

Geothermal Volcanology Workshop 2018

FIRST CIRCULAR

Institute of Volcanology and Seismology, Far Eastern Branch, Russian Academy of Sciences, Petropavlovsk-Kamchatsky, September 05-06, 2018

Objectives:

The 2-nd international seminar on geothermal volcanology (**Geothermal Volcanology Workshop 2018**) will be held from **05 to 06 September 2018** in Petropavlovsk-Kamchatsky, Russia. Kamchatka is an active volcanic, seismic and hydrothermal region. Active volcanism is accompanied by magma injections into host structures, magmatic fracturing and the formation of hydrothermal systems adjacent to volcanoes. Engineering study of productive geothermal reservoirs is a necessary condition for their effective use for heat and power supply. Geomechanical analysis of the magmatic fracturing regime with seismic data is extremely important for predicting volcanic activity. It is also useful for analyzing the productivity of geothermal reservoirs and as the analog of hydrocarbon reservoirs development with hard-to-recover reserves. The interdisciplinary focus of this workshop will bring together scientists to solve problems which transcend the framework of international borders.

Topics of scientific sessions:

- Hydrothermal systems adjacent to active and extinct volcanoes
- Seismicity in geofluid volcanic and hydrothermal systems
- Magmatic feeding systems of active volcanoes
- Modeling the exploitation of geothermal reservoirs in volcanic areas
- Problems of using geothermal energy in volcanic areas for heat and electricity supply
- Magmatic fracturing as an analogue of the development of hydrocarbon reservoirs with hard-to-recover reserves
- Mechanism of geyser functioning and cyclicity in hydrothermal systems

Geothermal Volcanology Workshop 2018 provides a unique opportunity to meet with other scientists working in the Far East segment of the North-West Pacific as it makes an excellent presentation for those willing to participate in research of this unique region. In 2018, the meeting will begin the day after the start of the 2-nd International Geothermal Conference GEOHEAT https://www.geothermal-energy.org/conferences_events/conference_database.html will combine the efforts of scientists for geothermal energy research in the areas of modern volcanism.

Language of the Workshop - English

Program Organizing Committee:

A.V. Kiryukhin (IVS FEB RAS) (Chair), V.Yu. Lavrushin (GIN RAS), S.A. Fedotov (IVS FEB RAS), E.I. Gordeev (IVS FEB RAS), M. Krieger (IGA), E.Sonnenthal (LBNL, USA), Tianfu Xu (Jilin University, China), M. McCluer («McCluer Geomechanics», USA), Y. Fujii (Rock Mechanics Laboratory, Hokkaido University, Japan), D. Elsworth (Penn State University, USA), N. Ozgur (Suleyman Demirel Univ., Turkey), V.A. Lushpeev (PJSC Gazpromneft), S.N. Rychagov (IVS FEB RAS), I.I. Chernev (JSC Geotherm), V.M. Okrugin (IVS FEB RAS).

Technical Organizing Committee:

A.V. Kiryukhin (Chair), A.I. Kozhurin (Acting Director IVS FEB RAS), O.A. Yevdokimova, A.Yu. Polyakov, I.F. Delemen, P.O. Voronin, A.V. Solomatin, T.B. Rychkova, E.V. Chernykh.

Meeting format:

Oral (including invited) and poster presentations, no more than one from the meeting participant.

Location:

Institute of Volcanology and Seismology, FEB RAS, Petropavlovsk-Kamchatsky, Russia.

Planned excursions:

Helicopter excursions: (1) Dike fields and thermomineral springs at Koryaksky volcano; (2) Mutnovsky geothermal area; (3) The Valley of Geysers.

Note: Helicopter excursions will be paid by each participant in proportion to the cost of the helicopter trip (depending on the number of participants, helicopter type and flight time).

Ground excursions: (1) Paratunsky geothermal field; (2) Mutnovsky geothermal field.

Note: Ground excursions will be paid by each participant in proportion to the cost of the transportation (depending on the number of participants, vehicle type and travel time).

Volcanological Museum at the Institute of Volcanology and Seismology FEB RAS, the Center for Processing and Forecasting Earthquakes, (the Kamchatka Branch of the Federal Research Center, the Unified Geophysical Service RAS).

Transport:

Daily flights between Moscow and Petropavlovsk-Kamchatsky, frequent flights from, Khabarovsk and Vladivostok. Participants from the US west coast can take a direct flight from Anchorage to Petropavlovsk-Kamchatsky. For the participants from Japan, the connecting flights via Vladivostok is the easiest way to get to the place of destination.

Weather:

The beginning of September in Petropavlovsk-Kamchatsky is usually sunny with a temperature of +16°C, but the possibility of a rain is not ruled out.

Cost:

Workshop registration fee: 3000 rub. (includes the expenses for organization and conducting of the workshop and general events).

Accommodation:

Hotels "Edelweiss", "Petropavlovsk", "Avacha" and "Oktyabrskaya". The most inexpensive rooms (about \$ 100) are in the hotel "Edelweiss", which is located near the Institute of Volcanology and Seismology FEB RAS.

Support:

The organizers expect support from the Russian Foundation for Scientific Research (RSF), Russian Foundation for Basic Research (RFBR), JSC Teplo Zemli, JSC Geotherm, International Geothermal Association (IGA), PJSC Gazpromneft .

For all questions concerning the organization of the meeting, contact

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