

Global Interchange lecture on Engineering Technology (Decommissioning and Dismantling of Fukushima Daiichi nuclear plants)

Intensive lecture, January 11-13, 2021

Overview: This intensive lecture will provide a basic knowledge on the decommissioning of Fukushima-Daiichi nuclear power plants (NPPs) including the characteristics and management of fuel debris and wastes produced both on-site and off-site. Students have a good opportunity to know and think of difficulties and challenges to deal with the aftermath of a nuclear disaster like Fukushima Daiichi NPP accident.

Prerequisites: It is desirable that participants have basic knowledge on nuclear power plant and waste management.

Textbook: N/A. Lecture materials will be distributed on the day of the class.

Classroom: This course will be delivered online using zoom.

Time: 9:00-12:00 including 10 minutes break for each day; January 11th & 12th
9:00- 14:30 including 15 minutes break and 1-hour lunchtime on January 13th.

Evaluation: Report (50%), Participation (25%), Attendance (25%)

Instructor: Asso. Prof. Takumi Saito(saito@n.t.u-tokyo.ac.jp), the University of Tokyo.

Project Prof. Shunichi Suzuki(s_suzuki@n.t.u-tokyo.ac.jp), the University of Tokyo.

(Coordinator: Prof. Takuji Oda(oda@snu.ac.kr), Seoul National University.)

Class schedule

# (date)	Contents	Goal
1day (1/11) 09:00~12:00	9:00-10:30 by Prof. Suzuki 1. Overview of the decommissioning of Fukushima daiichi NPP 10:40-12:00 by Prof. Suzuki 2. Overview of the concept of fuel debris retrieval (comparing to TMI accident)	To understand the decommissioning of Fukushima daiichi NPP and the concept of fuel debris retrieval.
2day (1/12) 09:00~12:00	9:00-10:30 by Prof. Suzuki 3. Management of fuel debris (characteristic of fuel debris, fuel debris containing and transfer, safety design) 10:40-11:00 by Prof. Suzuki	To understand the characteristics and management of fuel debris. To understand principles of nuclear waste management in general.

	<p>4. General Q&A 11:00-12:00 by Prof. Saito</p> <p>1. Principle of Nuclear Waste Management</p>	
<p>3day (1/13) 09:00~14:30</p>	<p>9:00-10:00 by Prof. Saito</p> <p>2. Principle of Nuclear Waste Management</p> <p>10:10-12:00 by Prof. Saito</p> <p>3. Waste management of Fukushima Daiichi decommissioning</p> <p>13:00-14:00 by Prof. Saito</p> <p>4. Off-site decontamination and waste management</p> <p>14:00-14:30 by Prof. Saito</p> <p>5. General Q&A</p>	<p>To understand the peculiarity of wastes from both the decommissioning of Fukushima Daiichi NPPs and their management and off-site decontamination.</p>