan)

- 09:00-09:40 **Invited Speech 4:**
"Nuclear Security Education at TAMU"
William CHARLTON (Professor and Director, Nuclear Security Science & Policy Institute, Texas A&M University, USA)
- 09:40-10:20 **Invited Speech 5:**
"CTBT Education and Training"
Genxin LI (Director, Legal and External Relations Division, CTBTO)
- 10:20-10:30 **Tea Break**
- 10:30-11:10 **Invited Speech 6:**
"Highlights of the National Science and Security Consortium (NSSC)"
Kathryn HUFF (Postdoctoral Fellow, Nuclear Science and Security Consortium, UC Berkeley, USA)
- 11:10-11:50 **Invited Speech 7:**
"Nuclear Security Education at JAEA"
Yosuke NAOI (Deputy Director, The Integrated Support Center for Nuclear Nonproliferation and Nuclear Security, JAEA, Japan)
- 11:50-12:30 **Invited Speech 8:**
"Nuclear Security Training at Russia"
Vladimir ARTISIUK (Professor and Vice-Rector, ROSATOM Central Institute for Continuing Education&Training, Russia)
- 12:30-14:00 **Lunch**
- 14:00-14:40 **Invited Speech 9:**
"Academy for Global Nuclear Safety and Security Agent"
Masaki SAITO (Professor and Director, Academy for Global Nuclear Safety and Security Agent, Tokyo Institute of Technology, Japan)
- 14:40-15:00 **Tea Break**

February 26 (Wed)

(Int'l Conference Hall, 3F, Plaza HEISEI, Tokyo International Exchange Center)

Plenary Session 3:

Nuclear Safety and Security

Chaired by William CHARTON (Professor and Director, Nuclear Security Science & Policy Institute, Texas A&M University, USA)

15:00-15:40 **Invited Speech 10:**

"Global Governance and International Regimes for Nuclear Safety and Security"

Tomihiro TANIGUCHI (Professor, Tokyo Institute of Technology, Japan)

15:40-16:20 **Invited Speech 11**

"The WINS Academy; Providing World-Wide Certified Professional Training for Personnel with Nuclear Security Accountabilities

Roger HOWSLEY (Executive Director, The World Institute for Nuclear Security (WINS)) *Video*

16:20-17:00 **Invited Speech 12**

"Post Fukushima Nuclear Safety and Security in Japan (*Tentative*)"

Kenzo OSHIMA (Commissioner, The Nuclear Regulation Authority of Japan, Japan)

February 27 (Thu)

(Int'l Conference Hall, 3F, Plaza HEISEI, Tokyo International Exchange Center)

Plenary Session 4: Plutonium Issues (II)

Protected Plutonium and Innovative Fuel Cycle in Future

Moderated by Masaki SAITO (Professor and Director, Academy for Global Nuclear Safety and Security Agent, Tokyo Institute of Technology, Japan)

9:00-11:30 **Panel Discussion**

(25 min. Presentation/Panelist and Discussion, Including Tea Break)

Vladimir ARTISIUK (Professor and Vice-rector, ROSATOM Central Institute for Continuing Education & Training, Russia)

Shin-ich KOYAMA (General Manager of Alpha-Gamma Section, Fukushima Fuels and Materials Dept., JAEA, Japan)

Kosaku FUKUDA (Former Professor, Tokyo Institute of Technology, Japan and Former Staff, IAEA)

Chaitanyamoy GANGULY (Distinguished Visiting Professor, Indian Institute of Technology, India and Former Head, Nuclear Fuel Cycle & Materials Section, IAEA)

Gary DYCK (Head, Nuclear Fuel Cycle & Materials Section, IAEA)

11:30-11:45 **Closing Remarks of Plenary Sessions**

William CHARLTON (Professor, Texas A&M University, USA)

Masayuki IGASHIRA (Professor, Tokyo Institute of Technology, Japan)

12:30- *Only Invited Students and Young Professionals Move to Hiroshima*

February 28 (Fri)

Field Education 1: Hiroshima Atomic Bombing

10:00-11:30 **Radiation Effects Research Foundation (RERF)**

12:00-13:30 **Lunch**

13:30-16:00 **Hiroshima Peace Memorial Museum**

16:00-17:00 **Special Lecture 2:**
"Experience of Atomic Bomb"

