

ISPET - International Seminars of Petrology

Third Seminar

"High and Ultrahigh Pressure Metamorphism: A Window on Subduction Processes"

Monte Ortone (Italy), June 20-25 2004

We invite applications to the Third ISPET Seminar on " High and Ultrahigh Pressure Metamorphism: A Window on Subduction Processes ".

Period: June 20 (arrival) – June 25 (departure)

Venue: Hotel Terme San Marco, Monte Ortone (PD) – Italy

Participants: the School is limited to 30 participants at graduate level, with priority for students from partner institutions (two for each partner)

Program: The Seminar will consist of five days of lectures; an afternoon poster session is planned to enable the participants to present and discuss their research topics and results.

Topics covered in the Seminar will include: Modelling Subduction Zones and the Experimental Approach to Phase stability and fluid transfer; Slab devolatilization, fluid budgets, nature and compositions of released fluids; Fluids in high and very high pressure rocks and mechanisms of fluid/rock element exchange; Textures and mineralogy of natural high and ultrahigh pressure rocks; Pressure-temperature-time evolutions and exhumation processes of high and ultra high pressure rocks.

Preliminary list of lecturers:

Taras Gerya (ETH - Zürich, Switzerland); **Max Schmidt** (ETH Zürich, Switzerland); **Patrizia Fumagalli** (Univ. Milano, Italy); **Paola Comodi** (Univ. Perugia, Italy); **Stefano Poli** (Univ. Milano, Italy); **Pascal Philippot** (IPG Paris, Fr) ; **Zachary Sharp** (Univ. New Mexico, U.S.A.); **Marco Scambelluri** (Univ. Genova, Italy); **Maria Luce Frezzotti** (Univ. Siena, Italy); **Joerg Hermann** (RSES, Canberra, Australia); **Roberto Compagnoni** (Univ. Torino, Italy); **Gaston Godard** (CNRS UMR 7097 – IPGP, Paris, Fr); **Hermann Von Roermund** (Utrecht University, The Netherlands); **Gisella Rebay** (Univ. Pavia, Italy); **Daniela Rubatto** (ANU Canberra, Australia); **Alexei Perchuk** (Ruhr-University, Bochum, Germany)

Registration Fee: □ 250.00 covering accommodation, full-board treatment and teaching material. We expect to be able to give students a small contribution to travel expenses.

Important Deadlines:

25 April: Application, by email, filling the form which can be downloaded at:
<http://www.dmp.unipd.it/ISPET/form.doc>

10 May: Notification of accepted applications

20 May: Circular with final program and technical details

Scientific Committee

Bernardo Cesare, Roberto Compagnoni, Joerg Hermann, Pascal Philippot, Stefano Poli, Marco Scambelluri

Organizing Persons**Bernardo Cesare**

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Third ISPET Doctorate School
High and Ultrahigh Pressure Metamorphism: A Window on Subduction Processes
Monte Ortone (Italy), June 20-25 2004

Scientific Committee: Marco Scambelluri, Roberto Compagnoni, Joerg Hermann, Pascal Philippot, Stefano Poli,
Organizing Persons: Marco Scambelluri, Bernardo Cesare

Preliminary Program and Talks

SUNDAY JUNE 20 2004, Afternoon: Arrival

FIRST DAY, MONDAY JUNE 21 2004

Modelling Subduction Zones: The Experimental Approach to Phase stability and fluid transfer

Taras Gerya, *Geologisches Institut, ETH - Zürich, Switzerland*

Dynamics and structure of subduction zones and exhumation of (U)HP rocks: insight from 2D numerical modeling and visualization

Max Schmidt, *Institute for Mineralogy and Petrology, ETH Zürich, Switzerland*

Experimental strategies for simulating high-pressure processes

Patrizia Fumagalli, *Dipartimento Scienze della Terra, Milano, Italy*

Phase relations in mantle rocks

Paola Comodi, *Dipartimento Scienze della Terra, Perugia, Italy*

Mineralogy and structure of minerals at high and ultrahigh-pressure

SECOND DAY, TUESDAY JUNE 22 2004

Slab devolatilization: fluid budgets, nature and compositions of released fluids

Stefano Poli, *Dipartimento Scienze della Terra, Milano, Italy*

The budget of C-O-H components at subduction zones

Pascal Philippot, *Laboratoire de Géosciences Marines, Institut de Physique du Globe de Paris*

Fluid produced during HP and UHP metamorphism. Chemical and isotopic imprint

Zachary Sharp, *Dept. of Earth and Planetary Sciences, University of New Mexico, Albuquerque, U.S.A.*

An introduction to and applications of stable isotope geochemistry to high pressure rocks

Marco Scambelluri, *Dipartimento per lo Studio del Territorio e delle sue Risorse, Genova, Italy*

Fluid and element recycling in the subducted oceanic lithosphere

THIRD DAY, WEDNESDAY JUNE 23 2004.

Fluids in high and very high pressure rocks and mechanisms of fluid/rock element exchange

Maria Luce Frezzotti, *Dipartimento Scienze della Terra, Siena, Italy*

Fluids in UHP rocks: the fluid inclusion evidence

Joerg Hermann, *Research School of Earth Sciences, The Australian National University, Canberra, Australia*

Experimental and natural constraints on trace element recycling in subduction zones

Poster session

Fourth Day, Thursday June 24 2004

Natural High and Ultrahigh pressure rocks: Textures and mineralogy

Roberto Compagnoni, *Dipartimento di Scienze Mineralogiche e Petrologiche, Torino, Italy*

High and UHP rocks: occurrences and microstructures

Gaston Godard, *Laboratoire de Géosciences Marines CNRS UMR 7097 – IPGP, Paris*

Eclogite-facies poly-orogenic metapelites and metagranites: A case study from the Armorican massif (Variscan belt)

Hermann Von Roermund, *Department of Earth Sciences, Utrecht University, Utrecht, The Netherlands*

UHP minerals within garnet peridotites of the Western Gneiss Region, Norway.

Gisella Rebay, *Dipartimento di Scienze della Terra, Pavia, Italy*

PTX sections for high pressure rocks

Fifth Day, Friday June 25 2004

Natural high and ultrahigh pressure rocks: Pressure-temperature, time evolutions and exhumation processes

Daniela Rubatto, *Department of Geology, Australian National University, Canberra, Australia*

Geochronology of HP and UHP rocks and inferences on the rates of subduction and exhumation processes

Alexei Perchuk, *Institute of Geology, Mineralogy and Geophysics, Ruhr-University, Bochum, Germany*

Temporal aspects of HP rocks evolution: insight into exhumation process

FRYDAY JUNE 25. Afternoon End of the School