

# Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



U020-07

Room:304

Time:May 23 10:45-11:10

## Perspectives on resource geology

Yasuhiro Kato<sup>1\*</sup>

<sup>1</sup>University of Tokyo

Here I present several examples of my current researches on resource geology. One is a research on a new type of submarine mineral deposit that may potentially produce huge amounts of rare-earth resource. Last September, a "rare-earth shock" accompanied the announcement that China would reduce its exports of rare-earth elements to the West. The newly-discovered mineral deposit may break such a concern about a deficient supply of rare-earth resource to the world in the future. Secondly, I discuss about a genesis of Besshi-type Cu deposits in the Sambagawa metamorphic belt in Japan. The Besshi-type Cu deposits are strata-bound volcanogenic massive sulfide deposits that were the ancient counterparts of modern Cu-rich seafloor massive sulfide deposits and were formed/preserved as products of environmental changes of the Earth's surface. Finally, I present a new concept on origins of hydrothermal deposits in the Japanese island arc. These hydrothermal deposits in the island arc crust may have been directly formed from slab-derived fluids in the deep crust.