# **Editing Organization Profiles in SCOPUS and the RSCI: Facilities Comparison**

V. N. Gureev and N. A. Mazov

Trofimuk Institute of Petroleum Geology and Geophysics, Siberian Branch, Russian Academy of Sciences, Novosibirsk, Russia e-mail: GureyevVN@ipgg.sbras.ru, MazovNA@ipgg.sbras.ru Received October 19, 2015

Abstract—This article describes the experience in editing organization profiles in Scopus and in the Science Index for organizations system, which is an add-on to the Russian Science Citation Index (RSCI). The basic functionalities of the two systems are analyzed and comparison of the Science Index for organizations with the possibilities of editing an organization profile in Scopus is carried out. An attempt is made to give an objective assessment of the current state of the two systems from the user's point of view. The conclusion is made that despite the more extensive functionalities of the Science Index for organizations, the feedback system in Scopus is well thought out and provides better control of changes that are requested by organizations. In the system of editing the profile of an organization in the RSCI the functional tools are characterized by a low level of moderation, which has a formal character; therefore, it can be used not only to edit a profile, but to create unreasonable increases in the values of bibliometric indicators.

Keywords: Science Index, RSCI, Scopus, organization profile, publication activity, addition of publications, bibliometrics, scientific journals

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### INTRODUCTION

The modern abstract and scientometric databases (DBs) provide ample possibilities for identifying metadata of publications, allowing one to group, on the one hand, and to differentiate records of certain bibliographic fields, on the other. Important steps to improve the metadata identification of various digital objects are being taken by international committees, as well as the database owners [1, 2]. Mostly due to this the results of bibliometric studies are becoming a more reliable and authoritative information source for executive decision making in science. However, fully automatic methods cannot be said to be perfected; semiautomatic information processing methods remain the best solution. This is particularly important in two problem identification domains, viz., authors and organizations.

This problem is mainly solved by two methods. The first comes from below, from authors and organizations; this is the manual processing of information on publications that are exported from a scientometric DB. The data on the publications of an author, research team, or organization that were brought together are the most accurate factual basis and allow one to conduct exact accurate bibliometric studies. The disadvantage of this approach is that these data are stored locally in an organization and often are not available to other users, who are interested in obtain-

ing accurate and complete information about the publication activities of a scientist, team, or institution. The second approach proceeds from the developers and owners of the database itself and is manifested in the creation and improvement of record-processing algorithms, as well as additional tools for authors of publications and for institutions. These tools allow us to edit the corresponding data on authors and organizations, viz., their profiles (e.g., records in the database, accumulating information on the number of publications, citations, years of publication activity, area of research, h-index, and a list of the used literature sources, etc.) so that the most complete and accurate information about the publication activity of the author or an organization is reflected in the most scientometric database and thus becomes available to all users.

One important step in this direction is the trend towards the unification of the two identified approaches that have been initiated by DB developers. The new data-processing method, which is similar in its concept to wiki technology, according to which the users can independently change data using the tools that are provided in the database, is expected to attract many users to co-editing and refining bibliographic information. Initially, access to their profiles was obtained by the authors of publications; recently these possibilities are also open for organizations. The subsequent exchange of edited data is important so that

the corrections that are made in one database are also reflected in other databases.

We previously analyzed tools provided by the Web of Science, Scopus, and Russian Science Citation Index databases to the authors of scientific publications [3]. The aim of this work was to analyze tools for editing organization profiles in the Scopus and Russian Science Citation Index (RSCI) databases.

The content of this article is based on the results of 3 years of work by the authors on editing the profiles of various scientific organizations. The profile of the Novosibirsk Trofimuk Institute of Petroleum Geology and Geophysics of the Siberian Branch of the Russian Academy of Science (IPGG SB RAS), which was completely edited in the Scopus database by addressing a number of complex requests with data on the publications of the organization in the technical support of the DB, as well as in the RSCI database using the Science Index for organizations add-on, is used as an example. The presented data are relevant as of October 2015.

## EDITING AN ORGANIZATION PROFILE IN THE SCOPUS DATABASE

The main system characteristics of editing an organization profile in Scopus include the following:

- the Scopus concept allows one to work only with those publications that are indexed in a DB in which the ideology of the clear core of the indexed sources is shown. Therefore, the addition of new publications is not possible;
- the changes in the database are approved by Scopus technical support, with which users can interact using feedback tools;
- all requests pass strict moderation, which prevents the manipulation of bibliometric indicators by the users;
- any user can make a request to edit the information on behalf of an organization;
- all requests are processed free of charge with a paid subscription for the database itself. Thus, the applications for making adjustments can be submitted without access to the database;
- there is no possibility to combine the descriptions of the original and translated versions of the same publication in indexing cases in the Scopus database of Russian and English versions of journals (according to verbal communication by the Russian representatives of Scopus, this problem will soon be solved).

