

S. P. Verma

MEXICAN VOLCANIC BELT

PART 3A

S. P. VERMA
Guest Editor

PREFACE

This is the third part of the Special Volume on Mexican Volcanic Belt (MVB). The first and second parts of the MVB contain each a total of nine papers published in *Geofísica Internacional*, Vol. 24, No. 1, p. 1-216 (216 p.) and Vol. 24, No. 4, p.459-708 (250 p.) respectively. Vol. 24 of *Geofísica Internacional* published a total of 708 pages in scientific articles. The MVB volume (parts 1 and 2) thus consisted of about 65.8% of this journal. Because of the heavy response and large interest in the subject of Mexican Volcanic Belt, it has been necessary not only to prepare the third part of this series but also to subdivide it into two sections: 3A and 3B.

The first half of the third part (Part 3A) contains a total of five papers, four of which are written in English. Fourteen authors from eight institutions have contributed to this special issue.

The first paper by S. E. Cebull and D. H. Shurbet reports on an intraplate transform model for the origin of the MVB. They argue that the present orientation of the MVB is controlled by an older (Mesozoic and/or early Cenozoic) fracture or zone of weakness, so its origin need not be related to present subduction.

The second paper (in Spanish) is by L. Manzanilla and M. C. Serra and deals with the vast variety of biological resources of the Basin of Mexico that were exploited during 2 500 bC - 1 500 dC. Inclusion of this paper in the MVB series in particular and the journal *Geofísica Internacional* in general, reflects the inter-disciplinary nature of modern research.

In the third paper, M. Cameron, K. Spaulding and K. L. Cameron present an interesting and useful synthesis and comparison of the geochemistry of volcanic rocks from two important geologic provinces of Mexico: Sierra Madre Occidental (SMO) and Mexican Volcanic Belt (MVB). They point out some significant geochemical differences that exist between the two provinces and thereby suggest different modes of origin of the magmas.

The fourth paper by J. J. McGee, R. I. Tilling and W. A. Duffield gives a description of the petrologic characteristics of the 1982 and pre-1982 eruptive products of El Chichón volcano, Chiapas, Mexico. These authors suggest a uniformity of chemical composition of the magmatic products during ~ 0.3 m.y. period.

The fifth and final paper of this issue is by G. T. Nixon, A. Demant, R. L. Armstrong and J. E. Harakal and gives an excellent summary of the K-Ar and geologic data on the MVB and their implications on the evolution of this important volcanic province.

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