Book:

The Geology of Iberia: A Geodynamic Approach Quesada, C. & Oliveira, J.T. – Springer, 2019 Volume 2 – Variscan Cycle Capítulo 13

Variscan Magmatism

M. L. Ribeiro et al.

DOI: 10.1007/978-3-030-10519-8_13

Abstract:

This chapter aims to identify, characterize and locate the main facts/events related to orogenesis in the Iberian Peninsula. Its succession in space and time determines the geodynamic environment of the broader geological phenomenon corresponding to the Variscan cycle. In this sense, this section comprises two parts: I—The Iberian orogenic magmatism seen through a space-time approach of its westernmost region—focus on the enormous complexity of the inherited basement, its nature, age and distribution in space. Establishes a space-time sequence of geodynamic environments correlated with the obtained data and tries to identify the agents responsible for its genesis. Some case studies are presented to illustrated significant regional aspects of the magmatic process and II—An overview of the petrogenesis of the great batholiths and of the basic, intermediate and mantle-related rocks—identify and analyze a great amount of these rocks intruding and extruded from 400 to 280 Ma and to better understanding the large-scale process involving the whole lithosphere during Variscan cycle.

Citation:

Ribeiro, M.L., Castro, A., Almeida, A., Menéndez, L.G., Jesus, A., Lains, J.A., Lopes, J.C., Martins, M.H.B., Mata, J., Mateus, A., Moita, P., Neiva, A.M.R., Ribeiro, M.A., Santos, J.F., Solá, R. (2019) – Variscan Magmatism. In: Quesada C., Oliveira J. (eds) The Geology of Iberia: A Geodynamic Approach. Regional Geology Reviews. Springer, Cham, Vol. 2, The Variscan Cycle, Cap. 13, pp 497-526. ISBN 978-3-030-10518-1; DOI: 10.1007/978-3-030-10519-8_13