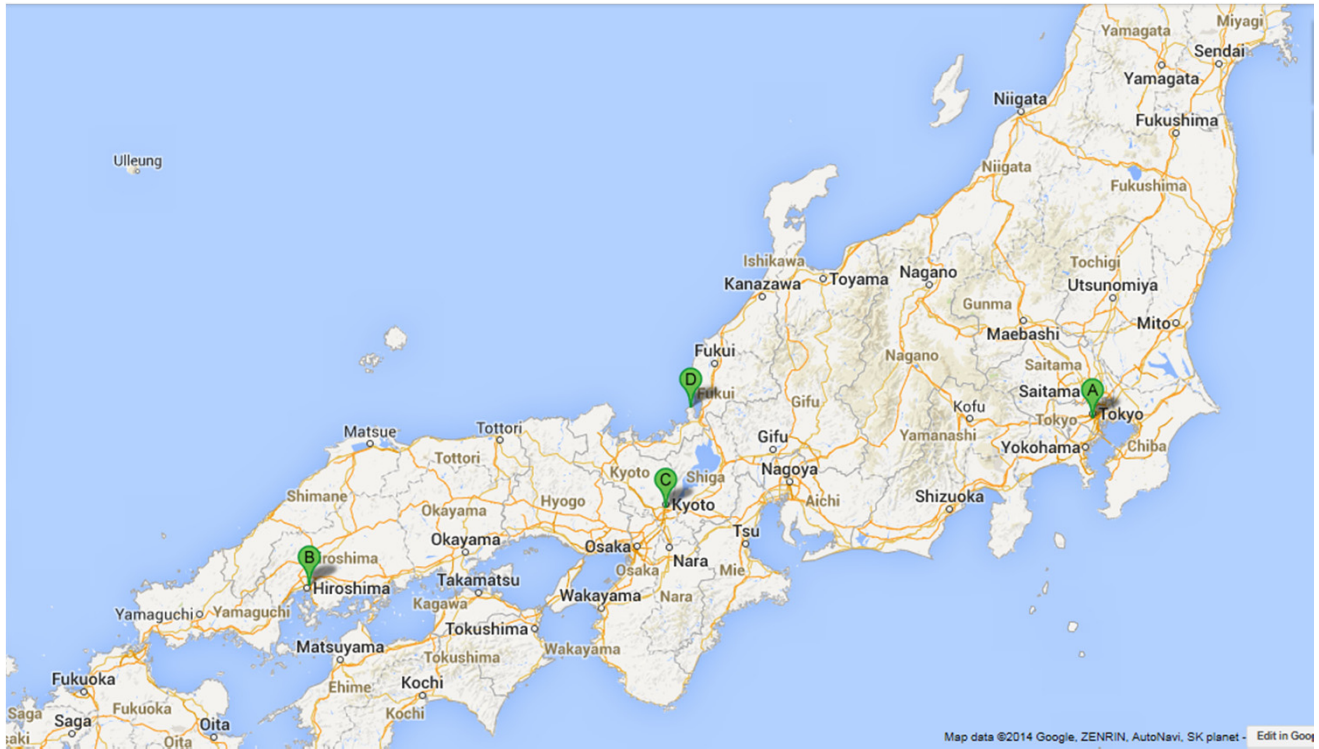


Field Education

(Closed: Only for Invited Students and Young Professionals)

March 1 (Sat) – 2 (Sun)

Move to Tsuruga (Fukui-ken)



March 3 (Mon)

Field Education 2:

Facilities Experience of MONJU Fast Breeder Reactor

08:30-09:30 *Move to MONJU Site*

09:30-09:40 *Security Check*

Facilities Visit

09:40-10:10 MONJU Communication Square

(Welcome Address, Briefing, MONJU Models)

10:15-10:30 Sodium Handling Training Bldg. (Sodium Circulating, Combustion, and Cut)

10:35-10:45 Observation Deck

10:50-11:00 Passport or ID Check (Exchange to Security Card)

11:00-11:25 Secondary Cooling Loop and Air Cooling Room (C Loop)

11:35-11:40 Central Control Room (Window)

