

17th **International Workshop on WATER DYNAMICS**  
**Dynamic Earth - Rocks, Fluids and Reactions -**

Venue: Graduate School of Environmental Studies Main building, New Aobayama Campus, Tohoku University

**Tuesday, Friday 27th, 2020**

Lecture Room				
Time	No.	Speaker	Title	Chairman
<b>Opening</b>				
10:00-10:15		Noriyoshi Tsuchiya Noriaki Watanabe	Opening Remarks Evacuation	A. Okamoto
<b>Geothermal and Supercritical Research</b>				
10:15-10:45	1	Hiroshi Asanuma	Current status of Japanese supercritical geothermal project	N. Tsuchiya
10:45-11:15	2	Noriyoshi Tsuchiya	Frontier Research of Supercritical Water-Rock Interaction	
11:15-11:45	3	Yasuo Ogawa	Anatomy of Active Volcanic Edifice at the Kusatsu-Shirane Volcano, Japan, by Magnetotellurics: Hydrothermal Implications for Volcanic Unrests	
11:45-14:00	Lunch & Poster Session			
<b>Fluid in the Earth's Crust</b>				
14:00-14:30	4	Mark Reed	Supercritical hydrofracturing and alteration reactions in the Butte porphyry copper deposit	N. Tsuchiya
14:30-15:00	5	Atsushi Okamoto	Knockout seawater experiments and insights for hydrothermal alteration of midocean ridges	
15:00-15:30	6	Craig Manning	Fluids in the Lower Crust: Deep is Different	
15:30-16:00	7	Masaoki Uno	Fluid pressure and permeability evolution in the crust: insights from natural metamorphic reaction	
16:00-16:15	Break			
<b>Tectonics in East and Central Asia</b>				
16:15-16:45	8	Ariuntsetseg Ganbat	Geochemistry and geochronology of late Paleozoic-early Mesozoic igneous rocks of the Delgerkhaan region, Central Mongolia: constraints on the tectonic evolution of the Mongol-Okhotsk Ocean	M. Uno
16:45-17:15	9	Otgonbayar Dandar	The Nature of Metasomatism in Mantle Wedge: Evidence from the Alag Khadny Accretionary Wedge, Western Mongolia	
17:15-17:45	10	Kosuke Naemura	Melt inclusions in eclogite and garnet peridotite in the continental collision zone (Review)	
17:45-18:15	11	Chin-Ho Tsai	Tectonic blocks and high-pressure metamorphism in the Yuli belt, eastern Taiwan	
18:30	Workshop Banquet			

**Saturday, March 28th, 2020**

Lecture Room				
Time	No.	Speaker	Title	Chairman
<b>Metamorphic Reactions</b>				
9:30-10:00	12	Tetsuo Kawakami	Dating ductile deformation in the high-temperature/low-pressure type metamorphic terrane (Ryoke belt, Japan)	M. Uno
10:00-10:30	13	Fumiko Higashino	Timing of garnet-forming metamorphism and behavior of halogens in middle to lower crust deduced from nanogranitoid inclusions in garnet	
10:30-11:00	14	Takayoshi Nagaya	Talc CPO from talc-rich schists in the Sanbagawa and Franciscan metamorphic belts: implications as a weak layer formed due to Si-metasomatism at slab-mantle interfaces	
11:00-11:15	Break			
<b>Hydrothermal Experiments</b>				
11:15-11:45	15	Ryosuke Oyanagi	Experimental constraints on changes in rate-control process during hydrothermal alteration of olivine	A. Okamoto
11:45-12:15	16	Jiajie Wang	Control on Fe(II) behaviors during H <sub>2</sub> O-olivine-CO <sub>2</sub> hydrothermal reactions for H <sub>2</sub> production	
12:15-13:15	Lunch & Poster Session			
<b>Geofluids</b>				
13:15-13:45	17	Sergey	Kuril Island	N. Tsuchiya
13:45-14:15	18	Ohtani	Deep Mantle	
14:15-14:45	19	Christoph Hilgers		
<b>Lab Tour</b>				

**Sunday, March 29th, 2020**

Field Excursion: Central Part of Iwate Prefecture