

## **Mapping the global structure of Antarctic research vis-à-vis Antarctic Treaty System**

Prabir G. Dastidar\* and Olle Persson†

\*Department of Ocean Development, Block 9 and 12, CGO Complex, New Delhi 110 003, India

†Umea University, Department of Sociology, SE-901 87 Umeå, Sweden

Keywords: Antarctic research, Antarctic Treaty System, global structure, scientometrics.

ANTARCTICA is a continent of science and peace, a common heritage of mankind. This fifth largest continent is governed by a set of guiding principles, the Antarctica Treaty System (ATS)<sup>1</sup>. The ATS is the basic instrument for managing the activities in this icy continent. Conducting science is occupying a central place in ATS. Currently, there are 45 treaty member nations: 28 consultative (voting) and 17 acceding states. This icy, coldest and windiest continent is covered with a sheet of ice with more than 2 km average thickness (4.7 km at its thickest point). Locked up in thick ice sheet is a record of past climate for the last 500,000 years. Antarctica provides an ideal setting for conducting frontier science (Figure 1). It has a scanty flora, but a rich fauna, including many species of fish, birds and mammals. It has no permanent human population. Today, there are 37 year-round research stations, run by 20 nations, operating in the continent. Belgium, The Netherlands, Ecuador, etc. (Consultative Parties) do not have any permanent bases, but instead use the infrastructure of other nations in collaborative efforts. In this paper we have attempted to visualize the structure of science that is being pursued by the countries in the framework of the ATS.