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**Proceedings of the
5th Meeting on Italian Antarctic Glaciology
2005**

Editors

Massimo Frezzotti, Valter Maggi & Roberto Udisti

5th Meeting on Italian Antarctic Glaciology (5th CONGA)

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convened by

Giuseppe Orombelli, Valter Maggi, Roberto Udisti

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The Talos Dome camp.

Foreword

The 5th Meeting on Italian Antarctic Glaciology (5th CONGA) was held in Milan from 19 to 21 October 2005 at the University of Milano-Bicocca. The meeting was organised by the Glaciology Sector of the Italian *Programma Nazionale di Ricerche in Antartide* (PNRA) with the co-sponsorship of the Department of Environmental Sciences of the University of Milano-Bicocca, ENEA – Laboratory of Climate Observations and the European Project for Ice Coring in Antarctica (EPICA).

The meeting aimed to convene the different and multi-disciplinary competences on several aspects of glaciology, atmospheric processes and natural cycles of climatic and environmental markers in Antarctica. The knowledge and expertise exchange between Antarctic researchers, especially young scientists, was one of the main goals of this meeting in order to form and improve a collaborative and fruitful network on Antarctic studies. Particular attention was spent in discussing the present situation of glaciological investigation in Antarctica and the future developments, such as the incoming deep coring at Talos Dome, the Dome C – Dome A traverse and the study of the sub-glacial lakes in the Aurora Basin.

The meeting benefited from a large number of oral and poster presentations focused on palaeo-climatic and palaeo-environmental studies carried out by the reconstruction of high-resolution chemical, physical and isotopic stratigraphies covering up the last 900 kyr obtained from the deep ice cores drilled in the framework of the EPICA program (European Project for Ice Coring in Antarctica). Besides, model studies and experimental evidences were discussed around several other research fields, such as mass balance of Antarctic ice sheet, ice-ocean-atmosphere interactions and ice sheet dynamics, sub-glacial lake exploration, permafrost –climate relationships and search for meteorites.

About 90 persons attended the meeting and presented 75 scientific contributions. In this issue, we have collected 47 peer reviewed extended abstracts subdivided into the following subjects:

- Mass balance, detection and monitoring of changes in glaciers
- Palaeo-climatic and palaeo-environmental information from ice cores
- Atmosphere-snow interaction
- Bedrock topography and sub-glacial lake exploration
- Permafrost
- Antarctic Biology
- Meteorites
- Antarctic exploration technology

Local organization was managed by Giuseppe Orombelli (Chairman), Massimo Frezzotti, Valter Maggi and Ernestina Pellegrini.

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