Scopus makes it possible to edit one's own profile by feedback to organizations. This can be done both by an individual author and by a representative of an organization. Our experience shows that only an insignificant percentage of authors properly monitor the accuracy of information that is submitted on their activities in scientometric databases, including Scopus. Since reporting activity and financing largely depend on the accuracy of the scientometric indicators of an organization, it is expedient to carry out editing an organization profile centrally. At IPGG SB RAS, this work was carried out by the employees from the information analysis center.

The feedback tools in Scopus are particularly relevant for the countries where the metadata of publications are transliterated before recording in a DB. First of all, these are countries with hieroglyphic and Cyrillic scripts, where the share of multiple profiles of the same authors and organizations is much higher than the level that is inherent in the English-speaking countries. In addition to transliteration problems, a number of other and not less important issues that prevent their exact identification and grouping is relevant for the Russian publications that are indexed in Scopus [4].

When combining publications in the corresponding groups in Scopus, the following values of the coincidence accuracy of surnames of authors and names of organizations are declared:

- the average combination accuracy level of publications in the author's profile has a completeness of 95%, i.e., if an author published 100 works, on average 95 of them will be combined into one group in Scopus;
- the average combination accuracy level of publications in an organization profile has a completeness of 93%, i.e., if an organization published 100 works, on average 93 of them will be grouped in Scopus and the rest will be in one or more separate groups [5].

For most Russian authors and organizations, these values are much lower. For Russian authors in whose surnames and names yotized vowels and separation characters are found the number of transliterated spelling variants can be ten or more. The number of profiles of Russian organizations can be several tens, which is connected both with transliteration problems and with the frequent changes of the names of organizations and their head departments.

#### Authors Profiles Processing

Initially we carried out the work with the profiles of authors, i.e. with the DB identifiers, accumulating information about the workplaces of the author, the number of his or her publications and their citation, years of publication activity, area of research, coauthors, h-index, and list of used literature sources.

The separate profiles of all current and retired employees of IPGG SB RAS were united in their respective groups using the different options to group data in Scopus (the request to merge authors) [3, 6]. Requests (request for corrections of the details about an author) to remove unnecessary publications were made for those authors in whose profiles another person's publications were found. This work allowed us to eliminate all of the duplicate profiles of authors; the distribution of publications on profiles began to reflect

the real publication activities of particular researchers. Editing the author's profiles occupies the most time. However, subsequently, the inevitable formation of new duplicates in the author's profiles and their association with the main profile occurs in the current mode: this can be done at the end of the year, while looking at the list of publications for the year (usually their number is low in Russian organizations) and correlating the publication sources that are not in the list with the author's profile.

As a result, IPGG SB RAS obtained the following capabilities:

- the ability to draft requests of various degrees of complexity on the basis of unique identifiers of authors (Scopus Author IDs). Based on these it is possible to obtain, for example, data on the publication activities only of the working researchers, data on a certain laboratory, or that of an organization for the entire period of its existence. In this case, the results can be exported, assuming a choice of necessary fields, in various formats;
- the ability to receive accurate information about the publication activities of a particular researcher in the real-time mode;
- the ability to trace the publication activities of authors in cases where they are published by other organizations;
- the ability to receive prompt notification about new publications by request that are based on the authors identifiers.

It should be noted that in Scopus there is no ability to connect (correlate) authors to organizations. Until quite recently an author could indicate an organization as the main one in his profile via a request to edit information. Currently, this option does not exist and the data on the author's affiliation are automatically specified in the profile. The constant connection of an author to an organization with the subsequent manual verification of information in the author's profile is possible through the paid Profile Refinement Service [7], which, unfortunately, is not included in the basic cost of access to the Scopus database.

The second stage of the work was to identify the group of publications that directly belong to the IPGG SB RAS. This requirement is connected with a number of requirements for controlling institutions, which can only request information about the publications of an organization in which it is listed as the author's affiliation (the organization to which the publication is connected). The connection of publications to an organization is a much more time consuming and involved process in comparison with editing author's profiles because the Scopus technical support needs the evidence that a publication belongs to an organization in the following cases:

• a change of the name of an organization;

- the separation of an organization into several institutions:
- the attribution of the publication to the head department;
- the existence of branches of an organization in other cities.