11:50-12:05 Exchange of Security Card

12:10-12:20 Plant Simulator Room

12:25-12:30 *Move*

12:35-13:15 MONJU Communication Square (Lunch and Q&A)

13:20-13:30 Group Photo

13:40- *Move to Tokyo*



Seminar on Nuclear Security

(Closed: Only for Invited Students and Young Professionals)

March 4 (Tue)

(Media Hall, 3F, Plaza HEISEI, Tokyo International Exchange Center)

Lecture Session 1

Moderated by Hideo NAGASAKA (Professor, Tokyo Institute of Technology, Japan)

09:00-10:00 **Lecture 1:**

"Nuclear Security Culture: A US Perspective"

Joseph STAINBACK IV (Research Associate Professor, Dept. of Nuclear Engineering, The University of Tennessee, USA)

10:00-11:00 **Lecture 2:**

"Threats to Nuclear Security"

Richard MAC NAMEE (Lecturer, The Bush School of Government and Public Service, Texas A&M University, USA)

11:00-11:45 **Group Discussion** *(Including Tea Break)*

11:45-12:30 **Q&A**

12:30-14:00 **Lunch**

Lecture Session 2

Moderated by Yoshihiro NISHIWAKI (Professor, Tokyo Institute of Technology, Japan)

14:00-15:00 **Lecture 3:**

"Nuclear Security Risk Analysis"

Mitsutoshi SUZUKI (Deputy Director, Dept. of Science and Technology for Nuclear Material Management, JAEA, Japan)

15:00-16:00 **Lecture 4:**

"Technologies for Applied Nuclear Security: Detect, Delay, and Response"

William CHARLTON (Professor and Director, Nuclear Security Science & Policy Institute, Texas A&M University, USA)

16:00-16:45 **Group Discussion** *(Including Tea Break)*

16:45-17:30 **Q&A**

March 5 (Wed)

(Media Hall, 3F, Plaza HEISEI, Tokyo International Exchange Center)

Lecture Session 3

Moderated by Chi Young HAN (Professor, Tokyo Institute of Technology, Japan)

- 09:00-10:00 **Lecture 5:**
"Consequence Management"
Colin OKADA (Senior Scientist, National Security Technologies, Remote Sensing Laboratory, USA)
- 10:00-11:00 **Lecture 6:**
"Border/Port Security"
Robbie YORK (Senior Subject Matter Expert, Culmen International and Consultant, Oak Ridge National Laboratory, USA)
- 11:00-11:45 **Group Discussion** (*Including Tea Break*)
- 11:45-12:30 **Q&A**
- 12:30-14:00 **Lunch**

Lecture Session 4

Moderated by Kyoko OBA (Professor, Tokyo Institute of Technology, Japan)

- 14:00-15:00 **Lecture 7:**
"Security of Nuclear Material in Transport"
Miroslav GREGORIC (Consultant on Safety, Security and Non-Proliferation, Slovenia)
- 15:00-16:00 **Lecture 8:**
"Forensics and Law Enforcement"
William CHARLTON (Professor and Director, Nuclear Security Science & Policy Institute, Texas A&M University, USA)
- 16:00-16:45 **Group Discussion** (*Including Tea Break*)
- 16:45-17:30 **Q&A**

Seminar on Nuclear Security

(Closed: Only for Invited Students and Young Professionals)

March 6 (Thu)

(Media Hall, 3F, Plaza HEISEI, Tokyo International Exchange Center)

Student Session 1

Chaired by Students and Young Professionals

- 09:00-09:40 **Special Lecture 3:**
"Human Resource Development in Developing Countries, International Obligations and Compliance"
Noramly Bin Muslim (Visiting Professor, Universiti Tenaga Malaysia and Universiti Kebangsaan Malaysia, Malaysia)
- 09:40-10:20 **"Fukushima Nuclear Accident - A TEPCO Nuclear Engineer's Perspective"**
Kenji TATEIWA (Manager, Nuclear Power Programs, Washington Office, Tokyo Electric Power Company, USA)
- 10:20-10:30 **Tea Break**
- 10:30-11:10 **"CTBTO Response to Fukushima Accident"**
Naoko NAKASHIMA (Radionuclide Officer, Engineering and Development Section, International Monitoring System, CTBTO)
- 11:10-12:00 **"In the Aftermath of the Fukushima Daiichi Nuclear Power Plant Accident"**
Akira OMOTO (Professor, Tokyo Institute of Technology, Japan)
- 12:00-13:30 **Lunch**

