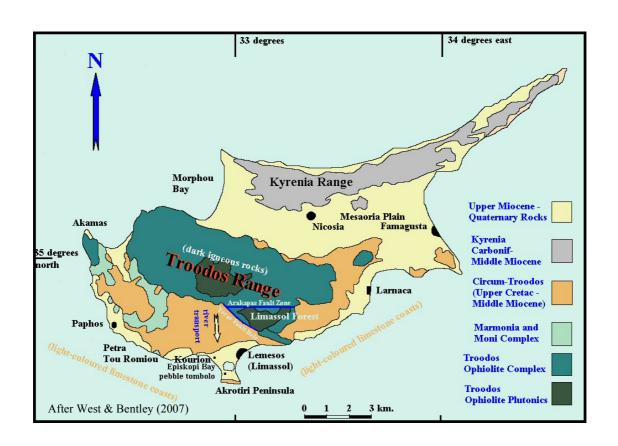


FIRST CIRCULAR OF THE SECOND IGCP-649 WORKSHOP

INVESTIGATING THE TROODOS OPHIOLITE, CYPRUS



Organized by IGCP-649 Project and the Geological Survey Department of Cyprus

May, 14th-20th, 2016

FIRST CIRCULAR OF THE 2nd IGCP-649 WORKSHOP TO INVESTIGATE THE TROODOS OPHIOLITE, CYPRUS

The 2016 IGCP-649 Workshop will take place on May 14-20, 2016 in Cyprus to investigate and discuss the origin of the world-famous Troodos ophiolite. Troodos is unique among the ophiolites of the world for its complete lithologic sequence, its structural integrity, its excellent exposures and its ease of access. It is one of the most studied ophiolites in the world and served as the model for the Penrose definition of ophiolites. Its original tectonic setting was the subject of much debate in the 1970s and early 1980s, which led to a general consensus that the Troodos Massif is a type example of the Supra-Subduction Zone (SSZ) class of ophiolites with a likely origin by slab rollback immediately following subduction initiation. The Troodos Massif is also famous for its copper deposits, which have been mined since Roman times, and for its smaller chromitite mines. In a very real sense, Troodos provides the lifeblood of Cyprus – the rain and snow pack that collects on Mt. Olympus recharges the aquifers, without which agriculture would not be possible.

This workshop is supported by the IGCP-649 project "Diamonds and Recycled Mantle". In 2015 CARMA (Center for Advanced Research on the Mantle) was awarded a new IGCP (International Geosciences Program) grant sponsored by UNESCO and IUGS, in support of our current work on ultrahigh pressure and highly reduced minerals in ophiolitic peridotites and chromitites. The project will undertake systematic sampling of peridotites-chromitites in ophiolites around the world with diverse ranges of ages and geochemical affinities in order to document, and explain, the extent of diamond occurrences in the mantle. This IGCP project provides support for a series of international workshops that will bring together students, young professionals and established researchers to discuss and to evaluate some of the most significant scientific problems and questions pertaining to the composition and dynamics of Earth's mantle. This is the second such workshop, following the successful excursion to the Qilian Mountains in 2015.

Travel Information and Venue

Cyprus is served by airlines from most European countries, which mostly fly into Larnaca Airport from which taxis and local buses will provide hotel transportation. The meeting will begin with registration at The Josephine Boutique Hotel in Larnaca

on the 14th May, where most participants will also spend the night. Participants will then travel by coach the next day (9.00 a.m. sharp on 15th May) to the conference hotel (the Rodon Hotel and Resort) in Agros in the Troodos Mountains, visiting a series of field localities en route. The Rodon Hotel and Resort will be the base for two conference and two field days. On the 20th May, the coach will return participants to Larnaca, again visiting field localities en route.

Information on The Josephine Boutique Hotel in Larnaca may be found on their website: http://thejosephinehotel.com. Information on the facilities providend by the the Rodon Hotel and Resort may be obtained from their website: http://www.rodonhotel.com/

PRELIMINARY SCIENTIFIC PROGRAM SCHEDULE

A two-day session for oral-poster presentations and a one-day Pre-Conference Field Trip and a two-day Post-Conference Field Trip to the Troodos range will be separately organized. The total number of participants is limited to 50, so if you don't want to miss this wonderful opportunity to explore the geology and spectacular scenery of Cyprus, contact us soon!

