

## PREFACE

The third international working group meeting of IGCP Project 246 was held in August, 1989 at the Federico Santa María University in Valparaíso/Viña del Mar, Chile, as a special symposium in conjunction with the 6th Inter-Congress of the Pacific Science Association. The conference was attended by 40 geoscientists from 12 different countries which contributed 30 papers focusing on Pacific Neogene Events.

Paleogene and Neogene sections in southern Chile, in the Magallanes basin, a petroleum-bearing back-arc basin in and around Punta Arenas and a forearc basin in Valdivia were examined and studied. Some Neogene sections in northern Chile were visited after the closing of the congress, a major topic being the magnificent Neogene section exposed on the coast of Caleta Herradura de Mejillones, north of Antofagasta. At these exposures, it was possible to examine the lithostratigraphy, biostratigraphy and various events in the southeast Pacific layer by layer from 18Ma of Early Miocene through 5 Ma of Pliocene time. On the basis of abundant occurrences of planktonic and benthic foraminifers, successions of important Miocene datum levels were recognized in the section, by which various events in the East Pacific could be correlated more precisely with those of the west Pacific.

The articles included in the present issue of the *Revista Geológica de Chile* were presented to and accepted by the editorial staff of *Revista Geológica de Chile*. The editing work in Chile was coordinated by Prof. R. Martínez-Pardo, of the Universidad de Chile, Santiago de Chile, co-covener and organizer of the meeting. Thanks are given to Prof. Martínez-Pardo and to all the unnamed reviewers for their helpful and invaluable cooperation.

The work by Ibaraki is placed first since it involves a broad biostratigraphic study of several very critical marine Neogene sequences of Perú and Chile based on planktonic foraminifera. A paper by Tsuchi follows in which five marine climatic and/or evolutionary events of Japan are discussed with reference to those on the Pacific coast of South America according to planktonic microfossils. The next two papers, by Krebs *et al.*, and Padilla and Elgueta, deal with the age and paleoceanographic significance of the Caleta Herradura diatomite at Península de Mejillones, Antofagasta, its probable continuous extension up to Caleta Patillos, near Iquique, and to southern Perú. The paper by Garrison discusses the different types of Neogene phosphatic sediments and their distribution and significance in the eastern Pacific, including some unresolved questions requiring further investigation. The final paper by Whatley is placed last in sequence only because it differs from the others by being a micropaleontological synthesis about the evolution of Cainozoic deep-sea Ostracoda in the southwest Pacific.

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