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.

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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 Océnographiques) who worked on board the submersibles Cyana and Nautil in 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.

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