

Scientometrics: status and prospects for development

Moscow, 10-12 October 2013

The international conference on scientometrics was held at the headquarters of the Russian Academy of Sciences (RAS) in Moscow. It was organized and hosted by the Institute for the Study of Science (ISS) of RAS in partnership with Thomson Reuters (TR). Among more than 120 participants were experts in information science and scientometrics from various regions of Russia and 34 scholars from the United Kingdom, Germany, France, the Netherlands, Switzerland, China, Ukraine, and Estonia.

The conference acknowledged the outstanding contributions of Prof Vasily Nalimov, who coined the term *scientometrics* in his famous book "Naukometriya" (Scientometrics) back in 1968.

At the opening ceremony, Professor Levan Mindeli, Director of the ISS, welcomed participants and reflected on the Government's science policy. He particularly noted that "it is symbolic that our conference is being held at the time when the use of scientometric indicators to evaluate the efficiency of scientists and research organizations can radically change the structure of the Russian science community. The forum for professionals in this field is assembled in a difficult period of reforms, and it is a contribution to the preservation of science in our country". It should be noted that the Russian Parliament recently initiated reforms in the field of science, which include the merging of the Russian Academy of Medical Sciences (RAMS) and the Russian Academy of Agriculture Sciences (RAAS) with the RAS. A new agency was organized to take responsibility for the property, regulate financial allocations, and manage research activities in the Academies by the end of December 2013.

The opening plenary presentation by Dr Valentina Markusova and Prof Levan Mindeli focused on comprehensive bibliometric analysis of the RAS and Higher Education Institutions. It also overviewed the Government's science policy. Managing director of the TR's Russian branch Alexei Novikov informed the audience about the TR's products and introduced a new analytical tool InCites.

Prof Hildrun Kretschmer, the co-ordinator of the Collaboration in Science and Technology (COLLNET, Germany) dedicated her plenary talk to this international interdisciplinary organization which was founded in Berlin in 2000. The goal of the COLLNET is to facilitate collaboration in scientometrics, infometrics, and webometrics. Prof Kretschmer referred to the outstanding research by an American philosopher and historian of science, the late Prof Direk De Solla Price, Prof Donald Beaver (Williams College in Massachusetts, USA) and others who pioneered in scientometric research.

Dr Vladimir Mayer from the Institute of Political Sciences (CNRS, France) delivered an elegant presentation on the research landscape in France. He particularly described bibliometric indicators for research evaluation in the context of the recent reforms in science and technology.

Dr Ed Noyons, deputy director of the well-known Centre for Science and Technology Studies (CWTS, Netherlands),

introduced a database developed by Leiden University and licensed by TR (<http://www.leidenranking.com>). It performs a wide range of scientometric analyses. Dr. Noyons listed the main functions and limitations of bibliometric indicators and emphasized the need for a standardized approach to these indicators. The presentation was packed with graphical material which included a visualization of the international research partnership of the Moscow State University.

Another major presentation was by Prof Liming Liang (Institute for Science, Technology and Society, Henan Normal University, China) and Zhen Zhong (China School of Management, Henan University of Technology, China). These scholars analysed errors in referencing the literature and the unacceptable practice of copying reference lists. They presented an example of a highly influential article which has been cited 224,397 times since 1970, with 8.5% of the citations containing mistakes (Laemmli UK. Cleavage of structural proteins during the assembly of the head of bacteriophage T4. *Nature* 1970; 227(5259):680-5.). Concluding remarks stressed the shared responsibility of the authors and science editors in appropriate referencing.

The conference was full of brilliant lectures and memorable educational and social events. Notably, Drs Sergey Paramovov and Pavel Kasyanov (Thomson Reuters, Russia) arranged two courses on scientometrics of great interest to most participants. The farewell reception was hosted by the ISS. It allowed strengthening of ties between collaborators and forging of new friendships. The next day's tour to the Kremlin turned into a very special event for all participants, who were impressed at the depth of the cultural and historical heritage of Russia.

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Conference participants at the farewell reception (V. Markusova is the second from left)