Ministry of Education, Culture, Sports, Science and Technology (MEXT) Program for Leading Graduate Schools
Academy for Global Nuclear Safety and Security Agent at Tokyo Institute of Technology(U-ATOM)

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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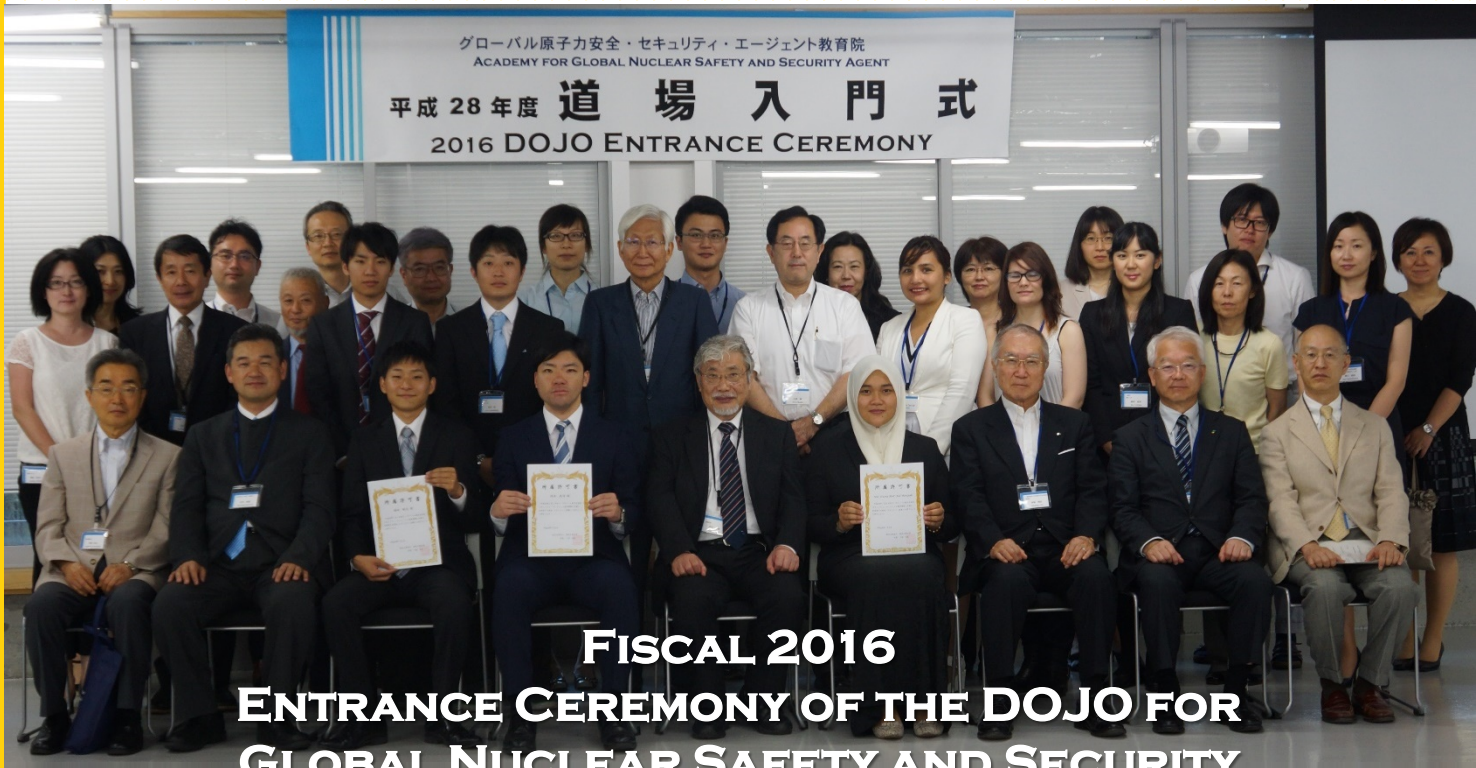


Fiscal 2016 Entrance Ceremony of the DOJO for Global Nuclear Safety and Security

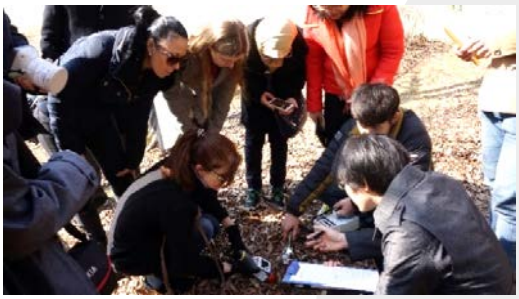
5th Class - Welcome to U-ATOM!

