

LETTER TO THE EDITOR

**A survey on publishing policies of the Journal of the Serbian  
Chemical Society– On the occasion of the 80<sup>th</sup> volume**

OLGICA NEDIĆ<sup>1\*#</sup> and ALEKSANDAR DEKANSKI<sup>2#</sup>

<sup>1</sup>*Institute for the Application of Nuclear Energy (INEP), University of Belgrade, Serbia and*

<sup>2</sup>*Institute of Chemistry, Technology and Metallurgy, Department of Electrochemistry,  
University of Belgrade, Serbia*

(Received 6 March, accepted 6 April 2015)

*Abstract.* Journal of the Serbian Chemical Society (JSCS) is the scientific journal of the Serbian Chemical Society and this year is celebrating 85 years of its publishing and the 80<sup>th</sup> volume. After so many years of publishing, the idea of the Editorial Board of the JSCS was to investigate the opinion of the authors, reviewers and Sub-Editors concerning the journal and whether their evaluation and suggestions could aid in its improvement. Questionnaires were sent to the three investigated groups as an e-mail link. The responses were analyzed and only the most general and the most important data are presented in this article. The grades, comments and suggestions showed that most of the contributors are satisfied with the present handling and publishing policy of the JSCS, but certain technical aspects should be improved. After a thorough inspection of the data, the Editorial Board decided to introduce a fully automatic on-line system, to speed-up the peer review process, to improve the Instructions to Authors and Reviewer's Report Form. All these novelties commenced from the beginning of March 2015.

*Keywords:* peer review; publishing; questionnaire; evaluation

INTRODUCTION

Evaluation of journals, especially the peer review process, has attracted great attention in the last decade. There are number of scientometric methods, mostly of the quantitative type, to express the “value” of the journal.<sup>1–3</sup> The best known is the one that measures journal's impact *via* the citation index. An intensive debate on the positive and negative aspects of the journal evaluation *via* the impact factor (IF) has been in progress for a long time, but officially the IF has been recognized as the measure of impact recognition and a tool for journal

\* Corresponding author. E-mail: [olgica@inep.co.rs](mailto:olgica@inep.co.rs)

# Serbian Chemical Society member.

doi: 10.2298/JSC150306036N

33 ranking.<sup>4</sup> There are other ways to investigate the quality of a periodical and one  
34 of which is to determine the opinion of associates of the journal.

35 After so many years of publishing, the idea of the Editorial Board of the  
36 Journal of the Serbian Chemical Society (JSCS) was to investigate the opinion of  
37 authors, reviewers and Sub-editors concerning the journal and to determine  
38 whether their evaluation and suggestions could help in the improvement of the  
39 quality of the journal and the managing process, and raise the prestige of the  
40 JSCS. Prior to this study, an educational article recommending how to write a  
41 good scientific paper was published.<sup>6</sup> Both scientific and technical aspect were  
42 discussed, as it is equally important to obtain significant research results and to  
43 know how to present them.

44 Journal of the Serbian Chemical Society, as its name says, is an official  
45 journal of the Society. The Society was founded in 1897 and its first bulletin  
46 appeared in 1899.<sup>6,7</sup> The Journal was first published in 1930 as the Journal of the  
47 Chemical Society of the Kingdom of Yugoslavia, the name was changed in 1947  
48 to the Journal of the Chemical Society Belgrade and under the present name, it  
49 exists since 1985.<sup>7</sup> In this year, the 80<sup>th</sup> volume of the JSCS is being published.  
50 All papers are published only in English. There are 12 issues per volume, 10–13  
51 articles per issue and 2000–2200 pages a year. The JSCS is an open access  
52 publication, without page charges and with on-line submission. It has been  
53 indexed in the Science Citation Index Expanded since 1995, in the category  
54 Chemistry: Multidisciplinary and its last impact factor (IF 2014) is 0.871 (rank  
55 114/157); 5-year IF is 1.009 (rank 105/157)\*.

56 The journal is managed as a non-profit making periodical by the members of  
57 the Serbian Chemical Society (SCS), who work mostly voluntarily. It is sup-  
58 ported by membership fees, various institutions of the University of Belgrade, the  
59 Ministry of Education, Science and Technological Development of Serbia and  
60 occasionally by sponsors. In the last five years, 2130 articles were submitted of  
61 which 872 were accepted. During this period, 7 authors complained about reject-  
62 ion of their papers, 33 withdrew their manuscripts after reviewing and 3  
63 manuscripts were recognized as plagiatorism.

64 A questionnaire is a widely recognized method to obtain relatively reliable  
65 data on the posed questions and it is used by many publishers. In contrast to the  
66 most publishers who interview the authors of accepted papers, it was decided to  
67 interview all contributors to the publishing process. It was felt that by examining  
68 the entire partnership network, a more reliable overview could be obtained. More-  
69 over, potential authors, a category of researchers whose manuscripts were not  
70 accepted for publication, were also interviewed. In addition, a very important  
71 decision was made by the Editor-in-Chief to publish openly the results of the  
72 survey.

