

Newsletter

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What is U-ATOM?

The Academy for Global Nuclear Safety and Security Agent is running a "residential school with a new and unique nuclear education (DOJO for Global Nuclear Safety and Security)." The name U-ATOM is a combination of the words 'Unique' and 'ATOM'.

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WELCOME, FRESHMEN!

On October 1, 2015, the Academy for Global Nuclear Safety and Security Agent DOJO entrance ceremony was held at Tokyo Tech Front at the Tokyo Institute of Technology. The select few constituting the fourth graduating class took their first step toward becoming global leaders.



AT THE ROYAL BLUE HALL, TOKYO TECH FRONT, TOKYO INSTITUTE OF TECHNOLOGY

The DOJO entrance ceremony began with speeches by President Yoshinao Mishima and Dean of Engineering Kikuo Kishimoto. Guests from outside the Institute were Takuya Hattori, Specially Appointed Fellow, Japan Atomic Industrial Forum; Seiji Hasegawa, Deputy Managing Editor, Yomiuri Shimbun; and Go Yamamoto, Strategy Subsection Chief, Japan Student Services Organization. These new students entered, wanting to contribute to the safety of nuclear power, despite popular opinion intensifying against it. Much is expected of their future success.



ENROLLMENT CERTIFICATE
PRESENTED BY PRESIDENT MISHIMA

CLASS OF 2015
ENTRANCE CEREMONY FOR DOJO



At SKB in Sweden, we learned about management of nuclear fuel and waste.

We toured an Interim Central Storage Facility for Spent Nuclear Fuel (CLAB)

and learned that centralized management of spent nuclear fuel storage and disposal is beneficial also from a nuclear security point of view. Additionally, we were able to learn the history of repeated dialogue between SKB, the municipality of Oskarshamn, and local residents to build up a relationship of trust. I feel it was productive experience.



Europe Study Tour



We had some precious experiences in Lithuania, such as interaction with students of Kaunas University of Technology (KTU) and visits to the Sugihara House and the Japanese Ambassador's official residence in Lithuania. The interaction with KTU students was especially memorable as we exchanged varied views on nuclear power through a group discussion. We were also able to strengthen our relationship with the local students. I feel this laid the groundwork for a cooperative relationship in the future as we work to solve problems related to nuclear power.

Voice

Kaname SAGA
2nd year
Master's Course



The first destination for the DOJO students was Sweden. They visited the back-end facilities of the Swedish Nuclear Fuel and Waste Management Co. (SKB) and Oskarshamn Nuclear Power Plant to learn about the state of geological disposal R&Ds and the No.3 unit. Next, they headed to Lithuania, where they visited the Embassy of Japan in Lithuania and Sugihara House, and held a discussion with students at the Kaunas University of Technology (KTU) regarding the present state and issues of nuclear power, enriching their understanding. Additionally, they visited the International Atomic Energy Agency (IAEA), the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), and the Permanent Mission of Japan to the International Organizations in Vienna. The students, with a goal of playing an active international role, asked many enthusiastic questions.



Voice

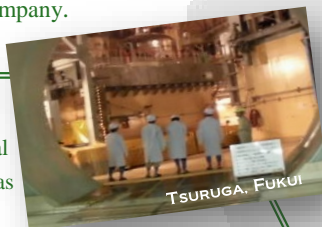
Saki IKEDA
2nd year
Master's Course



Practical Exercises

At the Academy, we perform practical and varied exercises throughout the year.

In "Simulation of Severe Nuclear Accidents," students thoroughly learn the major facilities related to the safety of nuclear power plants and experience accident response at the Tsuruga Comprehensive Training Center of the Japan Atomic Power Company.



Through this practical exercise, I was able to learn minute-by-minute the various transient phenomena which occur inside a nuclear reactor and each safety equipment which move in response. This further enhanced all the knowledge I had gained through classroom lectures.

