

Assessment of the Research Activities of Russian and Belarussian Scientists (according to Scopus Data)

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Abstract—The publication activity of Russian and Belarussian scientists, the degree of reflection of their papers in Scopus databases, and the data on the citation of Belarussian authors in the works of other researchers are discussed.

Key words: publication activity, Russian and Belarussian scientists, Elsevier Publishing house, DB Scopus.

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Elsevier Publishing house is one of the largest scientific publishers in the world, viz., 24.6% of all electronic scientific papers in the world and 40% of all European authors' papers are published by them, with a great number of journals with high citation indexes being among its offerings. According to loading statistics, Elsevier covers 50% of all information resources.

The central scientific library of the National Academy of Sciences of Belarus (CSL NASB) is the only library in Belarus that provides access to the full collection of journals published by Elsevier, which covers 1796 journals from 24 subject fields.

Scopus—the Elsevier publishing house reference database—includes reference information on the articles from 15000 scientific journals from 4000 publishers, 750 proceedings of scientific conferences and other published sources. Physical sciences include 5500 names; medicine—5300 (100% Medline); biological sciences—3400; social sciences—2850. The total database volume is 28 million abstracts (since 1966); annual replenishment is 1.1 million documents. In addition, the database includes 245 million bibliographical references from the sources since 1966, 13 million patent records from four patent organizations; annually the database is replenished by 25 million references. None of the other known databases exceeds this database at present.

Citation information built into the information search system is one of the main functions that distinguished Scopus from other reference databases. Information is presented by a new method differing from the Web of Science database (the scientific citation databases produced by Thomson Scientific, formerly the Institute of Scientific Information (ISI), Philadelphia).

The system allows searching by the original country (e.g., Belarus). One may find Belarussian authors, the journals they published in, subject fields, type of document (article, book, review, abstract, etc.); year of pub-

lication, reveal the most frequently cited authors; sort the articles by citation index and look through the most frequently cited Belarussian authors; review the most cited papers of Belarussian authors, indicating the number of publications in which there are references to Belarussian authors, etc. The authors' identifier (a type of comprehensive record on an author) and reviews of the citations in a work by year are available.

In accordance with the goals of monitoring of the scientific–engineering integration process of Russia and Belarus conducted by CSL NASB and Library of Natural Sciences of Russian Academy of Sciences (LNS RAS) under the financial support of the Belarussian republican scientific foundation for fundamental research and Russian humanitarian foundation we have analyzed the degree of reflection of the papers of Russian and Belarussian researchers in the Scopus and Web of Science databases, as well as the data on citation of works of Belarussian authors in the works of other researchers.

In all in 1993–2006, 395736 publications by Russian authors including 343980 articles and 16958 publications of Belarussian researchers (including 14224 papers) were found in Scopus. During the entire period under consideration the data do not differ substantially from the data obtained by LNS RAS and CSL NASB by the Web of Science database. However, if we compare the data for 1997–2006 then we notice a small increase in the number of publications in the Scopus database: Web of Sciences contained an average of 27654 documents by Russian authors annually, while Scopus—32444 (1.17 times more) (Fig. 1). The same picture is observed in relation to Belarussian publications: 1147 documents in Web of Science and 1395 in Scopus (1.22 times more).

The main body of documents contained in the Scopus and Web of Science databases includes 86.9% and 91.4% of those by Russian authors and 82.8% and 92.6% of those by Belarussian researchers, respec-