

Ore Elements in Arc Lavas

Most of the world's great volcanic massive sulphide ore deposits, most of its porphyry copper ores, and many of its richest gold deposits occur in association with basalt-andesite-dactite-rhyolite lava suites that have been erupted from the volcanoes of ancient volcanic island arcs and their Precambrian equivalents. The volcanic arc and related aquatic-volcanic environments are now recognized as critical to an understanding of the evolution of the earth's crust, to the unravelling of the petrogenesis of many important ore types, and to the planning of much mineral exploration. This book is concerned with the behaviour of the 'ore elements' - copper, zinc, lead, cobalt, nickel, barium, and other - in young, unmetamorphosed volcanic arc suites ranging from high-magnesium basalts to dactites and rhyolites. Using principally the Late Tertiary to Recent lavas of the Solomon Islands Younger Volcanic Suite, the author considers the patterns of abundance of these elements both in the 'whole rocks' and their constituent minerals, and the way in which the metals may be enriched or impoverished in the residual melt as an arc lava series evolves from basalt to rhyolite.

OXFORD MONOGRAPHS ON GEOLOGY AND GEOPHYSICS • 28

Ore Elements in Arc Lavas

R. L. STANTON



OXFORD SCIENCE PUBLICATIONS

164,85 €

154,07 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780198540502

Medium: Buch

ISBN: 978-0-19-854050-2

Verlag: Oxford University Press

Erscheinungstermin: 16.06.1994

Sprache(n): Englisch

Auflage: Erscheinungsjahr 1994

Serie: Oxford Monographs on Geology and Geophysics

Produktform: Gebunden

Gewicht: 1064 g

Seiten: 404

Format (B x H): 195 x 254 mm