On July 1, 2016, the DOJO entrance ceremony for the students in the 5th Class of the Academy for Global Nuclear Safety and Security Agent was held at Multi-Purpose Hall in Environmental Energy Innovation Building at the Tokyo Institute of Technology.

The three students from the 5th Class took their first step with high hopes, aiming to become global leaders in the field of nuclear energy. At the beginning, President Yoshinao Mishima gave an address, which was followed by greetings from the Dean of the School of the Environment and Society, Kikuo Kishimoto, and the Director of the Academy for Global Nuclear Safety and Security Agent, Masaki Saito. Other guests from outside Tokyo Tech included the President of the Japan Atomic Energy Relations Organization, Takahiko Ito, the Vice President of the Japan Student Services Organization, Hideki Yonekawa, and a city news reporter from the TV Asahi Corporation, Yasumasa Matsui, all of whom gave encouragement, congratulatory greetings, and expressed their hopes for the future success of new students.

The 5th International Symposium and Seminar

This international conference was held at the Ookayama Campus from February 21 through March 3, 2016. It was held by the Academy for Global Nuclear Safety and Security Agent at Tokyo Institute of Technology, which receives funds from the Ministry of Education, Culture, Sports, Science and Technology, in collaboration with related organizations in Japan and overseas. This conference has been held every year since 2011 when the program started as part of global leader education. In addition to students from this academy, other students from Japan and overseas along with young engineers are invited, and the themes "Nuclear Safety", "Nuclear Security", "Safeguards/Non-Proliferation" are alternatingly chosen. This time, the themes "Nuclear Security" and "Safeguards/Non-Proliferation" were selected.



In Part 1, the Symposium, distinguished experts in the fields of "Nuclear Security" and "Safeguards/Non-Proliferation" from Japan and overseas were invited as lecturers, and public discourses were held. In Part 2, Technical Tours, students who participated in the seminar visited the Rokkasho Facility of Japan Nuclear Fuel Limited, the Onagawa Nuclear Power Station of Tohoku Electric Power Co., Inc., measured environmental radiation in the Iwaki area of Fukushima Prefecture, and compared these to measured results from Ookayama Campus, which gave the. students some practical experiences.

In Part 3, the Seminar, after lectures by the experts active on the front lines of the "Nuclear Security" and "Safeguards/Non-Proliferation" fields in Japan and overseas, a discussion was held that included the students. In the concluding phase, the Student Session, students who participated in the seminar were divided into groups where they held discussions on three themes related with global leaders, and then group presentations of the results were given on the final day of the seminar to deepen the discussion. There were 26 lecturers, the total number of students attending the seminar including students from this academy was 47, and total attendance including members of the public was 117. Two media companies held interviews, bringing this international conference to a successful conclusion.

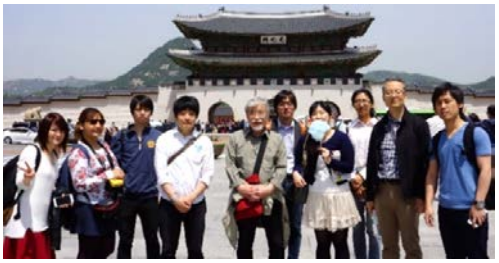
"It was an amazing opportunity to be a participant of a special symposium and seminar on global nuclear human resource development. The lectures, field education and facility visits covered significant topics such as nuclear programs over the world, world issues especially climate change and how nuclear energy may be significant to its solution, and other topics such as how to be a global leader. Overall, the program has given great knowledge on being updated and informed especially on nuclear researches and most importantly, on the efforts in Nuclear Safety, Security and Safeguards (3S) while addressing Energy, Environment and Economy (3E) issues. It was a very productive symposium and seminar with full of learnings, networking and education. Future global leaders will be able to use all the knowledge gained to think and implement on what else can be studied for the future of safe nuclear use."

4th Class Students
Asa Annie Day De Castro

Korea Technical Tour

The Korea technical tour took place over a period of ten days starting on April 28, 2016. KORAD (Korea Radioactive Waste Agency), the Wolseong Nuclear Power Plant, KINAC (Korea Institute of Nuclear Nonproliferation and Control), and KAERI (Korea Atomic Energy Research Institute) were visited, and there were international exchanges with students from KAIST (Korea Advanced Institute of Science and Technology) and Hanyang University. As part of this training, in addition to visiting facilities, practical exercises were implemented, and sports activities were enjoyed with local students resulting in meaningful benefits.