We will consider actions for the inclusion of publications in the profile of an organization in all these cases based on the example of the IPGG SB RAS.

Inclusion of Publications with Different Variants of an Institution's Name into an Organization Profile

All of the publications where the IPGG SB RAS was indicated as the affiliation of an author were selected from the expanded list of publications that was received via a request from the authors identifiers in Scopus by visual checking. A search for different interpretations of the name the organization was also carried out in the Affiliation field in the Document Search tab, which allowed us to reveal the identifiers of separate institution profiles (for greater detail see [6]). The list of different interpretations of the organization's name, including the versions of names that are connected with the renaming of the institution reached several tens for the IPGG SB RAS.

The fastest and easiest method to combine several profiles of the same organization in a single profile was carried out by a search for different interpretations of the institution (View potential affiliation matches) from the main page with the data on an organization. The Scopus interface allows us to choose versions of the name of an organization from a list that is formed in the automatic mode and apply for their association (Group with affiliation). However, the system of automatic recognition of versions of the institution name does not always cover all of the possible versions; therefore it is often necessary to send a letter with more detailed requests to the technical support.

Using requests for the correction of an organization profile from the system interface and according to the written requests for IPGG SB RAS within a month we verified and associated the publications to an organization:

- with options in the translation of the organization's name, for example, the Institute of Petroleum Geology and Geophysics and the Institute of Oil and Gas Geology and Geophysics;
- with an indication of the organization in the abbreviated form, for example, IPGG;
- with a transliterated name, for example, Institut Geofiziki;
- with the names of various degree of completeness, for example, Institute of Geophysics and Institute of Oil and Gas Geology;
- in the abridged form in the name, for example, Trofimuk Inst. of Petr. Geol. and Geoph.;

- with an indication of the department or laboratory of an organization in its name, for example, Geophysical Observatory, Institute of Geophysics;
- with spelling mistakes in a name, for example, the Institute of Petroleum Geology and GeophysicsRussia.

The total number of such publications was more than a third of the number of publications attributed in Scopus to the IPGG SB RAS before editing its profile.

## The Inclusion of the Publications of Branches into an Organization Profile

Approximately the same number of publications were due to the articles from the employees of branches of the Institute, which were separated from the main organization profile. The structure of the IPGG SB RAS includes three large branches in the Yakutia, Tyumen, and Tomsk Oblasts. In this case, in the affiliation, for example, the Tomsk Filial of the Institute of Petroleum Geology and Geophysics: ZSF IPGG and others could be specified. The algorithms for the grouping of publications contain a comparison of the cities of organizations; thus, other cities that were specified by the employees of branches did not allow us to attribute a publication to the IPGG SB RAS. This problem was also solved through the Scopus technical support, to which the data on the structure of an organization and the list of publications with versions of the names of an organization were transferred.

## The Inclusion of Publications that Are Referred to a Head Department into an Organization Profile

The connection of publications that are referred to the head department to an organization, was a more time-consuming task. In the case of the IPGG this is the Siberian Branch of the Russian Academy of Sciences (in rarer cases it is only the Russian Academy of Sciences). This group of publications exceeded the number of publications that were originally referred to IPGG by two times, which points at the extent of the problem for the majority of the Russian scientific institutions. It is remarkable that the names of an organization are placed before the indication of head department; however, head department is accounted for in the identification, whereas the name of an organization is ignored; for example, the Institute of Geology, Siberian Branch, Russian Academy of Sciences.

The problem is that each line with the indication of an organization can be connected only with one organization profile in Scopus. In the described example, this means that the publication can be attributed either to the profile of a specific institute or to the profile of the Siberian Branch of RAS, but not to both. The publication can be included in the profiles of several organizations only if they are presented in different lines (listed in the publication through a semicolon). Thus, in our case it was required to exclude the corresponding publications from the profiles of the SB RAS or

RAS for the inclusion of works in the profile for the IPGG. The simple list of selected publications with the name of the IPGG in the affiliation when addressed to Scopus technical support was insufficient; the service required a summary request in the database, thus the name of the IPGG must be present at each request point. The connecting process for these publications took about 4 months for the Scopus technical support.