Schedule

14th May People arrive in Larnaca

15th May Coach takes people to the hotel in Agros via field localities (Field

Day 1).

16th-17th May 2-day meeting

18th-19th May. 2-days fieldwork (Field Days 2-3) 20th May. Coach takes people

back to Larnaca via field localities (Field Day 4).

21th May People fly home.

Field Excursions

Day 1: Troodos Dykes and Lavas. We will traverse the upper part of the Troodos oceanic crust, visiting the 'Ultramafic Lavas' (boninites) at Margi, the Agrokipia VMS copper deposit, the famous exposures of the lava sequence (sheet flows, pillow lavas and hyaloclastites) of the Akaki Canyon, and the sheeted dyke complex at Palekhori.

Day 2: Troodos Plutonic Rocks, Moho and Mantle Sequence. We will first traverse the plutonic sequence of the Troodos Ophiolite, visiting the varitextured gabbros and

plagiogranites underlying the sheeted dykes, followed by isotropic gabbros and then by cumulate gabbros and cumulate ultramafic rocks in a section between the Rodon Hotel and Amiandos. We will then cross the Moho and take an initial look at the Mantle sequence, first in a 'serpentinite diapir' associated with the Amiandos Asbestos Mine and then near the top of Mount Olympus.

Day 3: Troodos Peridotites and Chromitites. We will start at the scenic Troodos Village and follow the Atalante Nature Trail which winds its way through the Troodos mantle sequence and provides an opportunity to take a detailed look at the mineralogy and structure of the mantle harzburgites and their various gabbro, dunite and pyroxenite veins, and to see the Hadjipavlou chromitite deposit. Subsequently, we will visit a second dunite-chromitite body where melt-mantle reaction textures are particularly well-exposed and where past mining has left spoil tips from which research samples of chromitites may be collected.

Day 4: Arakapas Fault Zone. We will visit the fossil transform fault, with localities highlighting the volcanism (boninitic lavas), sedimentation and dyke swarm within the fault zone before examining the fault itelf, represented by a wide serpentinite shear zone with many sense-of-movement indicators. Our final localities will be the geotourist locality of Aphrodite's Rock and archeological locality of Kourion.

Terrane and Clothing

Field days 1, 2 and 4 will be close to roads, with only a few outcrops requiring (optional) short distance off-road walking on rough terrane. The first part of field day 3 involves a 9km walk along a near-level track. Temperatures will likely be hot at low altitudes (field days 1 and 4), and warm at high altitudes (field days 2 and 3). There is a low but finite probability of rain.

Costs

Conference fee: **650 EUR** for general participants sharing a room and **750 EUR** for those wishing a single room in the Rodon hotel. The conference fee includes transportation from and to Larnaca and during the field trip, conference materials, meals and hotel accommodation for the period 15th -19th May, including a bag lunch on May 20th. Accommodation in Larnaca will be the responsibility of the individual participants and a list of suggested hotels will be provided later.

The conference fee has been kept as low as possible in order to also attract PhD students and young researchers, as well as participants from developing countries. Those expressing interest in participating in the conference will be provided with

details on how and when to transfer the fee to the conference bank account.

Please email your interest in attending the conference by completing the registration form and emailing it to igcp649@163.com by the 15th of February.

Important dates

15th February The deadline for receipt of the registration form

15th March Deadline for abstract submission and payment of conference fee.

14th May Arrival in Larnaca

15th May The pre-conference field trip.

16-17th May Conference days

18-19th May The post-conference field trip.

20th May Return to Larnaca via further field locations, and cultural sites

Sponsored by

UNESCO (United Nations Educational, Scientific, and Cultural Organization)
IUGS (International Union of Geological Sciences)
Institute of Geology, Chinese Academy of Geological Sciences, China
Geological Survey Department of Cyprus

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For more information, please visit:

http://www.igcp649.com

Answer Form for 2016 IGCP-649 Workshop

Name		Gender	Nationa		nality	
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Please send this form to <u>igcp649@163.com</u> before Feb 15th, 2016.