**BIOGEOSCIENCES proposal for Special Issue**

<http://www.biogeosciences.net/>

**Special issue info:**

<http://www.biogeosciences.net/general_information/special_issues.html>

**Title of Special Issue:**

**Impacts of the Fukushima Nuclear Power Plant Discharges on the Ocean**

**Opening Date: June 1, 2012**

**Closing Date: Oct. 1, 2012**

**Guest Editors**

Ken Buesseler

Woods Hole Oceanographic Institution, Woods Hole, MA USA

kbuesseler@whoi.edu

Hartmut Nies (pending IAEA approval)

Environment Laboratories, International Atomic Energy Agency, Monaco

H.Nies@iaea.org

Michio Aoyama

Meteorological Research Institute, Tsukuba, 305-0052 Japan

maoyama@mri-jma.go.jp

Pavel Povinec

Comenius University in Bratislava, Slovakia

Pavel.Povinec@fmph.uniba.sk

**Short Synopsis of Special Issue:**

The triple disaster of the March 11, 2011, earthquake, tsunami and subsequent radiation releases at Fukushima Dai-ichi are unprecedented events for the oceans.  This special issue (SI) seeks to bring together manuscripts focused on the impacts and fate of Fukushima Dai-ichi nuclear power plant radionuclides that were released to the ocean.  This includes studies of the relative path and magnitude of the radioactive releases, range of radionuclides released, dose assessments, levels of contaminants in the sea water, sediment and biota, dispersion patterns measured and predicted for both near and far fields.  Related studies of atmospheric transport pathways and deposition on land, as they relate to ocean studies, are also appropriate for this SI.  Studies of the transport of radionuclides to the ocean via rivers, run-off and groundwater are also appropriate.  Manuscripts can include both field and modeling results, as well as new radionuclide analytical methods used to understand the impacts of Fukushima radionuclides on the oceans.

**BG Staff Editor:**

Minhan Dai

Xiamen University, State Key Laboratory of Marine Environmental Science

**Tentative list of manuscripts, working titles, possible authors:**

**Compiled at Salt Lake City Ocean Sciences meeting- others are VERY likely and I have not gone back to this group or larger community to get new titles until I know we have approval for this special issue**

Tumey, S., and T. Guilderson: Input of I-129 into the Western Pacific Ocean resulting from the Fukushima nuclear event

Charette, M., and C. F. Breier: Radium age tracer for Fukushima runoff

Rypina, I. I., S. R. Jayne, S. Yoshida, E. M Douglass, and A. M. Macdonald: The circulation and transport of radionuclides from Fukushima

Aoyama, M.: Global distribution of radiocaesium in surface water in the Pacific Ocean and the Atlantic Ocean through the end of 2011: Impact of Fukushima accident

Casacuberta, Masqué, García-Tenorio et al. Sr-90 and Sr-89 in seawater. Likely including I-129 data from Sevilla and comparing to Cs data published by Buesseler et al

Casacuberta, Masqué, Kenna, García-Tenorio et al. A method for the determination of Sr-90, Cs-137, I-129, Pu-isotopes, and Np-237 in seawater.

Kenna, Buesseler et al: Pu in seawater

Fisher, Nishikawa, et al. Radionuclides in biota off Japan

Yu, Distribution of radioactive contaminants released by Japanese Fukushima accident at the northwest Pacific

Yu, Radionuclides levels of squid collected in NW Pacific after Fukushima Accident

Aoyama/Buesseler, Cesium compilation paper

Chen, C.; Lai, Z.; Beardsley , R. C.; Lin, H.; Sasaki, J.; Lin, J.; Ji, R.:

Modeling Assessment of Initial Spread of Cs-137 from Fukushima Dai-Chi Nuclear Power Plant off Japan's Coast