

11th INTERNATIONAL ECLOGITE CONFERENCE, RIO SAN JUAN, DOMINICAN REPUBLIC

The 11th International Eclogite Conference (IEC-11) was held January 31–February 7 2015 in a self-contained hotel complex near the town of Rio San Juan on the northern coast of the Dominican Republic. The conference was attended by 91 participants from 19 countries. Forty-eight talks and 41 posters were presented over three days of conference sessions; the remaining four days were spent on field trips to some of the local exposures of high-pressure and ultra-high-pressure rocks. An 86-page field guide edited by A. Hertwig and W. Maresch (Ruhr-University Bochum, Germany) made it easy for participants to understand the local geology within the framework of the geodynamics of the entire Caribbean.



International Eclogite Conferences were established in 1982 and are organized in different countries every two years to promote worldwide communication and cooperation among scientists who study high-pressure and ultrahigh-pressure rocks. Such rocks are the key to our modern understanding of plate tectonics: bear in mind that it was only 25 years ago that metamorphic diamonds were first discovered in deeply subducted crustal rocks, revolutionizing our concepts of subduction and exhumation processes. Continuing that tradition, scientists from Austria, China, the Czech Republic, England, the Dominican Republic, Germany, France, Japan, Mexico, the Netherlands, Poland, Turkey, Italy, Russia, Sweden, Slovenia, Southern Korea, Spain, and the USA presented their petrological, geochemical, and geochronological research on subduction-related rocks and processes and discussed how these bear on large-scale tectonic evolution. The poster sessions provoked intense discussions that continued well into the night. A final highlight was the award ceremony, where the best student talk and poster awards went to Anastasia Mikhno (Novosibirsk, Russia) and Wan-Cai Li (Hefei, Anhui Province, eastern China).

Field trips are, without doubt, a specialty of the International Eclogite Conferences. Although the IEC-11 was focused on the central four-day conference block, the meeting also included three field trips: a one-day “syn-conference” field trip and two 2-day pre- and post-conference field trips. These field trips illustrated the variety of (ultra)high-pressure rocks that are representative of the fossil subduction-zone complex that is exposed on this Caribbean island.

The two-day pre-conference field trip was led by Walter Maresch, Andreas Hertwig, and Hans-Peter Schertl (Ruhr-University Bochum, Germany) and focused on the serpentinite mélanges of the Rio San Juan Complex (Fig. 1). These rocks are interpreted to represent the



FIGURE 1 The pre-conference field trip to Magante (Dominican Republic) showing concordant jadeite layers in blueschist facies blocks of the Rio San Juan serpentinite mélange.

former subduction channel of an intra-oceanic island arc that has been moving eastward relative to the Americas for more than 100 million years and which is today represented by the Lesser Antilles. Highlights in the field were all the different kinds of jadeitites and jadeite-lawsonite rocks, blueschists, eclogites and serpentinites, as well as the memorable and remarkable tropical weather we experienced. The first day in the field was characterized by an uncommonly steady but warm rain, resulting in a second day of very muddy and slippery footpaths. “Fortunately” the rivers had swollen to the extent that fording them helped to clean our shoes and trousers.

The syn-conference field trip covered geological as well as archaeological aspects. After an introduction by Adolfo López Belando (Museo del Hombre Dominicano) to the excavation site of a pre-Columbian Taino village at Playa Grande, where a multitude of jadeite artefacts have been found, the participants visited the famous Amber Museum at Puerto Plata. Walter Maresch, Hans-Peter Schertl, Andreas Hertwig, and Grenville Draper (Florida International University) then showed us further outcrops of the Rio San Juan Complex.

The two-day post-conference field trip was led by Richard Abbott (Appalachian State University), Grenville Draper and Walter Maresch. Highlights of the first day were eclogites and garnet peridotites from Las Cuevas of the southern Rio San Juan Complex, a locality characterized by scenic cocoa plantations and a multitude of non-geological photos. The exhumation mechanisms necessary to produce such a rock inventory within an intra-oceanic environment led to intense discussions. The second day brought us to the picturesque Samaná Peninsula (Fig. 2) and a coastal exposure of a mélange-like outcrop of blueschists and eclogites within a metasedimentary matrix dominated by marble



FIGURE 2 The post-conference field trip to the Samaná Peninsula at Punta Balandra (Dominican Republic), participants viewing some blueschist and eclogite blocks in a metasedimentary marble matrix.

– considered by many participants to represent a “textbook” locality. The final stop at the palm-rimmed coral beaches of Las Galeras was a fitting farewell to the Caribbean.

The organization of IEC-11, in this somewhat unusual but certainly beautiful location, rested in the hands of an organization committee headed by Walter Maresch and Hans-Peter Schertl. Many thanks to them and the whole organization committee for perfect organization and the highly interesting field trips. The conference building was surrounded by lovely palm trees, and the “all inclusive” hotel was the “bedrock” of excellent spirits and a contagiously good atmosphere.

Further information on the IECs is available at www.rub.de/eclogite. The upcoming IEC-12 will be organized 2017 in Sweden.

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