## Inclusion of Publications that Were Written Prior to the Division of the Institution into an Organization Profile

The most complex problem was to add the publications that were written prior to its division into two institutes to the profile for IPGG SB RAS. The difficulty lies in the fact that all new organizations can lay copyright claim to papers of divided institute. In the IPGG the selection of such publications, whose total number was about a third of the volume of the publications of the institution before editing the profile, was made according to the authors who passed into the new structure after the division of the organization.

Regarding the request to include these works into the organization profile, the technical support approved only the works in which the departments and laboratories were identified that passed into the new structure. We will note that this work was not carried out for the Institute of Geology and Mineralogy, which formed after the division of the Joint Institute of Geology, Geophysics and Mineralogy; theoretically, two organizations could have a conflict of interests in the case of publications for which the co-authors subsequently appeared in various institutions. Such works were attributed to the IPGG according to the right of its earlier application for inclusion into its profile.

The overall result of the work was an almost threefold increase in the number of publications that were united in one organization profile (Fig. 1).

The abilities of the representatives of institutions for editing this profile are shown using the rather complex example of the IPGG SB RAS, which consisted practically entirely of difficult cases for the inclusion of publications in the organization profile.

#### Editing an Organization Profile in the RSCI Database

The main characteristics of the system for editing an organization profile in the RSCI database are:

- the RSCI concept allows us to add the publications of an organization to this system, as well as the publications that citing the works of the employees of an organization, which underlines the absence of a nuclear list of RSCI journals;
- the special Science Index for organizations addon was created;

(a) Trofimuk Institute of Petroleum-Gas Geology and Geophysics of the Siberian Branch of the RAS Ac. Koptyuga ave., Novosibirsk Russian Federation Affiliation ID: 60103859 Documents: Add to my list Authors Patent results: (b) Trofimuk Institute of Petroleum-Gas Geology and Geophysics of the Siberian Branch of the RAS 3, Ac. Koptyuga ave., Novosibirsk Russian Federation Affiliation ID: 60103859 Documents: Add to my list Authors

Fig. 1. Publication activity indicators of the IPGG SB RAS in the Scopus database before editing the organization profile (a) and after editing (b).

• the responsibility for the accuracy of RSCI data is placed on the representatives of an organization and on the scientific community as a whole [8]; therefore the moderation from the RSCI is formal and generally permits the manipulation of bibliometric indicators. We will note that this approach, in conjunction with the imperfect mathematical algorithms of bibliographic metadata processing [9], have led to repeated criticism in the scientific community [10];

Patent results:

- only a representative who is registered and appointed by an organization can work in the system (the RSCI demands a document on the appointment of a representative that is signed by the head of an organization);
- the system must be paid for (with free access to the database itself);
- the ability to combine original and translated versions of the same publication exists (however, in some cases, the automatic indexing system does not correlate these two versions of the publication).

One of the main differences between the RSCI and Scopus from the point of view of organization profile processing is the existence of the special Science Index for organizations add-on in the RSCI. The representative who is designated by an organization receives a much wider set of powers and abilities to form the publication profile of his or her institution. In the RSCI there is no problem with the transliteration of the metadata of publications, but other problems of data

reflection on the publication activities of an organization remain.

The Science Index for organizations allows us:

- to create a list of the researchers of an organization; the "Publications in which an organization is listed as the workplace of the author" and "All publications of the current researchers of an organization" windows are activated in the mode of displaying a list of institution publications. It is necessary to create a special request with use of the corresponding identifiers of authors in Scopus to obtain similar data;
- to edit the list of publications of an author. It is possible to include papers in the list of publications that are not related to the author's profile (an analogue of duplicate profiles in Scopus). Such an operation practically does not assume moderation from the RSCI and unfortunately allows the addition of publications and citation of namesakes into an author's profile. However, it is possible to exclude publications and citations that were incorrectly attributed to an author. The main work, as in Scopus, falls on the representatives of an organization, as no more than a third of authors are registered as a rule, most of whom do not properly edit the publication profile;
- to add publications that are absent in the RSCI, as well as works that cite publications of an organization:



Fig. 2. An example of the incorrect calculation of bibliometric indicators in the RSCI.

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P ov Andrei Mikha Tovich
Tel (3832) 33- , pr. Morskoi, h. , ap. , Novosibirsk, 630090, Russia,
p väneadernorg
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Fig. 3. An example of incorrect indication of personal data instead of that of an organization.

• to export lists of publications of an organization in the XML format; thus, the ability to choose the necessary fields is absent.