Student Session 2

Chaired by Students and Young Professionals

- 13:30-14:00 **"A Way to IAEA"**
Yoshitalia Meiliza (Staff, IAEA)
- 14:00-14:30 **"INMM Texas A&M University Student Chapter"**
Robert ZEDRIC (Student, Texas A&M University, USA)
- 14:30-14:45 **Tea Break**
- 14:45-15:45 **Special lecture 4:**
"Ultimate Simplicity - The Shakuhachi Bamboo Flute"
Christopher BLASDEL (Lecturer, Temple University in Tokyo, Japan)
- 15:45-17:00 **Preparation for Summary Presentation**

March 7 (Fri)

(Media Hall, 3F, Plaza HEISEI, Tokyo International Exchange Center)

Student Session 3:

Summary of the International Symposium and Seminar

Chaired by Students and Young Professionals

(Two Presentations by Each Group and Discussion: 25 min. Presentation and 15 min. Discussion/Each Group)

09:00-10:00 **Preparation for Summary Presentation**

10:00-10:40 **Presentation of Group 1**

10:40-11:20 **Presentation of Group 2**

11:20-12:00 **Presentation of Group 3**

12:00-13:30 **Lunch**

13:30-14:10 **Presentation of Group 4**

14:10-14:50 **Presentation of Group 5**

14:50-15:30 **Presentation of Group 6**

15:30-16:10 **Presentation of Group 7**

16:10-16:15 **Break**

Closing

Chaired by William CHARLTON and Masaki SAITO

16:15-17:00 **Special Lecture 5**

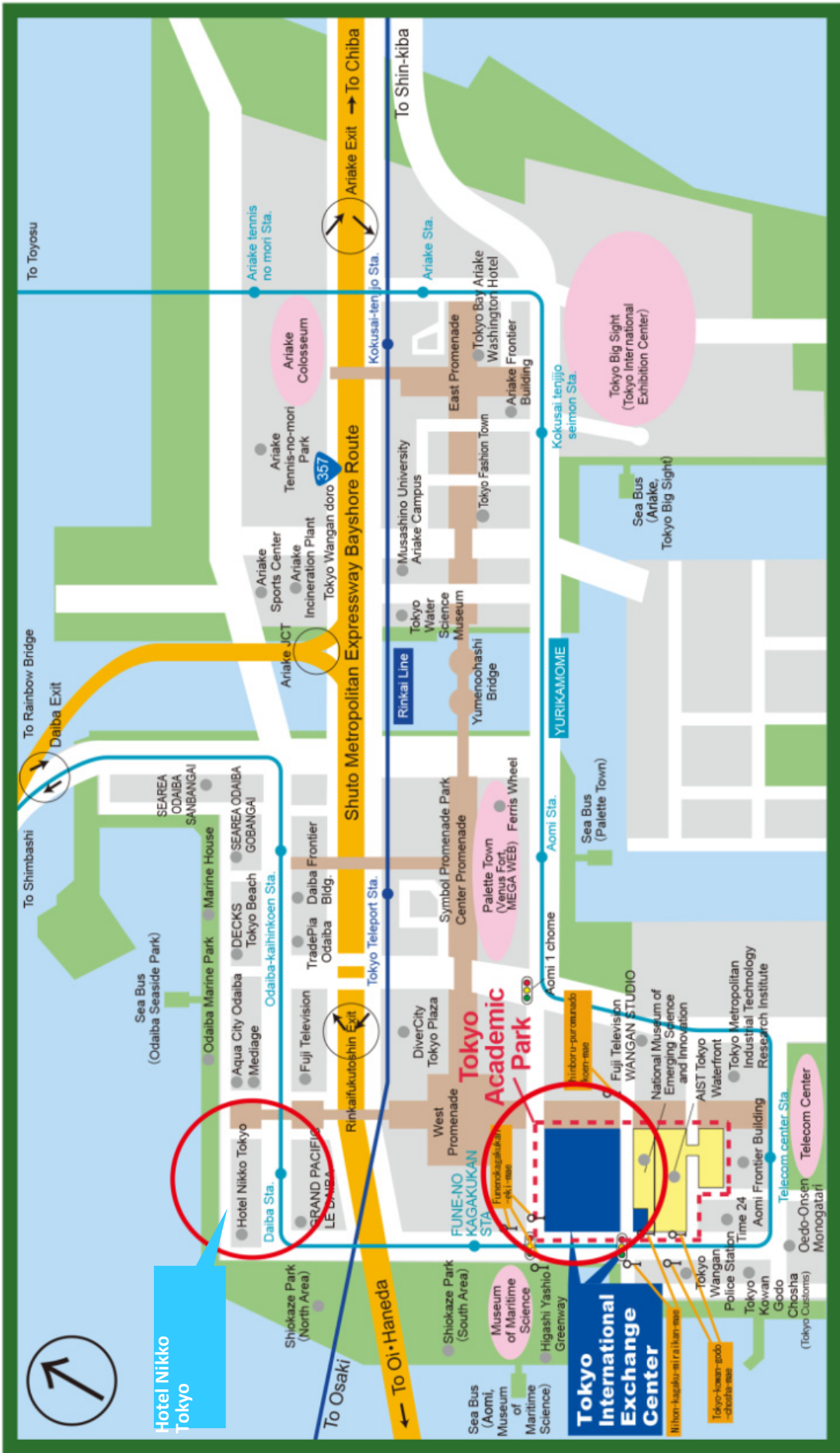
Bonnie JENKINS (Ambassador, The Bureau of International Security and Nonproliferation, The U.S. Department of State)

