

OPEN SCIENCE PLATFORM OF THE UNIVERSITY OF BELGRADE

The platform was adopted on the basis of the Open Science Platform enacted by the Ministry of Education, Science and Technological Development of the Republic of Serbia (act No. 119-01-263/2017/14/2 of 09.07.2018.), and pursuant in accordance with to the Strategy on Scientific and Technological Development of the Republic of Serbia for the period 2016–2020.

The platform applies to the university community members who carry out their scientific research activities in affiliation with the University of Belgrade.

The platform affirms the concept of open science, which provides researchers and the public with free and up-to-date access to reviewed scientific publications, primary data generated during research and other research results, with the aim to accelerate the exchange of scientific information, and the repeatability of obtaining and verifying scientific results, which in turn has a positive effect of the scientific, technological and economic development of the community.

The platform was created with the understanding that open science is based on a system of logic that is significantly different from the prevailing traditional research and academic practice at the University of Belgrade. Therefore, its introduction is a process that involves a gradual but fundamental change in academic culture.

1. What are the benefits of open science for researchers and for the University of Belgrade?
 - a. An increase of the visibility and impact of the results of scientific research. For researchers, this is a prerequisite for increasing citation rates; at the same time, the recognition of the University of Belgrade in the world can be improving.
 - b. Free access to research data, methodology and analytical software enables the scientific community to reproduce and critically review the results of the original authors. Such a synergy of the members of the scientific community is beneficial to the advancement of science, the promotion of academic communication, and distancing from practices that are contrary to academic honesty.
 - c. Free access to research data and the result based on them increases the possibility of improving research methods, which directly stimulates the development of science.
 - d. The use of standard content identifiers (DOI, ORCID, etc.) guarantees adequate recognition to authors, institutions and funders, and contributes to the quality of the citation analysis.
 - e. On the one hand, the body of the up-to-date publicly available scientific information is enriched, while on the other, society, at least partly, frees itself from the obligation to pay access to the results of such this research (through a subscription to science publications) along with funding it.

f. It provides direct public insight into the utilization of public funds spent on scientific research.

2. What does the implementation of open science principles mean in practical terms to researchers?

a. The results of their research (articles, books, etc.) will be made available to the public via the Internet, in compliance with the *Creative Commons* and similar licenses. This does not challenge the substance of the copyright protection of the materials made available to the public, but the copyright is rather used in a manner that implies the approval of the copyright holder that any third party may access the copyrighted material, record it on a computer and print it on paper, for use in research or other work without paying a compensation. The only obligation that third parties have is to respect the author's right of paternity (the obligation of a third party to cite the name of the author in bibliographic or other references) and the author's right to the integrity of his or her work (prohibiting third parties from making changes to the work).

b. Making available to the public via the Internet the research data used in creating the material under (a), so that the conclusions reached in these materials could be critically evaluated.

c. Making research software used for data analysis accessible to the public via the Internet, so that the entire research process is reproducible.

d. It is implied that activities in points (b) and (c) will not always be possible. The researcher has the right not to publish his or her results or research data, for example, until the completion of the series of publications relying on the data. In such cases, the principles of open science do not foresee any pressure or demand to publish.

e. When making publications and data available to the public via the Internet, it is important to use standard persistent identifiers (DOI, ORCID, etc.) to increase the visibility and facilitate the reproducibility and critical evaluation of the results of scientific research.

3. What are the specific obligations of the researchers?

Researchers have the obligation to deposit the electronic versions of all scientific publications that have been published in affiliation with the University, and in particular those created as a result of projects funded by the responsible ministry, in the corresponding repository of the University of Belgrade. The research data collected during the research, the peer-reviewed manuscripts (the so-called *post-print*), various types of materials, audio-visual materials, working documents, posters, presentations, reports, and similar can be deposited in the repository.

Professors and researchers are advised to enable open access to these materials whenever there are no legal and/or ethical limitations.

4. The University of Belgrade made the first step towards the affirmation of the open science principle by introducing a system of mandatory deposit of defended doctoral dissertations into the University's electronic repository. Further steps lead to dealing with several types of difficulties and obstacles.

a. It is necessary to alter perception and past practices based on an 'ownership' relationship towards research results and data. The transition to a culture of open science implies the adoption of a different system of values and incentives, which at the same time ensures a greater transparency of science, reducing the costs of disseminating the results of scientific research and contributing to a fairer evaluation of researchers and their institutions.

b. It is necessary to optimize the organization of publishing activities at the University of Belgrade, and adjust it to the operation in an open-access regime on a rational basis. At the same time, it is necessary to develop a modern IT infrastructure required by open science.

c. It is necessary to re-examine the existing rewards and incentives in the career development of professors and researchers, as well as the existing criteria for the evaluation of scientific contributions in order to integrate the values and good practices of open science, and eliminate or understate everything that is in conflict with open science.

5. The University of Belgrade will establish an Open Science Committee as an expert body with the mandate to affirm the principles of open science and coordinate all activities for the gradual introduction of its principles.

(Open Science Platform of the University of Belgrade was adopted by the Senate of the University of Belgrade at its session held on March 13, 2019.)