The extensive set of claims on the RSCI from the scientific and library community, on the one hand, justifies the creation of the Science Index for organizations, as institutions have an opportunity to correct many of the designated shortcomings in RSCI using this tool, including errors in mathematical calculations [11], for example, when the number of the Russian publications by the author is greater than 100% (Fig. 2).

The case of specifying incorrect data in the main window of the author's profile is another example (Fig. 3).

On the other hand, the Science Index for organizations provides powerful capabilities to unscrupulous organizations to manipulate bibliometric indicators, to which the attention of the scientific community is strongly attracted. The reasons for the current situation, which are connected with the unjustifiably wide use of bibliometric data by various controlling authorities, have been discussed in a number of recent publications [12, 13]. Thus, the accuracy of the data that is entered in the RSCI using the Science Index for an organizations largely depends on the integrity of the representative of an organization and its management. Below we will consider the main possibilities of the RSCI using the example of editing the profile for the IPGG SB RAS.

#### **Authors Profiles Processing**

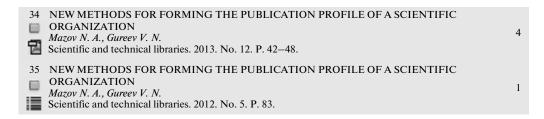
Editing the profiles of authors includes working with groups of authors according to a structural division, the creation of the profiles for new authors, as well as properly editing author's profiles.

The Science Index for organizations allows one to represent in the RSCI a structural division and to add the respective researchers when choosing from the list of authors that are indexed in the RSCI or creating a new profile. This is carried out in the Structure of an organization and List of organization researchers sections. As well as the data on employees the opportunity exists to refine the years of their work in an organization, as well as to specify their position. It is possible to compare bibliometric indicators at the level of the separate structural units of an organization on the basis of these data.

The interface of the representative of an organization allows the creation of the authors profiles in the case of their absence in the RSCI, which is especially important if there are data on the publication of the author in the database. The unnecessary detail of the Science Index registration inquiry, which is designed, apparently, to increase the accuracy of metadata identification, is notable. The downside of the excessive detail is that the authors often refuse to register; the representatives of organizations also cannot create the necessary profiles due to the lack of sufficient data. We will note that the efforts of international databases developers are primarily aimed at improving the efficiency of identification algorithms; the practice of collecting exhaustive data on authors is not applied.

The tools for editing the information about publication activities allow us to specify lists of publications and citations by adding publications and citations that are indexed in the RSCI, removing unnecessary works, as well as creating descriptions of publications, which are absent in the RSCI. For the IPGG SB RAS the profiles of all researches with high publication activity were edited. In some cases, the values of the main bibliometric indicators grew substantially. Sometimes, the number of citations increased by 11 times, and the h-index grew by three times. The low efficiency of algorithms for the grouping of publications on the basis of authorship in the RSCI should be noted as well as the high efficiency of the Science Index for organizations tool that promotes the elimination of defects of the metadata identification.

We will note the negative impact of the lack of core of sources in the RSCI on editing authors profiles. At



**Fig. 4.** An example of the duplication of the main publication description and the publication description on the basis of a reference that is connected with a mistake by the citing author (from below).

the time of the completion of the processing of authors profiles for the IPGG SB RAS in the RSCI a significant array of publications was indexed for the previous years; again, there were a significant number of publications that were not attached to the author profiles. The lack of transparency in the database formation multiplies the work of the representatives of organizations and prevents them from making a plan of the works, as well as from calculating the completion date for the editing of the profiles.

## Inclusion of Publications into an Organization Profile that Are Indexed in the RSCI that Are Not Attached to the Main Institution Profile

As in Scopus, in the RSCI it is a problem to identify the name of an organization, although this is less important and is mainly concerned with the cases that are connected with the renaming of an organization or abbreviated names. The problem of attributing a publication to the head organization, which is characteristic of the Scopus database, is absent in RSCI.

In the advanced search mode, users can create a request to find publications in the name of an organization, but cannot reveal the internal identifiers of separate profiles. Therefore, the mass connection of publications to an organization profile, which is carried out only for separate publications, is not possible in RSCI in comparison to Scopus. The inclusion of separate works into an organization profile is carried out by the reference Make corrections or additions to the bibliographic description of the publication, where it is necessary to unite the name of an organization, which is not correlated with the profile, with the official name of the institution by choosing it from an authoritative list in the RSCI.

## Addition of Publications that are Absent in the RSCI to an Organization Profile

Along with the possibility to edit without moderation, the ability to add publications, which are absent in the RSCI, to the system is another feature of the Science Index for organizations. This option is performed within the concept to index the entire set of the Russian scientific publications, which is declared in the RSCI [8, 14].

