

# **East Asia GEOTRACES Workshop: Trace Element and Isotope (TEI) study in the Northwestern Pacific and its marginal seas**

Conveners: Hajime Obata, Tung-Yuan Ho, Liping Zhou, Mansik Choi, Jing Zhang, Jun Nishioka

This workshop is supported by Grants-in-Aid for Innovative Areas “Ocean Mixing Processes” (No.15H05820) from Monakasho (Ministry of Education, Culture, Sports, Science and Technology MEXT), UTokyo Ocean Alliance, The Nippon Foundation, Institute of Low Temperature Science (Hokkaido University), and SCOR.

Sapporo, Japan  
16-18 January 2017

**Auditorium in Institute of Low Temperature Science**  
**Hokkaido University**

<b><u>16 January (Monday)</u></b>	
08:00	<b>Meet in Hotel lobby for travel to meeting site</b>
09:00	<b>Welcome from Director of Institute of Low Temperature Science (Professor N. Ebuchi)</b>  <b>Introduction</b> (Hajime Obata, Jun Nishioka, Jing Zhang)
09:20	<b>Plenary Talk (Dr. Greg Cutter)</b> <b>“2018 US GEOTRACES Pacific Meridional Transect: studying inputs and internal cycling across a wide variety of coastal to oceanic regimes”</b>
10:00	<b>Plenary Talk (Dr. Eric Atherberg)</b> <b>“Trace metal cycling in the Atlantic Ocean. Inputs, distributions and biogeochemical effects”</b>
10:40	Coffee break
11:10	<b>Plenary Talk (Dr. Pheobe Lam)</b> <b>“The distribution of particle concentration and composition in GEOTRACES: effects on scavenging”</b>
11:40	<b>Plenary talk (Dr. Hajime Obata)</b> <b>“Section cruises and Intercalibration in GEOTRACES Japan”</b>
12:10	Lunch
13:20	<b>Plenary talk (Dr. Jing Zhang)</b>

	<b>“Data Management and GEOTRACES Intermediate Data Product: from the global to the Asian marginal seas”</b>
13:50	<b>Keynote talk (Dr. Suk Hyun Kim)</b> <b>“Plan of KIOST with RV ISABU for a GEOTRACES”</b>
14:20	<b>Keynote talk (Dr. Kyunghoon Shin)</b> <b>“Nitrogen isotope as a biogeotracer in the ocean”</b>
14:50	<b>Keynote talk (Dr. Jun Nishioka)</b> <b>“A sub-polar marginal sea controls oceanic iron cycles in the North Pacific”</b>
15:20	Coffee break
15:50	<b>Keynote talk (Dr. Pavel Tishchenko)</b> <b>“Cruise Narrative, Line PO1W, Sea of Okhotsk Section, 1993 and Future Plan - Cruise GEOTRACES, Line PO1W, Sea of Okhotsk, 2018”</b>
16:20	<b>Keynote talk (Dr. Aya Sakaguchi)</b> <b>“Application of environmental anthropogenic actinides to oceanography”</b>
16:50	Adjourn
	Dinner will start at 18h00 at the restaurant “Enrei-Soh”

<b>17 January (Tuesday)</b>	
09:00	<b>Keynote talk (Dr. Liping Zhou)</b> “Multiple-isotope tracers of seawater in the South China Sea”
09:30	<b>Keynote talk (Dr. Guebuem Kim)</b> “Tracing the fluxes of nutrients and trace elements using Ra isotopes in the northwestern Pacific marginal seas”
10:00	<b>Keynote talk (Dr. Bochao Xu)</b> “Using Ra-Rn as tracers to study upwelling processes in the ocean”
10:30	Coffee break
11:00	<b>Keynote talk (Dr. Kuo-Fang Huang)</b> “Long-Lived Thorium Isotopes in North Atlantic Zonal Transect: Sources, Sinks and Cycling”
11:30	<b>Keynote talk (Dr. Kazuhiro Misumi)</b> “Numerical modeling of iron cycle in the North Pacific”
12:00	<b>Keynote talk (Dr. Akira Oka)</b> “A modelling study on global distribution of rare earth elements in the ocean”
12:30	Lunch (Buffet lunch)
14:00	<b>Keynote talk (Dr. Keiji Horikawa)</b> “Application of neodymium isotopes to the Japan Sea deep-sea sediments for 10 Myr: Japan Sea opening-closing history (K. Horikawa, Y. Kozaka, Y. Asahara, and J. Zhang)”
14:30	<b>Keynote talk (Dr. Kazuhiro Norisuye)</b> “Chelating resin column separation method for Pb isotopes and vertical profiles of Pb isotope ratios in the western subarctic North Pacific (K. Norisuye, M. Nakagawa, K. Maruyama, H. Obata, T. Gamo, E. A. Boyle, J.-M. Lee, K. Okamura, K. Nagaishi, T. Ishikawa).”
15:00	<b>Short topics</b>
16:00	Coffee break
16:30	<b>Short topics</b>
18:30	Adjourn
19:00	Dinner will start at Lecture Room on the 2nd floor in Institute of Low Temperature Science.

## 18 January (Wednesday)

09:00	<p><b>Session “Bio-GEOTRACES”</b></p> <p><b>Keynote talk (Dr. Tung-Yuan Ho)</b>  <b>“Nickel limitation of nitrogen fixation in Trichodesmium”</b></p> <p><b>Keynote talk (Dr. Koji Suzuki)</b>  <b>“Phytoplankton community responses to iron and CO<sub>2</sub> enrichment in different biogeochemical provinces of the Southern Ocean (K. Suzuki, H. Endo, J. Nishioka, H. Hattori)”</b></p> <p><b>Keynote talk (Dr. Yoshiko Kondo)</b>  <b>“Influence of organic Fe-binding ligands on phytoplankton growth in the western subarctic North Pacific”</b></p> <p><b>Short topics</b></p>
11:00	Coffee break
11:30	<b>Short topics</b>
13:00	Lunch
14:00	<b>Short topics</b>
15:30	<b>General Discussion</b>
16:30	<b>Adjourn and Tour in Institute of Low Temperature Science</b>
19:15	Meeting at the Hotel lobby for dinner

\* Lunch during this workshop and dinner on 16 and 17 January will be provided (Alcohol will not be covered by our grant).