17:00-17:30 **Awards and Closing Remarks**

William CHARLTON (Professor and Director, Nuclear Security Science & Policy Institute, Texas A&M University, USA)

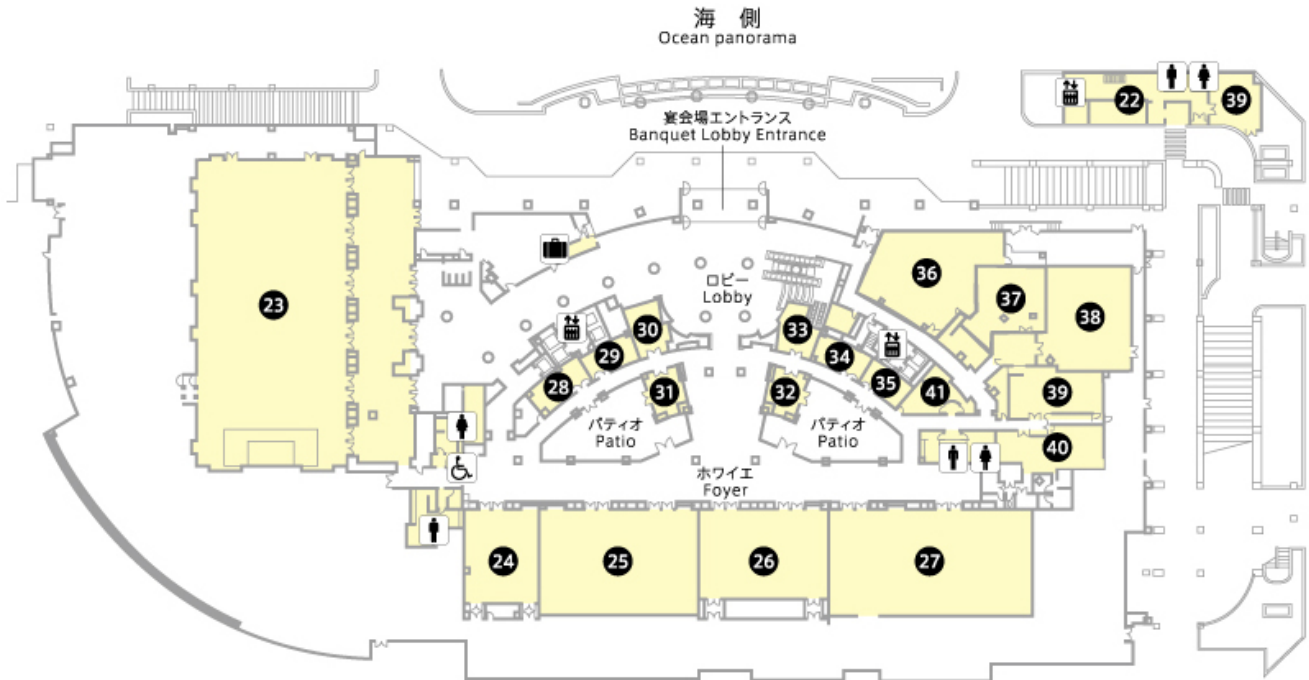
Masaki SAITO (Professor and Director, Academy for Global Nuclear Safety and Security Agent, Tokyo Institute of Technology, Japan)