This approach seems doubtful to some experts [10], especially taking the fact into account that in higher-education institutions the added publications are in the tens of thousands (for example, [15]). Often these publications are articles in unrefereed collections, methodological rationales, etc. However, in some cases, the entry of these publications seems justified: in the RSCI the archival articles are poorly presented in the top quality Russian and foreign journals (which are usually reflected in the international databases), the modern foreign publications are indexed with a delay; a number of national publications are indexed with gaps for separate issues. In these cases, the system allows us to fill in data on the missing publications.

When using the Science Index for organizations for IPGG SB RAS about 600 publications that are absent in the RSCI were added; this was the one-seventh of the total number of publications of the organization that are indexed in the RSCI. Works of the members of the Russian Academy of Sciences, as well as original articles and reviews from scientific journals that are not included in the RSCI were generally added since 2010. The addition of new publications in the RSCI is performed via four methods.

1. The creation of a full description of a publication on the basis of information from the bibliographic reference. We will note that incomplete descriptions of publications on the basis of references do not occur in Scopus; the absolute advantage of the foreign DB is shown here, as such descriptions are often duplicated in the main record of the RSCI (Fig. 4).

As well, main records can also be duplicated, which indicates the disadvantages of the metadata identification algorithms (Fig. 5).

- 2. The creation of the description of the publication on the basis of a bibliographic reference in any format. In this case, it is possible to make a short publication description in the dialog box. Despite the seeming simplicity of this approach it is impossible to display data on the affiliations of authors, reference lists, and abstracts; there is no opportunity to relate the authors to their profiles in the RSCI database. Therefore, the descriptions of publications that are introduced in such way will not be included in an organization profile.
- 3. The creation of a reference during the manual entry of bibliographic information in the dialog box.

17  v	PRE-STEADY STATE KINETICS OF BACTERIOPHAGE T4 DAM DNA-[N6-ADENINE] METHYLTRANSFERASE: INTERACTION WITH NATIVE (GATC) OR MODIFIED SITES Melygri E.G., Lindshow W.M., Schlagman S.L., Melthian S., Reich M.C. Nudeir Arich Descarch, 2000, T. 28, NO 21, C. 4207.	7
18	PRE-STEADY STATE KINETICS OF BACTERIOPHAGE 14 DAIR DNA-[N <sup>L</sup> -ADENINE] METHYLTRANSFERASE: INTERACTION WITH NATIVE (GATC) OR HODIFIED SITES Alelygri L. S., Ladston Jr. W. A., Soblegman S. L., Neithian S., Heich W. C. Nudel: Adds Repearth, 2000, T. 28, Nº 21, C. 4207-4211.	19

**Fig. 5.** An example of the duplication of the main publication description connected with the inefficiency of the algorithms for the identification of bibliographic information.

This method is currently the main one for organizations; it involves filling a significant number of required fields. The insufficiently detailed instructions for the representatives of an organization that were developed by the RSCI should be noted [16]. The absence of a description of actions in a number of difficult but common cases leads to a significant delay in the moderation of descriptions of publications, as well as to additional labor costs, both for the representatives of organizations and for RSCI moderators. The following cases are examples:

- the absence of journal titles in the authoritative list of RSCI publications;
- the impossibility of establishing the exact dates of a conference;
- the absence of pagination in electronic publications:
- difficulties in determining the type of a publication (a collection or conference proceedings):
- the absence of clear instructions on the bibliographic description of collections and conference proceedings, which can be described in different ways, which leads to the emergence of duplicates in the database.

In these and many other cases publications with typical remarks will be returned to be redone, despite the fact that they passed the primary automatic moderation. This could be improved with more detailed instructions.

Considerable difficulties are connected with entering the reference list in the description of a publication. The long time for the system response for a list in some tens of positions is notable. The data processing either breaks down or takes several minutes to work. The ability for processing in the system only for the citation style according to GOST (7.1–2003 or 7.0.5–2008) is an important limitation. This leads either to a significant increase in the time for data processing or to not filling in this field, which, as a result, reduces the value of the description of the publication and, as a consequence, the RSCI database itself.

