

International Workshop on

Mixing and Water Mass Modification in the East Asian Marginal Seas

February 13, 2017

W601 in Research Institute for Applied Mechanics, Kyushu University

Kasuga, Fukuoka, Japan

Water mass modification as a result of oceanic mixing is one of important factors controlling biogeochemical conditions in the ocean. Marginal seas in the East Asia such as the Yellow, East China and Japan/East Seas are rapidly changing due to natural and anthropogenic multi-timescale variations. The aim of this workshop is to promote studies on the mixing and water mass modification processes in the East Asian area through exchange scientific information. We welcome not only observational and modeling studies about physical processes of the water mass modification, but also about mixing effects on the biogeochemical conditions in the oceans.

10:00-10:05

Opening address

Hong-Ryeol Shin (Kongju National Univ.)

Chair: Hong-Ryeol Shin

10:05-10:35

Enhanced turbulence observed in the East China Sea shelf

Jae Hak Lee (KIOST), Chang Su Hong (KIOST) and Gyu Nam Baek (KIOST)

10:35-11:05

Budget of nutrients and biogenic particles for upper and lower layers of the East China Sea

Yucheng Wang (Ehime Univ.), Xinyu Guo (Ehime Univ.) and Liang Zhao (Tianjin Univ. Sci. Tech.)

----- Coffee Break 11:05-11:20 -----

11:20-11:50

Water exchange across isobaths over the continental shelf of the East China Sea

Jing Zhang (Ehime Univ.), Xinyu Guo (Ehime Univ.), Liang Zhao (Tianjin

Univ. Sci. Tech.) and Yasumasa Miyazawa (JAMSTEC)

11:50-12:20

Studies on turbulent mixing and tidal currents in Ariake Sea

Eisuke Tsutsumi (Kyushu Univ.) and Takeshi Matsuno (Kyushu Univ.)

----- Lunch 12:20-14:00 -----

Chair: Jae Hak Lee

14:00-14:30

Trends the appearance of coastal upwelling along the eastern coast of Korea during last a few years

In-Seong Han (NIFS) and Sang-Hyun Kim (Cheju National Univ.)

14:30-15:00

Seasonal characteristics of the circulation in the East/Japan Sea depending on sea surface heat flux

Daehyuk Kim (Kongju National Univ.), Hong-Ryeol Shin (Kongju National Univ.), Cheol-Ho Kim (KIOST) and Naoki Hirose (Kyushu Univ.).

----- Coffee Break 15:00-15:15 -----

15:15-15:45

Evaluation of vertical eddy diffusivity in the abyssal Japan/East Sea based on the one-dimensional advection-diffusion model in temperature and ^{14}C profiles

Tomoharu Senjyu (Kyushu Univ.) and Takafumi Aramaki (NIES)

15:45-16:15

Development of northeast Asian seas regional climatology by quality control of temperature and salinity data from the World Ocean Database

Joon-Soo Lee (NIFS)

Chair: Tomoharu Senjyu

16:15-17:00

Discussion