



# International Conference on Ophiolites and the Oceanic Lithosphere

## Results of the Oman Drilling Project and Related Research

**12<sup>th</sup> - 14<sup>th</sup> January 2020, Sultan Qaboos University, Muscat, Sultanate of Oman**

<https://conferences.squ.edu.om/icool>

### Objectives:

To provide a forum for discussion of the results of the Oman Drilling Project and other recent scientific research on ophiolites and the oceanic lithosphere  
To encourage the exchange of knowledge, ideas and experiences, between scientists, regarding the formation and evolution of ophiolites

### Conference Themes:

Results of the Oman Drilling Project  
Ophiolite genesis and the oceanic lithosphere  
Geodynamics and hydrothermal processes of ophiolites at spreading ridges  
Chemical and physical processes within oceanic magma chambers  
Formation of ore deposits related to ophiolites  
CO<sub>2</sub> sequestration, fluids and diagenesis within the oceanic crust.  
Geochemical cycles and geobiological studies related to ocean crust formation  
Tectonics of emplacement and metamorphism  
Hydrogeology of ophiolites  
Subsurface microbial ecosystems in gabbro and peridotite

### Important Dates:

1<sup>st</sup> Aug 2019: Deadline for abstract submission  
15<sup>th</sup> Sep 2019: Notification of abstract acceptance  
1<sup>st</sup> Oct 2019: Second Circular and Scientific Program  
30<sup>th</sup> Sep 2019: Deadline for early registration  
30<sup>th</sup> Nov 2019: Deadline for regular registration  
11<sup>th</sup> Jan 2020: Reception 19:00 - 21:00, SQU Faculty Club  
12<sup>th</sup> Jan 2020: Deadline for late registration

### Registration Fees (in US dollars):

Regular participants: \$200 (early) / \$300 (regular) / \$400 (late)  
Students: \$50  
Accompanying person: \$200  
Fees will cover conference materials, lunch, dinner, drinks and snacks during the conference



oman  
drilling  
project



Sultanate of Oman  
Public Authority for Mining



وزارة البلديات الإقليمية وموارد المياه  
Ministry of Regional Municipalities  
and Water Resources



United Nations  
Educational, Scientific and  
Cultural Organization

### Keynote Speakers:

- 1) Peter Kelemen, Columbia University, USA, "Mass transfer at the leading edge of the mantle wedge: Results from Oman Drilling Project Site BT1"
- 2) Marguerite Godard, France, "Fluid fluxes, mass transfers, carbon trapping and hydrogen production during serpentinization of the oceanic mantle lithosphere: Insights from drilling the Oman Ophiolite"
- 3) Damon Teagle, Southampton University, UK, "The impact on ocean chemistry of deep hydrothermal circulation through the lower ocean crust and upper mantle"
- 4) Mike Searle, Oxford University, UK, "Oceanic subduction initiation, ophiolite obduction and continental subduction: evidence from the Oman – UAE Ophiolite"
- 5) Juerg Matter, Southampton University, UK, "The hydrogeology of the active serpentinisation system in the Oman ophiolite"
- 6) Craig Manning, University of California, Los Angeles, USA, "Transformation of Serpentine to Listvenite as Recorded in the Vein History of Rocks From Oman Drilling Project Hole BT1B"
- 7) Eiichi Tazazawa, Niigata University, Japan, "Petrological and geochemical diversity in mantle section revealed by comparison between northern and southern Oman ophiolite"
- 8) Juergen Koepke, University of Hannover, Germany, "Studies of Ophiolites and Oceanic Lithosphere: Results from the Oman Drilling Project and Related Research"
- 9) Katsu Michibayashi, Nagoya University, Japan "X-ray-CT core imaging and its application to test a mantle flow model below a mid-ocean ridge spreading center"

### Field Trips:

Pre- and post-conference field excursions will be organized. Please indicate the field trip(s) you may attend, in order of preference, on your registration form.

#### **A: Igneous and metamorphic processes during formation and evolution of oceanic crust at spreading ridges, 11<sup>th</sup> January 2020**

*Excursion Guides: Peter Kelemen, Juergen Koepke and Damon Teagle. Cost: 50 OR*

#### **B: Wadi Abiad Moho–Nakhal Massif and chromite ores, 11<sup>th</sup> January 2020**

*Excursion Guides: Sobhi Nasir, Mohamed Al Kindi and Salah Khirbash. Costs: 50 OR*

#### **C: Accretion of the lower crust and initiation of hydrothermal cooling; locations are Samra, Wadi Wariyah, Wadi Gideah, 15<sup>th</sup> January 2020**

*Excursion Guide: Juergen Koepke. Costs: 50 OR*

#### **D: Deep-seated tectonic, magmatic and hydrothermal processes in a mantle diapir and in the lower oceanic crust: the Maqсад area of the Oman ophiolite, 15<sup>th</sup> January 2020**

