

ANNUAL REPORT ON GEOTRACES ACTIVITIES IN CHINA

May 1st, 2017 to April 30th, 2018

This year, GEOTRACES-China continued to develop albeit the lack of formal recognition as a special group with specific funding. Its major activities are highlighted in two aspects below.

(1) Several groups in China have been doing analysis of the seawater samples collected during the 2015 GEOTRACE GP06-CN cruise to the Yellow Sea and East China Sea. Results are being put together for publication. The main findings include: trace metal is high in Yellow Sea than East China Sea; high Ni, Cu, and Cd in Changjiang diluted waters, but low Zn and Pb; Pb shows different distribution patterns from the other metals, minima found in subsurface; high metal concentrations was found near coast; conservative behavior of Cu in the whole East China Sea, only one single strong Cu binding ligand; an interception of 72.83 nM Cu, suggested higher Cu endmember from Changjiang, i.e. higher than 1980s-2000s, higher than the US east coast rivers; much higher Cu in the Yellow Sea and Bohai Sea, suggested anthropogenic input? Pb is from atmospheric deposition and with short residence time in surface waters; hydrothermal influenced sediment might be an important source for Fe and other metals to overlying water column in Okinawa Trough.

(2) Two sea trial cruises (2-14 August, 2017 and 9-18 March, 2018) with the newly launched R/V *Tan Kah Kee* of Xiamen University were completed in the South China Sea and western Pacific. Sampling systems were tested and seawater samples collected are being analyzed. A international planning meeting for the first GEOTRACES-China cruise is scheduled for May, 2018.

Other cruises included the one to Yangtze River Estuary in August, 2017, the other one in Jinzhou Bay in September, 2017.

Another Open Day for the R/V *Tan Kah Kee* was successfully held in April, which coincided with the visit of the Tara to Xiamen China.

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