Odaiba Area Map



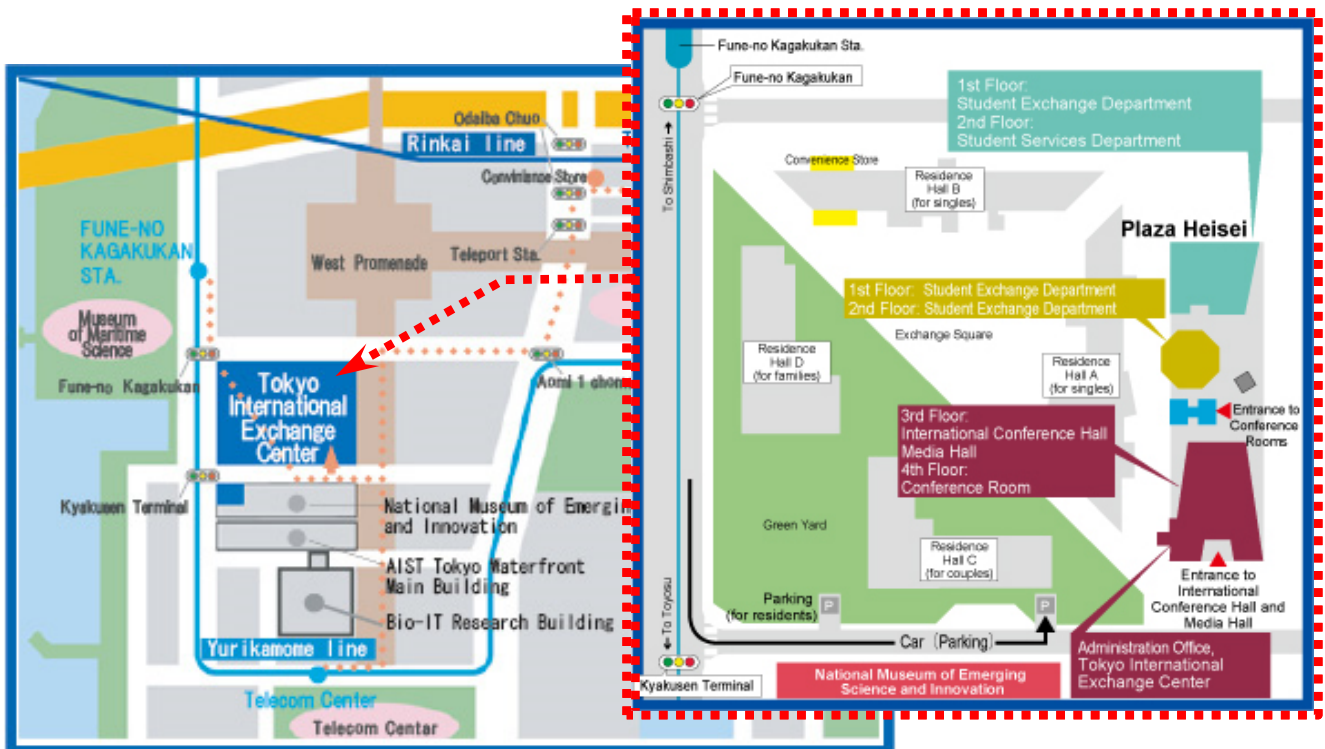
Hotel Nikko Tokyo, Feb. 25

- Opening and Plenary Sessions at Room "Apollon" (25), 1F
- Evening Session at Room "Sirius" (26), 1F

