Preface

The 9th IEC field trips in the Bohemian Massif are designed to illustrate the geological relations, lithological and geochemical features, and metamorphic evolution of different high-pressure and ultrahigh-pressure crystalline segments that formed by subduction and collision during the Variscan orogeny. The field trips will transect the orogen, and participants will have an opportunity to examine various lithologies and PT evolution of HP and UHP crustal and mantle rocks, which were exhumed along subduction channels and subsequently reequilibrated under HT granulite facies conditions in the orogenic root.

The two-day pre-conference field trip will visit the main HP and UHP localities in the Saxothuringian zone of the Bohemian Massif, beginning in the high-grade rocks at Saidenbach, including coesite- and microdiamond-bearing gneisses, continuing in garnet peridotite at Zöblitz in Germany, and ending in the low-temperature eclogite at Meluzína in the Czech part of the Erzgebirge. The main focus will be to understand the tectonic and metamorphic evolution of the Saxothuringian zone during the Variscan orogeny.

During the one-day mid-conference field trip, we will visit eclogites in the ophiolitic Marianské Lázně Complex, which is located between the Saxothuringian zone and Tepla-Barandian unit. It is a polymetamorphic complex containing eclogite and amphibolite, in which the main HP and subsequent amphibolite facies metamorphism occurred during an early stage of the Variscan orogeny. In addition to eclogite, serpentinized spinel peridotite and metagabbro will be examined during the field trip.

The four-day post-conference field trip will traverse more then 200 km in the Moldanubian zone, focussing on high-pressure granulites that contain lenses and boudins of eclogite, garnet peridotite and garnet pyroxenite. The field trip will start in the southern Bohemian granulite massif in the Czech Republic, continue in the Dunkledsteinwald in Austria, progress along the eastern border of the Moldanubian zone to the north in the Czech Republic, and end in the central part of the Moldanubian zone in the Kutná Hora complex. In addition to HP/UHP mafic and ultramafic rocks in HP felsic granulites of the Gföhl Unit, we will visit selected eclogites in the Monotonous Unit of the Moldanubian zone.

January 11, 2011, Prague

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