


Proceedings of the 8th International Conference
on Webometrics, Informetrics and Scientometrics (**WIS**) &
13th **COLLNET** Meeting



23-26 October 2012, Seoul, Korea

Edited by
Ho-Nam Choi, Hye-Sun Kim, Kyung-Ran Noh,
Seon-Hee Lee, Hye-Jin Kang, Hildrun Kretschmer



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The Presence of Iran and its Counterparts in science arena during 1996 and 2010

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Abstract

Since it is essential for the research policy makers to acquire knowledge about the global ranks of their countries in different subject areas, scientometrics experts have been always ranking and analyzing countries on the basis of 'total number of papers', 'total number of citations' and 'citations per paper', etc. In this paper, the data in SCImago has been used to analyze and evaluate the global ranks of Iran, Turkey, Saudi Arabia, India, South Korea and South Africa. These countries had a similar growth trend in many indicators of science and technology in the past, however, they achieved different international ranks in different subject areas in the last decade. This article mainly deals with the extent of presence of these countries in different subject areas, their international global ranks and comparing them with each other.

Key Words: SCImago, Scientific activity, Iran, India, South Korea, South Africa, Turkey, Saudi Arabia, Ranking, Papers, Citations, Citations per Document, H-Index, Self-Citation


Introduction

South Africa, one of the most important countries of Africa, has undergone numerous developments during the last two decades considering the expansion of its indicators of sciences and technology. These developments mainly resulted from its independence and freedom from Apartheid. Other countries such as South Korea and India in Asia have had such improvements in various indicators of sciences and technology that have attracted many communities of science and technology as well as global markets to their products and services. Moreover, Islamic Republic of Iran, as another Asian country which had faced imposed war up to late 1980s, initiated its development programs in different scientific, cultural, economic and political aspects. (Gange, Etienne Vignola and Archambault, Eric. 2004). The development programs in each of these countries have had different influences in their scientific, cultural, economic and social aspects. The extent of participation and the global place of each of these countries in the production of science have been always considered as the most important indicators of science and technology. Therefore, it is possible to evaluate the quality of performance of these countries with the above-mentioned information and merging them with the results of separate studies which are carried out on the situation of each country through other indicators of science and technology. It is essential to emphasize that it is impractical to judge about their scientific developments in all aspects only on the basis of the information retrieved from these indicators. Therefore, this information makes it only possible to evaluate and compare the scientific outputs of these countries. The evaluation of ideality of their performance requires another independent research which would be conducted to identify the extent of input which was required to produce such output. (Arabi, M. 2003).

SCImago is one of the most important bases of SCOPUS which can be used to analyze the international places of countries regarding their production of scientific production. Besides, it offers data for ranking scientific production, countries, and journals in the world on the basis of these indicators: "number of document", "total number of citations", and "citations per document". Furthermore, introduces "*H-index*" and "*International collaboration*". Since SCImago covers a

Comparative survey on scientific collaboration of Iran with Canada, Germany, Pakistan, Turkey and South Korea based on Web of Knowledge

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Abstract

In comparison to the past decades, almost all of the studies indicate this fact that because of the various benefits of cooperation in quantity and quality of countries scientific outputs, scientific collaboration has grown. Considering the importance of identifying the status of Iran's international scientific cooperation in selected science and technology priorities in the scientific roadmap of Iran, including nanotechnology, nuclear energy, medical and electronics field, in comparison with other pioneering countries and those who are in the level of Iran in mentioned subject fields, we selected, Canada, Germany, Turkey, South Korea and Pakistan. Among the studied countries, the Canada had the highest amount of scientific cooperation with Iran and then, respectively, Germany, Turkey, South Korea's and finally Pakistan.

Introduction

Today, phenomenon of information explosion, specialization, emergence of various branches of science, notable scientific equipment, technology growth and other reasons have impressed scientific societies and caused that scientists increase their scholarly communication with the other scientist throughout the world. (Didgah and Erfanmanesh, 2009)

Scientific and research collaboration is defined as a joint work of scientists for achieving common aims, that is one of the main indicators of scientific development and has become the fundamental issue of science policy making (Riahi; Norouzi, 2011).

The evaluation of scientific collaboration is based on "co-authorship" and "joint patent" indicators (Velayati; Norouzi, 2008). In comparison to the past decades, almost all of the studies indicate this fact that creating joint publications have grown and because of the various benefits of cooperation in quantity and quality of countries scientific outputs, this act is considered in the world and the number of scientist in the all of world who have co-authorship articles have been increased. (Zheng, et al., 2012; Osarehet al., 2010; Didgah and Erfanmanesh, 2008; 2009; Osareh et al., 2008; Vang et al., 2005)

The present paper mainly aims to have comparative evaluation of Iranian scientific collaboration status in terms of selection of science and technology priorities in the scientific roadmap of Iran, including nanotechnology, nuclear energy, medical and electronics field with other selected developed and developing countries, included Canada, Germany, Turkey, South Korea and Pakistan during years 2005 to 2011 based on WOS database to addresses the different aspects of Iran international collaboration with this selected countries. Different studies

Appropriate Indicators for Evaluation and Ranking the Iranian Universities

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Introduction

In recent year university ranking is one issue that is more discussed inscientometricsdistrict. In Iran we should apply proper approach in designing indexes for university ranking by pay more attention to international standards. mustconsidered native sciences and native criteria identicalnational goals & benefits according to Iranian Islamicadvancement pattern. This study, investigate indicators used in ranking systems, and during a survey of experts identified and introduced appropriate indicators for evaluation and ranking the Iranian universities.

Objective

The main aim is identification appropriate indicators for evaluation and ranking the Iranian universities, with look after ten international universities ranking systems: ARWU, QS, THES, HEEACT, Webometrics, Leiden, SCImago, 4ICU.org, URAP and ISC. Moreover, with analysis university ranking indicators during a survey of experts identified appropriate indicators for evaluation and ranking the Iranian universities.

Methodology

For data collection, about indicators of ranking systems, has been investigated the website of each ranking system. Indicators collected from international ranking systems in the three-step questionnaire was distributed among the selected experts and with Excel software analyze data.

Conclusions

During administered 3 round of questionnaire among 12 expert in scientometrics department in Iran 26 indicators confirm for Ranking the Iranian Universities.

Introduction

Universities in every country have vital role in educational, political & social development. Every year from 2003 world universities ranked by different systems, web sites and national & international magazine. Several countries make their ranking national systems and evaluation & ranking their universities and research institutions. university ranking might be different base on various countries situation (political, economic, social and...). The process of globalization has almost changed life. Higher education has also undergone dynamic changes along with the process of globalization. Internationalization of higher education is the main offshoot of this process. Obviously the business world is most