

Chapter 1

History of International Collaboration on the Exploration and Development of the Arctic

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ABSTRACT

The chapter discusses the key lines of international collaboration in the fields of exploration and development of the Arctic, from the first autonomous expeditions of the late 19th century to the powerful long-standing joint research conducted by thousands of scholars from all over the world. The chapter outlines the key trends of international cooperation within the framework of the exploration of the Arctic, as well as forecasts its development in the future. It is expected that the long-standing comprehensive studies of the Arctic will be continued due to the specific importance of this region for the future of the mankind. Robotic marine expeditions will start a new era in the exploration of the Arctic Ocean. Taking into account the complexity and high costs of polar studies and the growing interest of many countries to the High North, the international collaboration in the Arctic is expected to grow.

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INTRODUCTION

The chapter is devoted to the analysis of the key trends of international cooperation in the field of development of the Arctic, from single autonomous expeditions dated back to the late XIX century to the best-equipped comprehensive long-term research-focused surveys that are bringing together thousands of scientists from dozens of states. In spite of the fact that the compulsory research programs in the field of astronomy, meteorology, those related to aurora polaris studies as well as hydrographical, hydrological, botanical, zoological and geological research have been implemented since 1881, their technological capacity still meets up-to-date research challenges. The authors have outlined the main formats of international cooperation and suggest a forecast of their prospective development in the field of environmental safety, security of energy supply, logistics, science, trade, etc. There is brief information on the territorial disputes that created conditions for the militarization of the Arctic. It is expected that the long-term comprehensive research of the Arctic will be continued with regard to their role and position in the ongoing global processes that determine further development of the humankind. Due to the complicatedness and expensiveness of the needed research and increasing interest in the Arctic, expressed by many countries, international cooperation in the field of joint research is expected to strengthen and grow.

Discovering and development of new territories in extremal natural conditions is feasible only if it is based on a proper level of science and industry. The building of solid and powerful ships that could force through the Arctic ice and prepare the way for other ships of the team, made it possible to organize and implement the first expeditions. In 1899, the first in the world ice-breaker “Ermak” was built thus starting the development of the Arctic fleet for the exploring of the Northern Sea Route (NSR). From 1900 to 1902, the Imperial Academy of Sciences launched the first Russian research expedition to the Arctic.

On the one hand, the research results of the first and other expeditions that followed were of independent scientific value. On the other hand, they made it feasible to upgrade the technical capacity for new unique data gathering. This peculiarity is missing in the most of the published expeditions’ descriptions. It used to be a practice to stress the braveness of the explorers, history, chronology, specifications of certain expeditions where the discoveries had been made.

This chapter is aimed at the analysis of the mutual development of technical capacities, research goal, and obtained results. This goal is followed by some specific objectives. First, it is planned to evaluate the experience of the first polar expedition as a shift towards international cooperation. Second, the development of international cooperation in the Arctic is going to be considered and analyzed. Third, there will be given an evaluation record on the state-of-art of international cooperation.

BACKGROUND

History of the Arctic Development Before the XX Century

The first data on the Arctic research date back to 325 BC when Greek sailors started to look for stannum deposits. In Pitheas’ diaries, written during the surveys, the author turns out to be the first to describe the Polar lights and perpetual day (Roseman, 1994; Hawkes, 1977). Medieval records made Vikings tells us about the discovery of the White Sea, Greenland, and Northern America (Questia, n.d.). Hunting, fishing, and whaling caused the most of the maritime expeditions. The contemporary territories

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