As well, the issues of what resource with the full text of the publication is necessary to give the reference and what resource is preferable if it has several URLs are not answered in the instructions [16]. The issue of what is meant by the full text of the publication, viz., the manuscript that is accepted for the publication or

the final version is also not dealt with. The formulations, according to which the RSCI moderators often request full texts of publications, which can be protected by copyright laws of respective authors, are rather vague. The concept of recording data on an organization to which the publication is attributed is also not considered. In international databases, including Scopus, data are displayed in the form in which they are written in the publication. The RSCI moderators do not accept this form and require one to fill the data on an organization in the form that is presented in Fig. 6.

Leaving aside the labor intensity of such a practice (especially in the case of several organizations), it is necessary to note the loss of the original form in which an organization is represented by the author in the primary source. In addition, mistakes during the entering of the names of foreign organizations from non-English speaking countries, where it is not always possible to understand what the name of an organization is, what its division is, and what its the geographic location is, are inevitable in this approach. In this situation, the best possible choice is to indicate only its

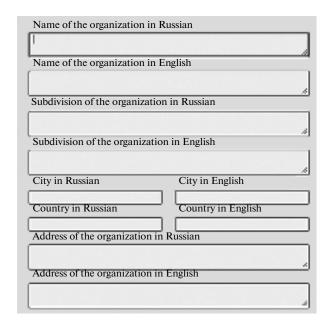


Fig. 6. RSCI form for entering data on an organization.

The main capabilities for editing an organization profile in the Scopus and RSCI databases

Characteristic	Database		
Characteristic	Scopus	Science Index for organizations RSCI	
Interaction type	Feedback with moderators	Mixed: direct corrections during con- necting/removal of publications and references in the profiles of authors; direct access to the modules of lists of researchers and the structure of an organization; feedback with modera- tors when adding/updating biblio- graphic descriptions	
The ability to search publications that are not attached to an organization	Yes	Yes	
The ability to add new publications	No	Yes	
The ability to add references to publications of an organization	No	Yes	
The ability to connect authors to an organization	Not in the base option	Yes	
The ability to make a correlation between the original and translated versions of publication	No	Yes	
The ability to export the publications of an organization	In various formats and with the specification of necessary fields for export	Only in the XML format without the possibility to choose fields	
System performance	Failure is not visible	When processing large data arrays (entering large lists of references; export over 1000 publications, etc.), the system works unstably	
The time for the approval of changes by moderators	1–4 months depending on the complexity of the request	Unlimited; separate types of publications expect moderation of more than 6 months	
The moderation quality	Strict: each change must be carefully justified	Weak: in the case of accidental or intentional entering of incorrect information (even if the file is added with the full text, where the information can be checked), technical support confirms all changes	
Cost of the system	Free (paid access to the database itself may be required)	Paid; the price depends on the number of the researchers that work in an organization	
The ability for data manipulation	No	Yes	
The alert system for new publications	Yes	No	
Information support	The existence of instructions that are timely and realistic	The instructions for a number of points do not correspond to the current state of the system	

(a) A. A. TROFIMUK INSTITUTE OF PETROLEUM GEOLOGY AND GEOPHYSICS Organization Novosibirsk General indicators (updating date November 30, 2014) Total number of publications of the organization in RSCI 3016 Total number of citations of organization publications 6365 Number of authors 544 Number of the authors registered in Science Index 99 h-index (Hirsh index) 24 g-index 38 i-index 13 (b) A. A. TROFIMUK INSTITUTE OF PETROLEUM GEOLOGY AND GEOPHYSICS Organization Novosibirsk General indicators (updating date September 01, 2015) 6712 Total number of publications of the organization in RSCI Total number of citations of organization publications 22266 Number of authors Number of the authors registered in Science Index 109 h-index (Hirsh index) 47 g-index 74

Fig. 7. The profile for the IPGG SB RAS before editing (a) and after editing (b).

main organization by a choice from the authoritative list, but in this case the record will be incomplete, which will reduce its value.

i-index

The less significant technical shortcomings, in our opinion, are:

- there is no language selection field for the publication name: it is possible to enter the title only in Russian or English, although both of these options can be absent for the publication of works in other languages;
- the RSCI developers did not plan an algorithm for the automatic correlation of the author with their organization: This function occurs only while entering in the reverse order, viz., first, the name of the organization is entered and then the author's surname:
- the function of automatic moderation to enter the numbers of pages and serial number of the publication, which could be organized on the principle of "either—or," is not performed. Without filling in both fields the description will be returned by the moderator based on the structure of the organization, which will increase the time of moderation:
- there is no automatic control for the use of Cyrillic or Latin layouts for the respective fields. Thus,

when entering data in the Latin alphabet in the field for data entry in Russian the system of automatic moderation does not give an error message; however, the publication will be returned for modification after manual moderation;