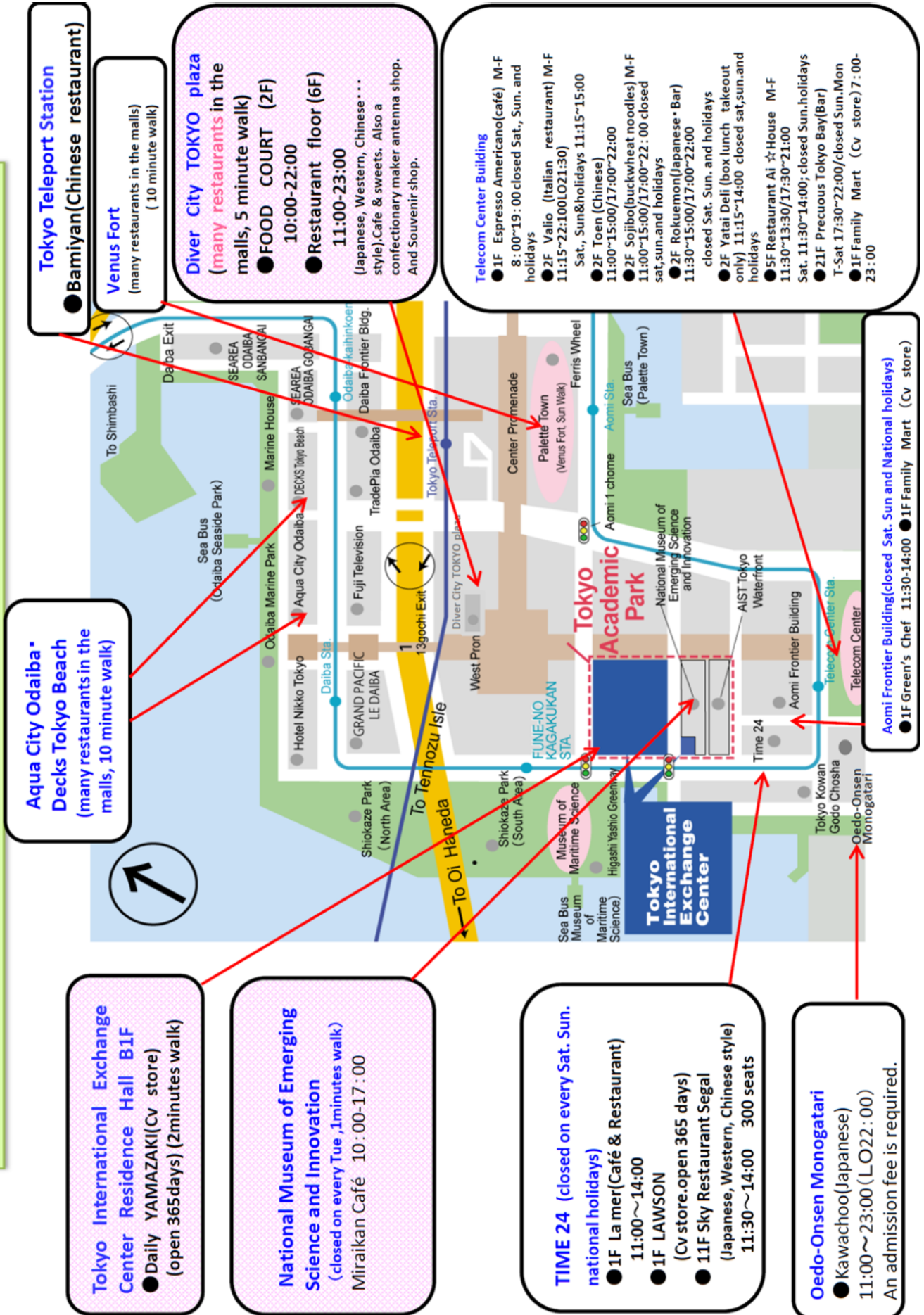


Tokyo International Exchange Center, Feb. 26 - 27 and Mar. 4 - 7

- Plenary Sessions at **International Conference Hall, 3F**, Plaza HEISEI (Feb. 26 - 27)
- Lecture and Student Sessions at **Media Hall, 3F**, Plaza HEISEI (Mar. 4 - 7)



Restaurants around Tokyo International Exchange Center



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Academy for Global Nuclear Safety and Security Agent

世界原子力安全・セキュリティ道場

