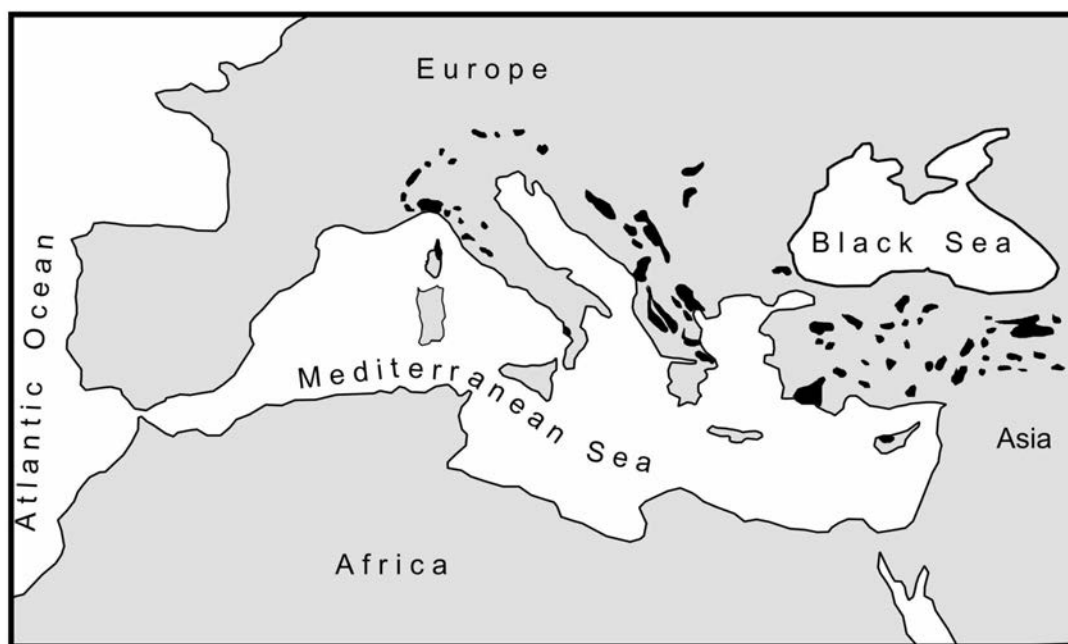


Special Section

Working Group on Mediterranean Ophiolites

**GEODYNAMIC AND TECTONO-MAGMATIC SIGNIFICANCE
OF OPHIOLITES FROM THE PERI-MEDITERRANEAN
OROGENIC BELTS**



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FOREWARD

Ophiolites have been a stimulating and interesting topic of multidisciplinary research since their recognition as on-land exposures of fossil oceanic crust in the early 1960s. Since those times, the ideas on the tectonic setting of formation of ophiolites, mechanisms of their incorporation into continental margins, and their geodynamic significance in the formation and evolution of orogenic belts have significantly varied over the years. Over the past 30 years, a fundamental role for refining the general ideas on ophiolites has been played by multidisciplinary researches on ophiolites from the peri-Mediterranean orogenic belts (Tethyan ophiolites), which have produced a wealth of data and observations and have significantly improved our knowledge of the tectonic, magmatic and metamorphic processes through which the oceanic lithosphere is generated and transformed.

The G.L.O.M. (Working Group on Mediterranean Ophiolites) session at the 6th Italian Forum on Earth Sciences held in Rimini, Italy, 12-14 September 2007, provided an excellent opportunity to evaluate and discuss the most recent observations, data and ideas on ophiolites from the peri-Mediterranean orogenic belts. New observations and data were presented for a number of ophiolitic complexes located in the peri-Mediterranean orogenic belts, including Western Alps, Alpine Corsica, Northern and Southern Apennine, Albanides, Hellenides and central Anatolia. Multidisciplinary discussion on igneous petrogenesis of ophiolites, melt and fluid flow in the oceanic lithosphere, tectonic and metamorphic evolution of ophiolites, emplacement tectonics of ophiolites sedimentary processes in the ophiolitic covers and biostratigraphy of radiolarian cherts, involved active participation of many researchers, from Italy and abroad.

This Special Section of *Ophioliti* contains a collection of research papers presented at the 6th Italian Forum on Earth Sciences with the aim of propagating new data and models on various aspects of the peri-Mediterranean ophiolites to the international community.

A systematic geochemical investigation of ophiolitic basalts and metabasalts from Alpine Corsica is presented by Saccani et al. in order to understand the petrological processes responsible of their formation. Hellenide ophiolites are investigated in the Othrys area (External Ophiolitic Belt) by Bortolotti et al. through a synergetic combination of biostratigraphic, petrologic and tectonic expertise in order to constrain the Triassic evolution of the Vardar oceanic basin, as well as by Saccani et al. in the Guevgueli area (Internal Ophiolitic Belt), where the complex association of back-arc basin basalts and volcanic arc calc-alkaline rocks confirm the existence of an ensialic back-arc basin in that area. For Central Anatolia, Goncuoglu et al. provide new biostratigraphic and petrologic data in support of the debated existence of a Jurassic ridge spreading in the poorly known Intra-Pontide branch of the Tethys. For the Western Alps, Fontana et al. and Panseri et al. presented two companion papers on the oceanic to orogenic evolution of serpentized ultramafic sequences and associated mafic rocks from the Mount Avic (Piemonte Ophiolitic Nappe) based on new field, petrographic and mineralogical data. The antigorite-titanian clinohumite-diopside schists and the enclosed rodingitized mafic rocks are interpreted as products of oceanic metasomatism and tectonic and metamorphic evolution of the Alpine orogeny, at the expense of abyssal peridotites intruded by mafic rocks at a fossil slow-spreading ridge setting.

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