In "Environmental Dynamics of Radioactive Nuclides," students simulate the diffusion of radioactive materials into the environment as a result of a nuclear accident to learn how to estimate public exposure. They use the latest Worldwide version of System for Prediction of Environmental Emergency Dose Information (WSPEEDI-II).

Voice

Rie FUJIOKA
2nd year
Master's Course



I was in awe at being able to model visually the diffusion of radioactive material, such as what happened with the Fukushima accident. I felt that this system should be incorporated into such things as evacuation planning.

In "Nuclear Security Training," students learn the basic thinking and culture behind nuclear security and the properties of nuclear materials and radioactive materials in a hands-on manner through lectures and exercises at training facilities. They also visit a training facility of the Japan Atomic Energy Agency.



Voice

Takuya KAWACHI
2nd year
Master's Course



It was a grueling schedule visiting many states of the vast country, but this training in the U.S.A. resulted in a large harvest of experience and knowledge this time as well. At the University of California, Berkeley (UCB) and Texas A&M University (TAMU), students held discussions and poster sessions with the local students, fostering mutual understanding and improving DOJO students' English skills in a practical setting. At TAMU's disaster response training facility, Disaster City, they underwent practical exercises in nuclear disaster emergency response, reinforcing in their minds the necessity of ensuring safety. At the National Atomic Testing Museum in the State of Nevada, they learned about the history

U.S Study Tour



EMBASSY OF JAPAN, USA



In September, we visited places such as the University of California, Berkeley (UCB); the National Atomic Testing Museum; the World Bank; the Embassy of Japan in the U.S.A.; and Texas A&M University. At UCB, we held a poster session with the local students, and toured the laboratories and the national laboratory. It was also a pleasant surprise to see again some students who had been in Odaiba in February of this year to participate in the International Seminar. It made me realize that the world is a small place, and that connections between people happen in small places.

of nuclear power in the U.S.A. and the difference in the exhibition about and thoughts Hiroshima and Nagasaki. At the Embassy of Japan and the World Bank that they visited in Washington D.C., they had the opportunity to ask those working on the front lines about their jobs, as well as what to expect and what is required to work in international organizations.

The main purpose at TAMU was the discussion between students. We considered international issues that actually exist regarding nuclear power. My group discussed risk communication and the issue of dialogue with residents. We discussed the differences between Japan and the U.S.A. when it comes to regulatory framework and organization, and both sides renewed their awareness that "dialogue" is crucial. We were able to get as far as specific proposals about the relationship between countries including their residents and citizens. I feel this was very beneficial.

Voice

Jiaju ZHOU
1st year
Doctor's Course

Voice

Shuichiro YONEOKA
2nd year
Master's Course



UC BERKELEY, USA



WORLD BANK, USA



TEXAS A&M, USA

Asia Study Tour

This year's Asia Training destination was Malaysia, located in the middle of Southeast Asia. Students participated in the International Nuclear Science, Technology and Engineering Conference 2015 (iNuSTEC2015) hosted by the Malaysian Nuclear Society and the Islamic Science University of Malaysia. Despite the short trip, students were able to have significant experiences, such as by visits to the Malaysian Nuclear Agency, the Atomic Energy Licensing Board, and the Embassy of Japan in Malaysia.



MALAYSIA



Voice

Takeshi AOKI
1st year
Doctor's Course

In addition to attending iNuSTEC2015, students visited and toured the facilities of the Malaysian Nuclear Agency, responsible for research and development of nuclear power, and of the Atomic Energy Licensing Board, responsible for regulations and the like related to nuclear power. At this time, there are no nuclear power plants operating in Malaysia, and research and development into radioactive waste and issues such as 3S (nuclear safety, nuclear security, nuclear nonproliferation safeguards) are not far along. On the other hand, their students had tremendous motivation and energy. I felt the need to make further effort so that we, Japan, are not overtaken.



