



### **Fukushima- a view from the ocean**

**A public lecture by Dr. Ken Buesseler, Senior Scientist, Woods Hole Oceanographic Institution, USA**

The triple disaster of the March 11, 2011 earthquake, tsunami, and subsequent radiation releases at Fukushima Dai-ichi were unprecedented events for the ocean and society. This public lecture will provide an overview and 8 year update regarding the radioactive contaminants released from the Fukushima Daiichi Nuclear Power Plants. The talk will consider the radioactive world we live in and address the specific fate of Fukushima radionuclides in the ocean, with an eye to the future ocean. The emphasis is on the radioactive forms of cesium, though other radionuclides are also considered. Topics include: sources from atmospheric and ocean discharges in 2011; a Pacific Ocean time-series that tracks the transport of contaminants across the ocean; an extended time-series in

marine fish that examines species specific variability in radionuclide content; and a discussion of the burial of particle associated contaminants on the seafloor. The look to the future includes estimates of ongoing releases from groundwater associated with beach sands in comparison to other land sources, such as rivers and operations during decommissioning. We end by considering the long term trends in radioactivity levels in marine biota and sediments, with comparisons to other sites in the world, and open discussion on key issues that have yet to be resolved, such as the fate of contaminated water in the storage tanks and discovery of cesium microparticles.

The talks will be of several formats, from a panel format with one or more additional speakers, but most will be individual presentations by Dr. Buessler. While the talk will be in English (about 30-45 min), slides will have Japanese text, and a one page Japanese language hand-out will be provided. Questions from the audience will be encouraged (about 15 min) with assistance from local hosts to translate questions into English and back into Japanese. The event on March 24 will be part of a Safecast event with various citizen scientists groups presenting.

#### **Ken Buessler Mar/April 2019 Japan Lecture schedule**

<b>date</b>	<b>day</b>	<b>where</b>	<b>time</b>	<b>host</b>	<b>contact email</b>	<b>lecture address</b>
19-Mar	Tues	Temple University Tokyo	1900-2100	Kyle Cleveland	kylecl@tuj.temple.edu	Temple University, Japan Campus, Azabu Hall, 1F Parliament
20-Mar	Wed	Hiroshima Peace Institute	1800-2000	Robert "Bo" Jacobs	jacobs@hiroshima-cu.ac.jp	Seminar Room, Satellite Campus of Hiroshima City Univ., 9F Otemachi-Heiwa-building, 4-1-1, Otemachi, Naka-ku, Hiroshima City
24-Mar	Sun	Safecast Tokyo	1500-1800	Azby Brown	azby@me.com	Loftwork Multipurpose Space, 10F, Dogenzaka Pia Bldg. 1-22-7 Dogenzaka, Shibuya-ku, Tokyo-to
26-Mar	Tues	Hokkaido Univ, Sapporo	1500-1615	Takeshi Yoshimura	yoshimura-t@fish.hokudai.ac.jp	Auditorium D201 in the Graduate School of Environmental Science
27-Mar	Wed	Hirosaki University	1800-1920	Hirofumi Tazoe	tazoe@hirosaki-u.ac.jp	50th Anniversay Auditorium in Bunkyo-cho campus
29-Mar	Fri	Tokyo University	1500-1615	Hiroaki Saito	hsaito@aori.u-tokyo.ac.jp	Yayoi Campus 15-16

30-Mar	Sat	Aquamarine Onahama	1300-1530	Seiya Nagao	seiya-nagao@se.kanazawa-u.ac.jp	Aquamarine Fukushima, Onahama, Fukushima
2-Apr	Tues	Kanasawa University	1330-1500	Seiya Nagao	seiya-nagao@se.kanazawa-u.ac.jp	Kanasawa University
10-Apr	Wed	Tokyo University AORI	1600-1700	Hiroaki Saito	hsaito@aori.u-tokyo.ac.jp	U. Tokyo, AORI, Graduate School of Agriculture and Life Sciences