

*Materials of Conferences***DEVELOPMENT OF OIL AND GAS FIELDS AT THE NORTH: INFORMATION SUPPORT OF THE PROBLEM**

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The information flow on oil and gas fields geology, exploration and exploitation is very significant, but dispersed in bibliographic tools. Researches carried out on this topic need to be accompanied by information support using new information technologies. SPSTL SB RAS provides information support of scientific research through the creation of electronic bibliographic resources. Materials touching various aspects of oil and gas fields geology, exploration and exploitation are concentrated in the databases «Problems of the North» and «Nature and natural resources of Siberia and the Far East and their protection and rational use» generated by the Division of Scientific Bibliography. The first one covers issues on exploration, evaluation of hydrocarbon resources, extraction, storage and transportation of oil and gas under permafrost conditions, the second – fields geology and prospecting. DBs of SPSTL's own generation are formed on the basis of the legal deposit of national literature and foreign literature entering the scientific institutions of SB RAS, and include various types of documents: books, articles from periodicals, serial publications and scientific journals, conference proceedings, dissertation abstracts, deposited manuscripts, guidelines, patents, maps and atlases, etc. Records of DB contain a bibliographic description, an annotation, geographic and subject headings, translations of foreign publications. Search for material in DBs is possible by key words from the title, abstract, or translation, authors, editors, year and place of publication, geographic or subject heading, publication type and language.

The documentary flow (DF) on «Development of oil and gas fields of the North» was selected out of DB «Problems of the North», which exceeds 10,000 documents from 1987 to 2010 in Russian and foreign languages. A brief scientimetric analysis of DF was made. The analysis of DF dynamics revealed its stable growth since 1995 indicating a renewed interest of scientists and experts in this subject. Low publication activity of the Perestroika period is explained by extremely poor funding of research.

The greater part of DF documents are represented by articles from periodicals (33%). More than a half of DF are proceedings of conferences and articles in collected papers (31% and 23% correspondingly). Abstracts of dissertations and monographs are about 7% of DF, patents – 3%.

The geographical analysis of DF identified the key areas of research: the north of West Siberia (70%), the European North (including the Arctic shelf) (20%). Materials for foreign North are presented mainly by works on the Northern slope of Alaska (USA) and the Mackenzie Delta (Northwest Territories of Canada), the Athabaska basin (Alberta, Canada).

The DF thematic structure highlighted three main spheres of research: geological (the study of hydrocarbon resources of the northern territories); technological (the development of techniques for drilling in the northern fulfillment and technologies for the extraction of oil and gas in permafrost and on the Arctic shelf; ecological (studying effect of oil and gas extraction on northern ecosystems and environmental issues). Information from our DB can be found at the Library Internet site www.spsl.nsc.ru.

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GEOMECHANICAL PECULIARITIES OF DESTRUCTION OF FRAGILE MATERIALS WITH USAGE OF PLASTIC MEANS IN PERCUSSIVE REGIME

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Based on the analysis of features of natural stone, as well as the condition of problem of geomechanical provision for its processing, the author of this report came to the following conclusions:

1. Natural stone, like other kinds of solid raw materials, has a number of specific main and additional features. Thereby a technologist of mining production faces the problem of accounting physical and mechanical characteristics, mineral composition of a rock, and presence of a crack system in it, possibility to use waste products of the main and repeated production, solidity, ornamentality, safety, seasonal prevalence of works, and also size and shape of the future monoliths (blocks) at the same time.

2. According to the modern world trend, the overall production of natural stone in blocks and products of it increases. It makes the problem of increase in its breaking efficiency through introduction of new methods, means, and technologies of its realization urgent.

3. A gradual shift of the leading region of production and processing of natural stone from Europe to Asia takes place in the world.