Novosibirsk State University

Ministry of Education and Science, Russia

Project 14.Y26.31.0018

Earth-Life Science Institute, Tokyo Institute of Technology, Japan

Russian-Japanese Field Training School and Workshop

"Accretionary complexes of Japan: a key to understand the history of fossil Pacific-type orogenic belts of Central Asia"

Nagoya-Gifu-Kochi-Tokyo: 5-15 April 2017

Summary: The field training school for Russian early and mid- career participants will be organized in the frame of megagrant project # 14.Y26.31.0018 "A multidisciplinary study of Pacific-type orogenic belts and development of a holistic model linking evolution of oceans, their active margins and mantle magmatism" led by Prof. Shigenori Maruyama and supported by the Ministry of Education and Science of the Russian Federation. The field training school will be performed at key accretionary complex of Japan to show accretionary complexes and Ocean Plate Stratigraphy (OPS) units of different ages: Akiyoshi (Carboniferous-Permian), Mino-Tamba (Permian-Triassic), Chichibu (Triassic-Jurassic) and Shimanto (Cretaceous-Neogene), which are type localities of all kinds of OPS. The fragments of oceanic crust or OPS units, which were accreted to island arcs or active continental margins and later incorporated into accretionary complexes (AC), are important constituents of Pacific-type orogenic belts (Isozaki et al., 1990; Maruyama et al., 2010; Safonova et al., 2016)/ In turn, the major site of the formation of new continental crust and the only way on Earth to delivery on-surface materials of oceanic and continental crust and volatiles (water, carbon dioxide) to the deep mantle.

Goal: The field training school aims to help the geologists studying fossil Pacific-type orogenic belts of Central Asia to master techniques of mapping of structurally very complicated accretionary complexes, OPS units and to observe examples of tectonic erosion. This training school is necessary to construct a practical basis for field works at accretionary and supra-subduction complexes of Central Asia.

Foci: will be on the accretionary complexes consisting of the material eroded from adjacent arcs and on OPS units scrapped off the subducting oceanic plate. The OPS rocks are of special importance as they record the full history of the oceanic plate from its "birth" at mid ocean ridges to its "death" at subduction zones. Special attention will be paid to the identification and characterization of accretionary and OPS lithologies, studying their relationships in the field and making implications on their origin. There will

be a series of en-route lectures on the structure of accretionary complexes, major OPS lithologies and petrogenesis of igneous rocks.

Supervisors:

Prof. Shigenori Maruyama, Earth-Life Science Institute (ELSI); Dr. Inna Safonova, Novosibirsk State University (NSU)

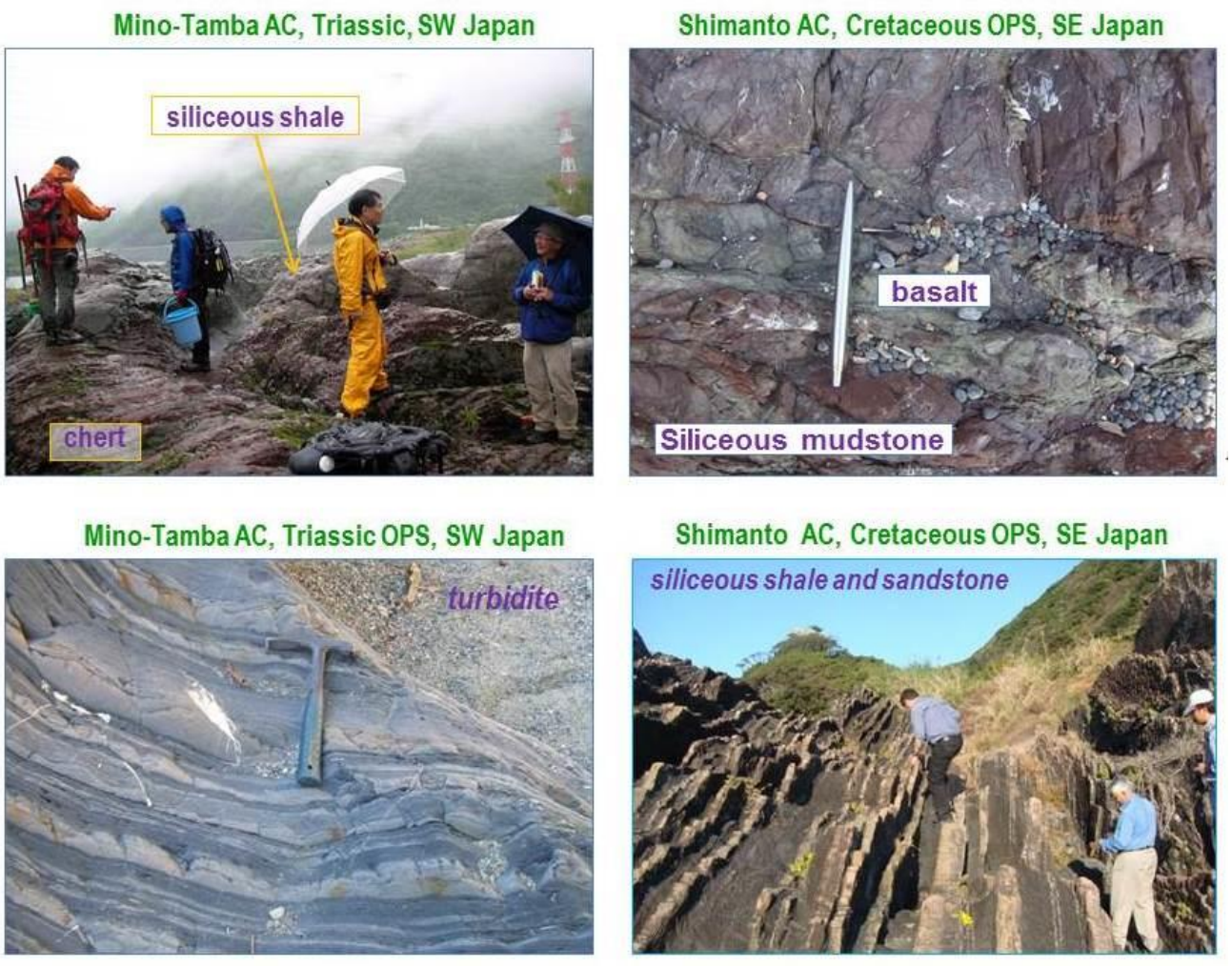
Guides: Drs. T. Sato, T. Saito

Itinerary: Nagoya – Inuyama OPS type locality, Gifu Prefecture, SW Japan – Shimanto accretionary complex, Kochi prefecture - Tokyo

Registration: on 5th April 2017, Nagoya

Registration Fee: 60000 yen payable in cash upon arrival/registration include transportation in Japan during the whole field trip, camping facilities, geological guide-books, textbook materials, guides/lecturers.

Contact for registration: smaruyam@elsi.jp



Typical examples of OPS units at the Mino-Tamba and Shimanto accretionary complexes