

Subduction Zone Processes: Magma, Volcanoes, Ore Deposits, Geohazards



16 – 27 September 2019, Bremen, Germany

Invited Lecturers:

Richard Arculus (Canberra, Australia)
 Wolfgang Bach (Bremen, Germany)
 Christoph Beier (Helsinki, Finland)
 Gerhard Bohrmann (Bremen, Germany)
 Marie Edmonds (Cambridge, UK)
 Verena Heuer (Bremen, Germany)
 Katrin Huhn (Bremen, Germany)
 Achim Kopf (Bremen, Germany)
 Cin-Ty Lee (Rice Univ., USA)
 Anne Le Friant (Paris, France)
 Mark Hannington (Kiel, Germany)
 Ursula Röhl (Bremen, Germany)
 Klaus Wallmann (Kiel, Germany)
 and others ...

Venue:

MARUM – Center for Marine Environmental Sciences



with the

IODP Bremen Core Repository



University of Bremen
 Germany

The Topic

The cycling of metals and volatiles between oceans, subducted slabs, mantle, and arc volcanoes is critical for the evolution of our planet. It is the place where new continental crust is generated and some of the largest and richest ore deposits form. It is also the most hazardous geotectonic setting with violently explosive volcanoes, deep and strong earthquakes, and devastating landslides. Exciting new discoveries in subduction zone processes made in recent years are to a large extent fueled by IODP results. These are the base to address a range of first-order questions in geosciences: How is continental crust formed in subduction zones? How does element cycling in subduction zones affect the evolution of the Earth's mantle? How does volatile cycling affect the composition of atmosphere and oceans, now and throughout Earth's history? Do metallogenic super-provinces form in modern subduction settings?

The School

This summer school will combine lab exercises on IODP-style shipboard methodologies ("virtual ship"), as well as interactive lectures by world-leading scientists in the field subduction zone processes. Participation will help to prepare you for involvement in IODP and for research work in this field. The summer school will take advantage of the unique and integrated facilities offered by the IODP Bremen Core Repository and MARUM laboratories.

Application

To apply, please visit the course web page given below. A total of 30 participants can be accepted. The course fee is **€150**. Travel, accommodation and meals must be covered by the participants. The **application deadline is 19 June 2019**.

Scholarships

ECORD provides scholarships for students to attend ECORD summer schools. Applications from students of non-ECORD countries are also accepted. The **deadline** for applications to get an **ECORD Scholarship** will be announced on the webpage of the summer school (see below).



<http://www.marum.de/en/ECORD-Summer-Schools.html>