*Excursion Guide: Georges Ceuleneer. Costs: 50 OR*

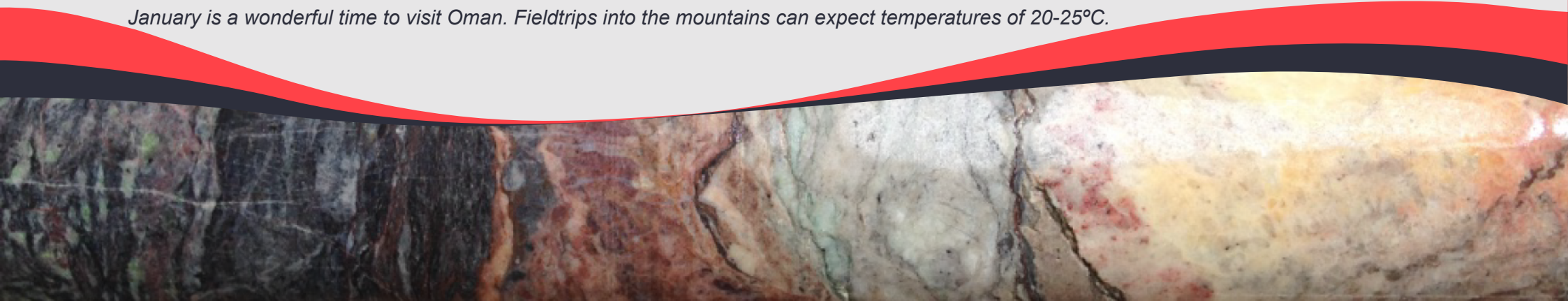
#### **E: Carbon mineralization and serpentinization in the Samail ophiolite, 15<sup>th</sup> -16<sup>th</sup> January 2020**

*Excursion Guides: Marguerite Godard, Peter Kelemen, Jürg Matter. Cost: 100 OR + accommodation*

#### **F: The Northern Oman ophiolite: Oceanic crustal succession, ocean ridge segmentation, hydrothermal system and igneous history of the Oman ophiolite, 15<sup>th</sup>-16<sup>th</sup> January 2020**

*Excursion Guides: Eiichi Tazazawa, Shoji Arai, Sumio Miyashita and Susumu Umino. Costs: 100 OR + accommodation*

*January is a wonderful time to visit Oman. Fieldtrips into the mountains can expect temperatures of 20-25°C.*





### **Scientific Committee:**

Dr. Osman Abdullah, SQU, Oman  
Dr Ibrahim Al Ismaili Geological Society of Oman  
Dr. Salah Al-Khirbash, SQU, Oman  
Prof. Françoise Boudier, Université de Montpellier, France  
Dr. Georges Ceuleneer, CNRS, France  
Dr. Issa El-Husaa'in, SQU, Oman  
Prof. Marguerite Godard, Université de Montpellier, France  
Dr. Talal Hosni, SQU, Oman  
Prof. Peter Kelemen, Columbia University, USA  
Prof. Juergen Koepke, Leibniz Universität, Germany  
Dr Salim Mahruqi, Public Authority of Mining, Oman  
Prof. Craig Manning, University of California, USA  
Dr. Juerg Matter, University of Southampton, UK  
Prof. Katsuyoshi Michibayashi, Shizuoka University, Japan  
Prof. Sobhi Nasir, SQU, Oman  
Prof. Adolphe Nicolas, Université de Montpellier, France  
Dr. Jörg Pfänder, TU Bergakademie Freiberg, Germany  
Prof. Hugh Rollinson, University of Derby, UK  
Prof. Michael Searle, Oxford University, UK  
Prof. Eiichi Takazawa, Niigata University, Japan  
Prof. Damon Teagle, University of Southampton, UK

### **Organizing Committee:**

Prof. Sobhi Nasir (Chair), SQU, Oman  
Dr. Osman Abdulla SQU, Oman  
Dr. Saleh Al-Anboory, Ministry of Oil and Gas, Oman  
Dr. Talal Al-Hosni, SQU, Oman  
Dr. Arshad Ali, ESRC, Oman  
Dr. Rashid Al-Abri, Ministry of Regional Municipalities and Water Resources, Oman  
Dr. Salah Al-Khirbash, SQU, Oman  
Dr. M. Al-Kindi, Geological Society of Oman  
Dr. Ali Al-Rajhi, Public Authority of Mining, Oman  
Mr. Hussam Al-Rawahi, Petroleum Development Oman  
Eng. Zaher Al-Suleimani, Director, Oman Water Society  
Dr. Issa El-Husaa'in, SQU, Oman  
Dr. Rajnedran Sankaran, ESRC, Oman

### **VISAs and Travel to Oman:**

VISAs can be offered for most European citizens online or at the airport. For information please visit:  
[www.rop.gov.om/english/dg\\_passport\\_visa\\_tourist.asp](http://www.rop.gov.om/english/dg_passport_visa_tourist.asp)  
We can assist in issuing the visa which will cost 20 OR

### **Accommodation:**

Hotel accommodation will be arranged upon request. Hotel rates range from US\$70 to US\$300 per day. More expensive luxury hotels are also available. Limited accommodation will be available on the campus. We recommend the following hotels, which will give a special rate for the participants:  
Holiday Inn Alseeb, Sundus Rotana, Golden Tulip Seeb.  
Transport to the conference venue will be provided only from these hotels.  
For more information please visit this website: <http://www.destinationoman.com/hotels.html>  
Because Oman is extremely busy in January we kindly recommend you to book your hotel as soon as possible.

### **Language:**

The official language of the Conference is English. There will be no simultaneous translation.

### **Abstracts:**

A model abstract and template are provided on the website (<https://conferences.squ.edu.om/icool>). Please download the abstract template from the website, copy and paste your abstract and submit online or to [sobhi@squ.edu.om](mailto:sobhi@squ.edu.om). Please identify the particular conference theme into which the abstract fits.

### **Scientific & Social Program:**

- Contributing participants will present their research in a diverse range of thematic sessions. The Program will include oral and poster presentations and field trips.
- A series of events and activities for participants and their accompanying persons will be announced in the Second Circular

### **Contact:**

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