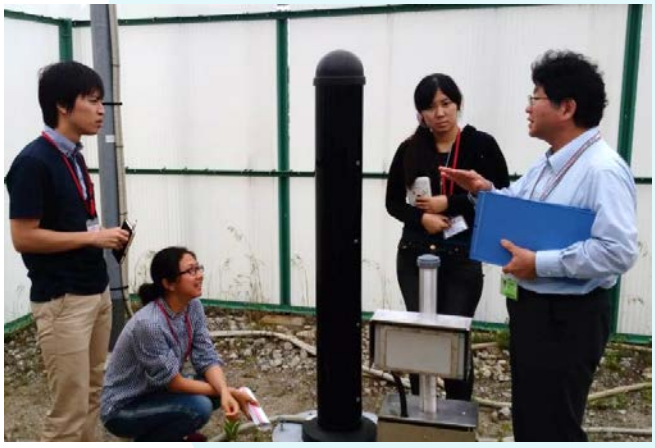
4th Class Student
Aileen Blant



"The Korea study tour provided me with the opportunity to learn more about nuclear industry and South Korea. I learnt more about nuclear waste disposal from KORAD. At KINAC we enjoyed testing the physical protection systems for the nuclear power plant. The part I enjoyed the most was the KAIST and Hanyang University student exchange sessions. There I realized the importance of building relationships with other like-minded students and hearing their ideas, which is valuable in order to solve problems on a global scale. Finally being able to learn about the culture of another country was enjoyable because it broadened my perspective on the lifestyle and thinking of other people."

Nuclear Security Training

The purpose of the "Nuclear Security Training" is to learn basic concepts, designs and applications related to nuclear security of nuclear power systems, which has become increasingly important, in practical ways through classroom lectures, experiments, numerical analysis, and visits to facilities. As for the training that was conducted on May 30th and 31st of 2016, based on past experiences, a more systematic educational curriculum was conducted through the basic training at Tokyo Tech and visits to facilities of the Japan Atomic Energy Agency.



"Through impact analysis using a simulator and taking tours of actual reprocessing plants, I was able to learn about security systems for protecting nuclear materials and nuclear power facilities against terrorists in a systematic way. In the past, it was difficult for me to imagine this by only listening to lectures without seeing the actual situation. I could actually see and touch real things. I was very impressed by this."

3rd Class Student
Rie Fujioka

Intercommunication with KAIST students

On August 10, 2016, the international team from KAIST visited and intercommunication with DOJO students was held. After listening to a lecture by Academy Professor Sugimoto about the Fukushima nuclear power plant accident, students were divided into groups for discussions and giving presentations. The DOJO students gave tours of their own laboratories. In this way, they were able to have a meaningful opportunity in a relatively short period of time. The meeting with students from 11 countries was filled with the excitement of young people with the same ambitions, making it an enjoyable and memorable summer day.

Student Introductions 4

"My name is Kodai Fukuda. I entered U-ATOM because of my desire to help people not only in Japan but throughout the world by participating in the decommissioning work of nuclear power plants. Through the U-ATOM program, I hope to visit different places, meet many new people, and acquire valuable experiences. In addition to knowledge, I want to gain a broad cultivation and ability to communicate so that I can fully utilize this knowledge."

5th Class Student **Kodai Fukuda**

"I am Nur Husna Md Hanipah, a 1st year Master student of Nuclear Engineering. I graduated from Bachelor Science in Physics with Electronics in University of Sabah in Malaysia and obtained my first Master in Safety Radiation and Nuclear in the National University of Malaysia in 2014. By joining the Academy for Global Nuclear Safety and Security Agent (U-ATOM) Programme, it would be my best platform to discover my potential and become a leader who could serve for the community well in the future. Currently, I belong to Sagara Laboratory and am focusing on waste categorization system development for debris from Fukushima Daiichi Nuclear Power Station by non-destructive assay technology."

5th Class Student **Nur Husna Md Hanipah**

"During my time as an undergraduate, I belonged to the Department of Mechanical Engineering, where I studied the relationship between coolant flow and corrosion in nuclear reactors using fluidic numerical analysis. I entered Graduate School in Nuclear Engineering because I wanted to learn about nuclear power more systematically. Currently, I am studying nuclear criticality safety for decommissioning operations. Five years have passed since the TEPCO Fukushima Daiichi nuclear accident. Decommissioning is steadily progressing, but there are still many issues that remain. I hope to become someone who is capable of handling Fukushima decommissioning work, which is believed to take decades. In addition to study, I am also gaining a broad knowledge and cultivation through the various curricula provided U-ATOM.

5th Class Student **Takeshi Muramoto**

Information

Upcoming Events

- ■October 2016- DOJO Lecture
- ■February 2017 International Symposium and Seminar
- ■March 2017 Environmental Radiation Measurement Fieldwork

U-ATOM

Access for the latest information!

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