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- apparently, there is no correlation system for the titles of the entered publications with the array of the titles that are moderated. Rejections repeatedly occurred on the grounds that these works were already present in the RSCI, although at the time of their entry checking yielded a negative result. This leads to the problem of multiple entry of the same record, which is typical for Russian bibliography; this increases the cost of the work;
- manually entered records can be replaced by the same records from the editor, if he provides a general description of the issue of a journal or collection. In this case, without any notification the identifier of a bibliographic record, which could already be used, for example, in the internal database of an organization, changes;
- there is no alert system about the emergence of new publications, which creates problems when constructing an internal database, in which it would be

possible to give references to the RSCI, when adding new works to the database.

4. The creation of a reference on the basis of information from the CrossRef database in the case of the DOI identifier in the publication. In this case, the entry of the publication name is generally similar to the manual entry, while some fields are filled automatically. It is possible to attribute to this shortcoming the fact that the field with the DOI code is not automatically filled: it is necessary to indicate it again in the manual mode.

The work on editing the profile for the IPGG SB RAS allowed us to reflect the publication activities of its researchers in the RSCI database more precisely (Fig. 7).

When comparing the bibliometric indicators of an organization before and after editing a profile, it is necessary to note the rather questionable algorithm for calculating bibliometric indicators that is used in the RSCI. When making a contract with the RSCI for the use of the Science Index for organizations system by an organization only publications in which the organization is listed as the workplace of the author are considered. After the conclusion of the contract and the formation of a list of organization authors that indicates the years of their work, the publications of all authors are considered for their work in the organization (without the publications that are taken from the reference lists). This approach with minimal labor costs of the representatives of an organization (this is only the connection of authors to an organization) in most cases doubles the growth of the main bibliometric indicators, encouraging other organizations to join the competition regarding these indicators and to make a contract with the RSCI. Thus, organizations that make a contract with the RSCI and organizations that do not choose to do this are in unequal positions; the algorithms for calculating the indicators, which are more favorable to them, are used in an unreasonable manner (although they remain in force after the end of the license for the access to the Science Index for organizations).

This statement can be illustrated based on the following example. If the record is kept only according to publications in which an organization is specified the number of publications would be 4054 after all of the corrections for the IPGG SB RAS (i.e., only 25% more, taking connections into account, the new works for the current year, and 600 newly introduced publications) and the number of citations would be 8424 (compared with the indicators in Fig. 7b).

If the Science Index for organizations is evaluated from the point of view of the user in general, the rather broad set of tools for editing an organization profile should be noted, which can be substantially improved by eliminating a number of shortcomings, some of which have been shown in this article. The main disadvantage of this system is the lack of strict modera-

tion, but this concerns the RSCI in general. Practically all of the responsibility for the editable and input data belongs to the representatives of an organization, who can use the system in good faith; however, they can also manipulate the data in an unlimited volume. The position of the RSCI administration as discussed in the media [10], as well as the direct funding dependence of organizations on bibliometric indicators [12, 13], frequently pushs organizations towards the second option.

#### **CONCLUSIONS**

We demostrated the capabilities for editing organization profiles in two scientometric systems, viz., Scopus and RSCI, using the example of the IPGG SB RAS.

With the use of the described action sequences, we also edited the profiles of the State Research Center of Virology and Biotechnology "Vector" in Scopus and RSCI. In this case, the total absence of the main profile of an organization in Scopus was a distinctive feature, although some hundreds of bibliographic records with the indication of the center in line for an organizations were indexed in the database. After creating the profile, the work was completed in a short time, because the organization changed its name only once, has only one branch in the same city, and did not change its structure throughout its existence.

At the end of the analysis of the two systems for editing the publication profile of an organization we can draw the following conclusions:

- the Scopus database has less functionality, the work is conducted only with the publications that are indexed in Scopus, and all requests for changes pass through strict moderation;
- ample abilities to edit an organization profile occur in the RSCI database.

Taking the blurring of the core of the sources in RSCI and imperfect algorithms for calculating bibliometric indicators into account, the delegation of authority by organizations themselves to correct data can lead both to positive and negative consequences: on the one hand, all possibilities exist to correct deficiencies in the RSCI and to add significant publications that are absent in the RSCI; on the other hand the same tools can be used in bad faith. Many organizations abuse the capabilities of the system in the modern conditions of excessive dependence on decision making based on bibliometric indicators, which generally affects the authoritativeness of the RSCI negatively.

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