

CROSBI – A tool for monitoring scientific productivity

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Short bibliography: Jadranka Stojanovski is a head of the Library at the biggest research institute in Croatia – Ruder Boškovic Institute. Her recent work includes several projects: library network system "Croatian scientific information system (SZI) - Sciences" (<http://prirodo.irb.hr>), digital library about scientific and professional papers "Croatian scientific bibliography CROSBI" (<http://bib.irb.hr>), access to the relevant databases for the academic and research community of Croatia "Centre for online databases" (<http://baze.irb.hr>), and the most recent project "Who's who in Science in Croatia?". She is involved in the continuous education of librarians and users, and has taught different seminars on database retrieval, web searching, evaluation of web resources, digital libraries etc.

Extended Abstract:

The Croatian system of higher education includes public and private universities, polytechnics and schools of higher education under the supervision of the Ministry of Science and Technology (MST). The universities cover faculties, academies of art and schools of higher education. There are four universities and 27 scientific institutes in Croatia. There are about 9,000 full-time and 1,000 part-time employed researchers with university level education. Scientific research in Croatia has been financed through Ministry of Science and Technology through agreed projects performed by universities and institutes with a mechanism of annual monitoring of results. The monitoring also includes the information on scientific production published during a particular program/project.

The concept of the Croatian Scientific Bibliography (CROSBI) arises from the lack of a source of reliable bibliographic data for Croatian scientists, like a database containing papers published by the Croatian scientists working on current research projects. This database daily updated with new publications is monitored by local libraries, which ensure the accuracy of publications currently accessible in the database.

Such an electronic bibliography in the network environment supported by new information technologies offers numerous possibilities. Besides standard bibliographic data, electronic bibliographies also encompass other information such as full-text or multimedia. This bibliography often contains the records of the documents, which have not yet been published in a paper form or might never be. Such a bibliography can contain information about patents, computer programs or various scientific contributions, which would never be covered by traditionally

printed bibliography or other published items. The electronic bibliography equipped with searching, sorting, filtering and ranking tools is an easily accessible and available source for different scientometric analyses on national or global scales.

A completely new approach is introduced in the CROSBI electronic bibliography, since it has been generated by the authors, whereas the librarians as information specialists provide forms, standards and monitoring of the process. The entire bibliography (<http://bib.irb.hr>) is available on the Web and records could be edited by the authors or accessed by the readers.

The concept of such an electronic bibliography is intended to provide comprehensive and accurate information:

- about scientific output in Croatia, including all media;
- about ongoing research projects supported by the Croatian Ministry of Science and Technology, academic and research institutions, and researchers;
- about scientific productivity inside specific subject fields (such as chemistry, physics and the like);
- full-text archive of Croatian publications;
- the source of reference which scientists can use when writing their reports or publications;
- local institutional bibliography (all papers published by authors who are employees of a certain institution);
- local personal bibliography;

CROSBI project provides an access to all the information related to the scientific research in Croatia. Apart from improving scientific communication, and Croatian scientist promotion, the bibliography enabled proper and accurate evaluation of research projects.

There are several modules on the CROSBI main page which are well supported by detailed instructions and examples:

1. Browsing (by the list of active scientists, current projects, institutions, etc.)
2. Simple Search
3. Advance Search
4. Data input
5. Data corrections.

Some crucial bibliographic data are collected in English language as well (title, keywords, abstract). The English version interface is completed recently. Full-text documents are stored in the database permanently and available depending on the permission getting from author. The bibliography is supervised and the bibliographic records controlled and corrected by the librarians working on the project. The librarians became knowledge facilitators, organisers, managers and supervisors of the information system, which grows every day bigger and more popular. Due to constant feedback from researchers, who use CROSBI in their everyday work, after five years we are fully aware of all the achievements and still some system disadvantages.

Lots of questions such as those related to different electronic publishing issues, copyright agreements and electronic journals as well as those connected with indexing and retrieval are yet to be discussed and analysed within the of this project. Future surveys, if undertaken, could contribute to the understanding of the digital library environment and new opportunities.

Managing bibliographic records of scientific papers in the network environment has many issues. The way IT helps scientists to handle the information, and the way scientists are included in the process of cataloguing bibliographic references, are some of them. CROSBI supports the approach that those who generate information should be the first to record it. As an information creators scientist are in full competent to be bibliographic information provider as well. Furthermore, CROSBI demonstrates that such a complex work could be carried out with very limited funds. The support of governmental bodies included in the R&D field is no less important. Thus, without strong influence and support of Ministry of Science and Technology, the electronic bibliography would have been developed with lot of difficulties. Further, the library profession and librarians as knowledge collectors, organizers and disseminators had an important role in the whole project.

The electronic bibliography as described here has not much in common with traditional bibliographic tools. Its priorities are currency, accuracy and access. Being a rapidly changing structure, it tries to implement all requests coming either from users or librarians. Bearing in mind all imperfections of the system, we find our continuous contact with scientists motivating and progressive.

The greatest importance of the whole system is not in the system itself, but in its content. Scientific output as a result of research performed on scientific programs and projects in a five years period is certainly impressive. All scientometric studies and papers take into account just the most significant part of Croatian scientific output - journal articles from the journals indexed by the Institute for Scientific Information secondary publications. The insight into publications, their types and number shows publishing habits of Croatian scientists. A more detailed analysis could provide information on differences between scientists from different subject fields and much more.