

BOOK REVIEWS

SCIENTIFIC REPORT : TENTH INDIAN EXPEDITION TO ANTARCTICA (1995); Technical Publication No.8, Department of Ocean Development, New Delhi; pp.297.

This scientific report brought out by the Department of Ocean Development (DOD) records in substantial detail the scientific and logistic tasks accomplished by the Tenth Antarctica Expedition (November 1990 to March 1992 including the wintering period and the to and fro cruises).

The expedition team consisted of 100 members drawn from thirteen research organisations, the three Defence Services, Survey of India, All India Institute of Medical Sciences, Defence Institute of Fire Research and the Indo-Tibetan Border Police. Dr. A.K.Hanjura of the National Physical Laboratory was the Expedition Leader.

Scientists from the Geological Survey of India (GSI), National Geophysical Research Institute (NGRI), National Institute of Oceanography (NIO) and the Indian Institute of Geomagnetism represented Earth Sciences in the team and carried out preassigned tasks.

For example, officers of the Geological Survey of India carried out systematic geological mapping in southern Humboldt Mountain of the Wohlthat range covering about 1000 sq. km. Samples for detailed petrological and geochronological work were also collected in the process. In addition, glaciological studies, ice-berg monitoring and meteorite-search was also carried out.

The NGRI team conducted sampling in Peterman (I, II & III) Range, Gruber Mountain and Schirmacher Oasis for geochemical studies with particular emphasis on modelling the breakup of Gondwana Land. Scientists of the NIO collected water samples from equator to 60° S and in Polynya for phytoplankton counts, chlorophyll pigments, bacterial count and trace element analysis. Further, sampling in 15 fresh water lakes of the Schirmacher Hills was done to study trace elements and organic carbon in water.

Similar special studies in Atmospheric and Meteorological Sciences, Physical Sciences, Agricultural Sciences and Medical Sciences were also carried out by scientists from the other research organisations. The results of the scientific investigations are presented in this report in the form of 22 scientific papers devoted to specific aspects.

This hard-bound publication printed on art paper with several illustrations in colour is elegantly brought out by the DOD, deserving all praise. The role played by the defence service personnel in making the expedition successful is also highlighted and acknowledged. The Antarctica Expeditions are an example of great possibilities in interdisciplinary team work on common scientific problems, given the will, clear cut definition of goals and good leadership.

Indian scientific community can justifiably feel proud of the Antarctica studies carried out so far that could form the basis of even more intensive and extensive future endeavours.

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