DOJO Students go Around the World

DOJO students head outside the laboratory to learn the front lines of nuclear power at locations domestic and around the world. These global leaders responsible for the future realm of nuclear power overcome differences in national boundaries, races, and generations to expand their own possibilities.

Overseas Training

Europe study tour April 25–May 6, 2015
Asia study tour August 16–22, 2015
U.S.A. study tour September 13–25, 2015

Domestic Practical Exercises

Simulation of Severe Nuclear Accidents July 20–25, 2015
Nuclear Security Training July 29–31, 2015
Environmental Dynamics of Radioactive Nuclides August 24–28, 2015

SPECIAL DOJO LECTURE

Christophe Xerri, Nuclear Counsellor of the Embassy of France in Japan, took time out of his busy schedule to pay us a visit. The theme was “*Nuclear in France in the Context of Climate Change and Post-Fukushima Safety Improvement.*” He spoke about the state of nuclear energy in France and its ongoing change affected by various societal influences. (Held 2015.9.1)

Who are the leaders ?

Nuclear energy accounts for 75% of generated electricity in France (FY2010). Europe is highly involved in reducing CO₂ emissions and is also highly conscious of energy conservation. A stable supply of electricity must take into consideration the environment, in addition to cost performance. Nuclear energy in France is being advanced mostly by organizations such as electrical power companies, nuclear power manufacturers, and regulatory bodies, with cooperation internationally. They are also responsible for guaranteeing safety. The country and the military are not the leaders.

The Fukushima nuclear accident

The 2011 nuclear accident in Fukushima had quite an impact. The accident ↗



Christophe Xerri
Nuclear Counsellor,
Embassy of France in Japan

↘ triggered the sentiment of ensuring safety of nuclear power, and measures were taken to reinforce both the "hard" side (tangibles such as power plants, facilities, and equipment) and the "soft" side (such as emergency response).

Public response

The response of the public is divided. Concerns of those opposed include accidents, radioactive waste, and a lack of transparency in the structure. Those in favor value factors such as self-sufficiency in energy, environmental suitability, and cost performance. Trust can be gained only by dealing with both parties fairly. Additionally, long-term cooperation between Japan and France is necessary for the safety of nuclear power worldwide.

Christophe Xerri is a graduate of Salford University (Master's Degree in Science and Engineering) and acquired an MBA at Institut Supérieur des Affaires. He also studied International Finance at Sophia University and has held many responsible positions at corporations of Japan and France, holding his current position since 2011. He loves spending time with family, playing golf, and travelling.

AWARD WINNERS!



Gold Award

2015 Malaysian Nuclear Society
Takuya KAWACHI
3rd Graduating Class



Best Presentation

The 36th Annual Meeting of the INMM*
Poster Session for Juniors and Students
Rie FUJIOKA
3rd Graduating Class



Best Presentation

The 36th Annual Meeting of the INMM*
Poster Session for Juniors and Students
Takeshi AOKI
2nd Graduating Class



Best Presentation

The 36th Annual Meeting of the INMM*
Poster Session for Juniors and Students
Kazuki NAKAHARA
2nd Graduating Class

*Institute of Nuclear Materials Management

WHAT'S NEW

A guidebook has been published in the AERA magazine-book series by the Asahi Shimbun Company presenting the activities of the Leading Program. This project was produced by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the weekly journal AERA, and presents a multifaceted view of 11 leading programs throughout Japan.



Our program is featured from the Tokyo Institute of Technology, and the article includes interviews with President Yoshinao Mishima, Program Coordinator Masaki Saito and students and a report on a DOJO lecture. It is on sale at bookstores nationwide. (Japanese edition only.)

Ministry of Education, Culture, Sports, Science and Technology
Program for Leading Graduate Schools by AERA

“Mirai wo Hiraku Hakase-tachi”
– Doctors who will Create the Future –

Upcoming Events

- February to March 2016 International Seminar & Symposium
- March 2016 Environmental Radiation Measurement Fieldwork



Access for the latest information!