---

\*Data announced in June 2015.

73 Thus, three questionnaires adapted to suit the three investigated population  
74 groups were composed and sent as an e-mail link to all participants in the  
75 publishing activity of the journal in the last five years. There were cases when  
76 individuals performed two or even all three roles, so they received the appropriate  
77 number of questionnaires. The questions were composed to evaluate the  
78 publishing process in quantitative and qualitative ways, both at the level of peer  
79 review and managing, and the results obtained are presented accordingly.

## 80 METHOD AND APPROACH

### 81 *Study population*

82 There were three groups of persons involved in the study. In total, 2422 invitations were  
83 sent: 13 for Sub-editors, 980 for reviewers and 1429 for authors. Certain number of invitations  
84 returned undelivered (80 for reviewers and 170 for authors). The inclusion criterion for the  
85 survey was at least one type of activity in relation to the JSCS over a five-year period  
86 (November 2009–October 2014).

### 87 *Questionnaires*

88 The three questionnaires contained some questions that were the same for all participants  
89 and others that were more specific, suitable for the role played by the surveyed persons (see  
90 Supplementary material to this Letter). The participants were asked for their academic title,  
91 research field, professional background, previous experience in the same kind of activity that  
92 was being investigated in the survey, before being asked direct questions about the JSCS. The  
93 survey contained two types of questions: those to be answered by scaling (from 5, excellent to  
94 1, poor) and those to be answered by choosing offered responses (in some cases more than  
95 one response could be chosen). Finally, in the last section of the survey, the participants were  
96 given the opportunity to express their personal suggestions and remarks.

97 The surveys were sent time-shifted; the Sub-Editors first, the reviewers two weeks later  
98 and the authors a month later. Two weeks after the first invitation, a reminder was sent to  
99 those who had not responded. The reports were collected and analyzed. The results of the  
100 survey offered many more correlations and conclusions than presented in this paper, but in  
101 order not to overload the article, only the most general and the most important data are shown.  
102 Thus, the three surveyed populations were analyzed as entire entities.

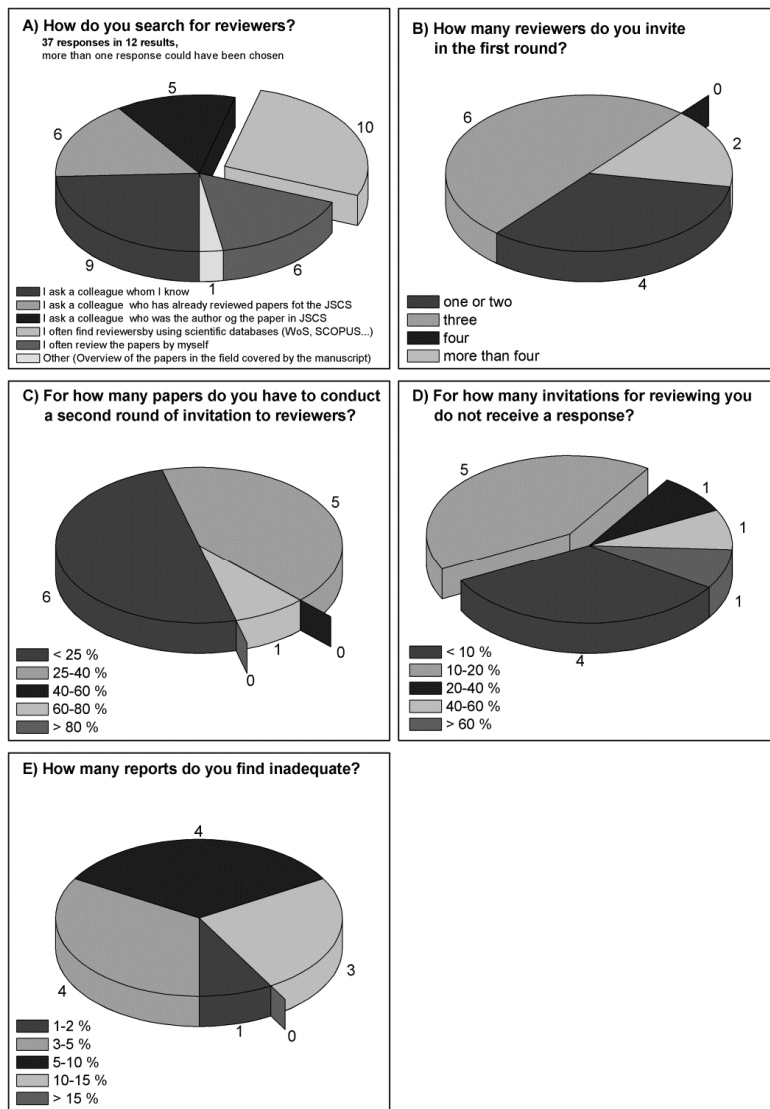
### 103 *Data analysis*

104 Data on questions that were answered by scaling (5–1) are given as an average grade.  
105 Data on questions that could be answered by multiple responses were grouped as the  
106 frequency of each response and are reported as such (in % of the total number of questionnaires).  
107 Suggestions and remarks were grouped according to their similarity and are reported as lists.  
108

