
Preface

During the past thirty years, studies on intraplate and ridge-centered volcanism have become an important aspect of planetary geology and have helped to elucidate the mechanisms of mantle convection and crust-lithospheric construction. This work has stimulated and improved multiple lines of scientific research and led to many seagoing expeditions in uncharted oceanic basins where there was very little previous information.

The fourteen papers presented in this volume were contributed by some of the outstanding members of a pioneering oceanographic community whose work has enhanced our understanding of the geophysical, morpho-structural, geochemical, hydrothermal and associated phenomena related to oceanic hotspots.

All the authors and editors are particularly indebted to the support from government agencies in France, Germany, the USA, Canada and England as well as several research institutions in these countries. It is thanks to their funding and logistic support that we have been able to carry out extensive exploration in such remote areas of the world's oceans.

The data and samples obtained at sea are also the result of a valuable collaborative effort among the captains, officers, crewmembers and the scientific teams on board the oceanographic vessels. In addition, the engineers and pilots from "GENAVIR" (Groupement pour la Gestion des Navires Océanographiques) who worked on board the submersibles *Cyana* and *Nautille* were extremely helpful in gathering the in situ observations and samples that were the basis of some of the research presented in this volume. Without all this precious collaboration in obtaining the samples and data used by the authors of this volume, our work would not have been nearly as successful.

The editors especially acknowledge the support received from the three research centers that were mainly responsible for seventeen years of Franco-German collaboration related to the program on Intraplate Volcanism. Dr. R. Hekinian has recently retired from the Institut Français de Recherche et Exploitation de la Mer (IFREMER) in Brest, France, Prof. P. Stoffers is Research Director at the Geoscience Institute of Kiel University in Kiel, Germany, and Dr. J. L. Cheminée † was Directeur de Recherche at the Centre Nationale de Recherche Scientifique (CNRS), Observatoires Volcanologiques, Jussieu, in Paris, France.

The volume "Oceanic Hotspots" has also been made possible thanks to the Alexander von Humboldt Fellowship awarded to one of the editors (Hekinian) and to the many years of work, research and publishing by all the authors and editors who have contributed to this book. In addition, we are thankful to Drs. R. Batiza,

I. Campbell, J. Casey, J.-L. Charlou, C. Deplus, P. England, J. Francheteau, A. Hirn, J. Natland, E. Okal, J. Pearce, and M. Regelous for their comments and criticisms of the various chapters of this volume.

Finally, the three editors sincerely thank Virginia Hekinian for her editorial assistance, and the staff of Springer-Verlag Publishing for their collaboration. R. Hekinian is also grateful to the Department of Marine Geosciences at IFREMER Brest and to the University of Kiel for the generous help and technical support received during the preparation of this volume.

October 2003, Saint Renan, France

Oceanic Hotspots

Intraplate Submarine Magmatism and Tectonism

Hekinian, R.; Stoffers, P.; Cheminée, J.-L. (Eds.)

2004, XVI, 480 p., Hardcover

ISBN: 978-3-540-40859-8