



FOREWORD

Forty years of Brazilian Antarctic research: A second volume

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This special volume of the *Annals of the Brazilian Academy of Sciences* (ABC) is the second one commemorating the 40 years of ongoing activity in the Brazilian Antarctic Program (PROANTAR). The first one was published last year (Kellner 2022) and dedicated to the late Professor Antônio Carlos Rocha-Campos, president of the Scientific Committee on Antarctic Research (SCAR) from 1994 to 1998 (Simões et al. 2022).

This volume is being published just after the implementation of the second decadal action plan for Brazilian Antarctic science covering the period 2023–2032 (Ministério da Ciência, Tecnologia e Inovações 2023). This plan presents strategic guidelines for the management of polar science. The advancement of national research in Antarctica covered all areas of knowledge, including efforts to disseminate polar science, expanding the dissemination of information generated and results obtained, and producing benefits for the entire society. For the first time, it gives attention to Human and Social Sciences and amplifies the Brazilian Polar research to the Arctic.

The research in Antarctica is multidisciplinary and fundamental for understanding the processes that occur at high latitudes and their global relevance. It contributes to recognizing environmental and climate changes at different time scales (from geological to historical ones), fostering the interface between public policies and scientific knowledge. Following this idea, we present this multidisciplinary volume, which includes glaciological articles (on glaciers retreat and the consequent changes in glacial morphology and how it affects the distribution of benthic organisms, biogeochemical and oceanic characteristics of fjords, the environmental interpretation of ice cores), geophysics of the upper atmosphere, permafrost and its fast changes. In short, it overviews the rapid environmental changes in the northern tip of the Antarctic Peninsula and offshore islands.

Many of the results reported in this volume result from actions of Brazilian scientists within the scope of activities promoted by SCAR and in cooperation with colleagues from various countries. Most of the research described here was funded by the Brazilian Ministry of Science, Technology and Innovations (MCTI) through the National Council for Scientific and Technological Development (CNPq) within PROANTAR's scope. The production of this volume also received financial support from the National Institute of Science and Technology of the Cryosphere (INCT da Criosfera).

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