## 9th International Workshop on WATER DYNAMICS Deep Carbon Cycle / Beyond Brittle

Venue: Tachibana Sendai International Center

Time	Speaker	Title	Chairman
10:00-10:10	Eiji Ohtani	Opening Remarks	N. Tsuchiya
10:10-10:40	Greg Bignall Scientific Rationale and Economic Benefits for Deep (5 km) Greg Bignall Drilling in the Taupo Volcanic Zone, New Zealand		
10:40-11:20	Gudmundur Omar	Iceland Deep Drilling Project – IDDP-1 in Krafla drilled into >900°C hot magma – presently the world's hottest production well (450°C). Planning for drilling well IDDP-2 at Reykjanes	
11:20-12:00	poster presentation (2min introduction)		
12:00-13:00	Poster Session		
13:00-14:00	Lunch		
14:00-14:40	Alexey Kiryukhin	Possible Scientific Drilling Targets in Kamchatka, Russia	A. Okamoto
14:40-15:20	Hirofumi Muraoka	Japan Beyond-Brittle Project proposed for a geothermal energy paradigm shift in northeastern Japan	
15:20-15:50	Hiroshi Asanuma	Seismicity from geothermal reservoirs –prospects of seismicity from engineered geothermal systems in ductile zone	
15:50-16:00	Break		
16:00-17:00	ICDP Project	Discussion	N. Tsuchiya

## 17:45

Workshop Banquet

Time	Speaker	Title	Chairman
09:30-10:00	Yangting Lin	H isotope constraints on the magmatic and meteoric water of Mars: Evidence from the GRV 020090 martian meteorite	Konstantine Litasov
10:00-10:40	Katsuyoshi Michibayashi	Tonga Trench: A window to explore a mantle wedge system	
10:40-10:50	Break		
10:50-11:30	Shun-ichiro Karato	hun-ichiro Karato Water in the deep interior of the Moon: geophysical constraints and its origin	
11:30-12:10	Craig E. Manning		
12:10-13:00	Lunch		
13:00-13:30	Poster Session		
13:30-14:00	Konstantine Litasov	Solidi and melting phase relations of alkaline carbonatite at the deep mantle conditions	Takeshi Sakai
14:00-14:30	Anton Shatskiy Formation and extraction mechanism of primary kimberlite melt: experimental constrains.		
14:30-14:40	Break		
14:40-15:10	Seiichi Takami	Experimental challenge to realize K4 crystals	
15:10-15:50	Hiroaki Ohfuji	Experimental study on the phase transition mechanism of graphite to diamond under high pressure and high temperature	Anton Shatskiy
15:50-16:00	Break		
16:00-16:30	Takeshi Sakai The effect of light elements on Earth's core properties		
16:30-17:10	Oliver T. Lord	The Earth's core: the deepest carbon reservoir and other stories	

## Friday, 9th March, 2012

Time	Speaker	Title	Chairman
10:00-10:30	Noriyoshi Tsuchiya	Hydrothermal Derived Fracturing: Natural and Experimental Evidences	A. Okamoto
10:40-11:20	Craig E. Manning		
11:20-12:00 Derek Elsworth		Roles of Fluid Pressure, Thermal and Chemical Effects in Conditioning Permeability and Triggered Seismicity in Enhanced Geothermal Systems	
	Lab Tour in Aobayama		

## Saturday, 10th March 2012 Field Excursion / Guide: N. Tsuchiva

Field Excursion	/ Guide: N. Tsuchiya	
09:00	start from Univ	
09:15	Hotel Pick up	
10:00	Yuriage	閖上
	highway (Sanrikudo)	
12:00	Ohya Kaigan (Lunch)	気仙沼
13:00	Ohya Mine	大谷鉱山
13:30	Minami-Sanriku	志津川
14:30	Oppagawa River ( Ookawa )	大川小学校
16:00	Sendai	仙台