Stratigraphy and tectonics of the alluvial plain and related area

Convener: *Yoshinori MIYACHI (National Institute of Advanced Industrial Science and Technology), Atsushi Urabe (Research Institute for Natural Hazards and Disaster Recovery, Niigata University), Chair: Atsushi Urabe (Research Institute for Natural Hazards and Disaster Recovery, Niigata University)

Thu. May 1, 2014 2:15 PM - 3:45 PM  313 (3F)

This session deals with stratigraphy, active tectonics and depositional system of the Pleistocene to Holocene sediments, distributed in and around the alluvial plain. Examples of discussion subjects are as follows: development process of the late Quaternary basin from the sedimentary system, sedimentary environment and its changes and sea level changes, ground disaster such as liquefaction, in and around the sedimentary plain.

3:30 PM - 3:45 PM

Geological overview of the Mobara District: Quadrangle Series, 1:50000, GSJ/AIST

*Futoshi NANAYAMA1, Hiroomi NAKAZATO2, Shinzou OOI3, Rei NAKASHIMA1 (1.Geological Survey of Japan, AIST, 2.NARO, 3.GSI)

Keywords: Chiba Prefecture, Mobara District, Quadrangle Series, 1:50000, GSJ/AIST, Geology, Geomorphology, overview

Between 2010 and 2014, geological and geomorphological research for the Quadrangle Series, 1:50000 of the Mobara district was performed by Geological Survey of Japan, AIST. In this poster presentation, we present the proto version of geological map due to have opinions from everyone. The Mobara district is located in the northeastern part of Boso Peninsula of the Kanto region. The district partly includes the Pacific Ocean in the eastern district. The land area is geomorphologically divided into hills, diluvia uplands, river terraces, alluvial lowlands and Kujyukuri strand plane. The hills and uplands occupy the southwestern to western and northwestern part of the district, respectively. The hills constitute parts of the Kazusa Hills and the uplands are parts of the Shimosa Uplands. River terraces and alluvial lowlands are distributed along Ichinomiya River, Isumi River and Murata River. The Murata River runs through the northwestern district flows into the Tokyo Bay. On the other hand, the Ichinomiya River runs through the central district eastward into the Pacific Ocean. Also the Isumi River runs through the southern district eastward into the Pacific Ocean. In the Mobara district, there are mainly two stratigraphic units, the lower to middle Pleistocene Kazusa Group and the middle to upper Pleistocene Shimosa Group, trending northeast to southwest and gently dipping northwest. Furthermore Upper Pleistocene terrace deposits with Kanto Loam, Holocene terrace deposits and alluvial deposits are mostly distributed along the Ichinomi, Isumi and Murata Rivers. The Kazusa Group is divided into seven formations, Otadai, Umegase, Kokumoto, Kakinokidai, Chonan, Kasamori and Kongochi Formations. These were conformably deposited upward the continuous change of the sedimentary environments from the lower bathyal through upper bathyal to inner shelf.