

2016 Mar. 30

Special Section of Exploration Geophysics
"Marine Geophysics"

Recently, marine researches are essential for economical growth and safety life for human society. For example, marine energy and mineral resources are new key powering industrial societies. Many offshore oil and gas fields have already been explored and developed. Geophysical explorations are continuously used for the discovery and monitoring. The depleted oil and gas fields (or deep saline formations) can also play an important role as storage of carbon dioxide (CO₂); the technology is called as the CO₂ Capture and Storage (**CCS**) that can reduce CO₂ emissions to the atmosphere. As a new hydrocarbon resource, gas hydrate (methane hydrate) is focused, and a Japanese institution succeeded in producing methane gas from the hydrate-bearing sediments. Mineral resources, such as seafloor massive sulfide, cobalt rich crust, manganese nodule, REY-rich mud and so on, were scientific targets for the past decades. Now, the developments of these minerals become more realistic. In addition to these resource issues, sub-seafloor earthquakes, tsunamis and seafloor volcanic eruptions are known as cause of great natural hazard. Marine geophysical surveys are necessary for understanding submarine active faults, seismic and volcanic activities, and future hazards.

In this special issue, we (editorial board of EG) pick up the novel technologies and survey results of various geophysical explorations relating to the marine researches. Due to the recent great advances of hardware and software for marine geophysics, technological papers (about sensors, data analysis, operations, and their feasibility studies, etc.) are welcome to this special issue. Case studies at various marine fields under both the shallow and deep water environments are also welcome.

<< The deadline of submission is scheduled at the end of July, 2016. >>

Caution to authors who wish to submit the paper to the special section; Please send an e-mail to Dr. T. Goto, a vice chairman of editorial board of Society of Exploration Geophysicists of Japan, before your submission through the website.

I hope that many of you will contribute to the special section.

Best regards,

Tada-nori Goto, Ph. D.
Graduate School of Engineering, Kyoto University
goto.tadanori.8a@kyoto-u.ac.jp

Tada-nori Goto