## 109 RESULTS AND DISCUSSION

110 Twelve Sub-Editors responded to the survey (92 % of the interviewed), 309  
111 reviewers (43 %) and 511 authors (41 %). Depending on the type of data, the  
112 analyzed results are presented graphically (in the case of frequency distributions),  
113 in tables (in the case of scaling) or in lists (suggestions and remarks). All surveys  
114 were analyzed separately and the results reported by the Sub-Editors are given in

115 Fig. 1, Table I and Frame 1, for the reviewers in Fig. 2, Table II and Frame 2, and  
 116 for the authors in Fig. 3, Table III and Frame 3.



117  
 118  
 119

Fig. 1. The responses of Sub-Editors to particular questions, expressed as frequency distributions (individual answers).

**Comment [L1]:** The question D should read "do you" and not "you do"

120 TABLE I. Sub-Editors' responses to questions that were recorded by scaling

Question	Grade					Average grade
	5	4	3	2	1	
	Number of responses					
Comprehensiveness of the <b>Guide for Authors</b>	4	6	2	0	0	4.2
Choice of the questions for reviewers in the form	2	7	3	0	0	3.9
Communication with the Editorial Office	9	2	1	0	0	4.7

**Comment [N2]:** Is this term related to Instructions to Authors and is there any connection to the "Instruction for Authors" as it appears on JSCS website? If it is, then please choose unique term throughout the paper, maybe the best choice is the term officially mentioned at the JSCS website.

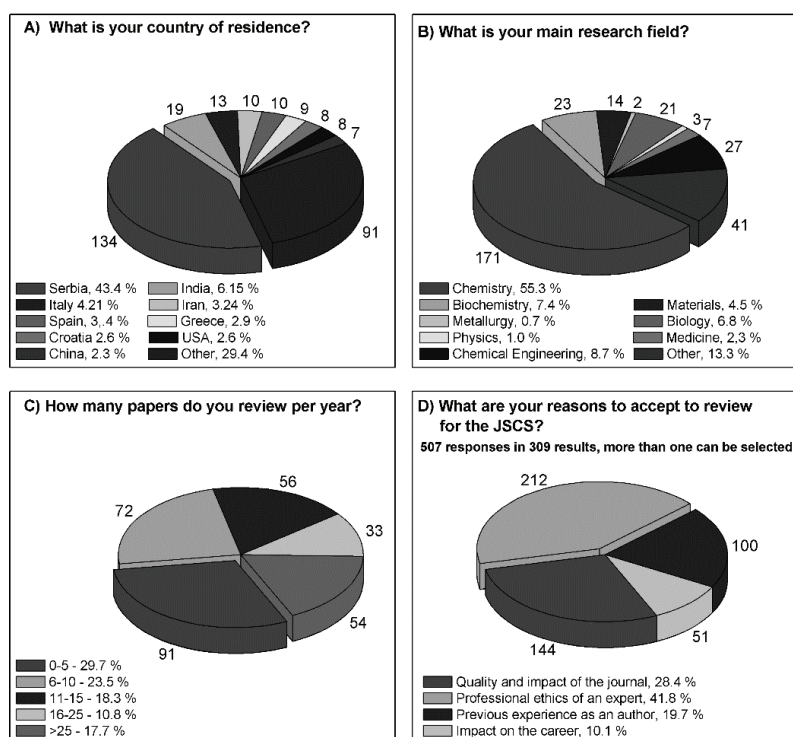
121 FRAME 1. Sub-Editors' major suggestions and remarks grouped by topics

1. Introduction of fully automatic on-line system for submission and management of manuscripts
2. Improvement of the **Instructions to Authors** (considerable number of inappropriate figures)
3. High tendency of potential reviewers to refuse the invitation to review
4. Examination of manuscripts by use of software to detect plagiarism

122 Sub-Editors were first asked about the procedure they conduct while searching  
 123 for reviewers and their general opinion on this process. They responded that  
 124 they most often find reviewers by using scientific databases (Scopus, PubMed) or  
 125 by asking colleagues who they know (Fig. 1A). In the first round, some Sub-Edi-  
 126 tors invited only one or two reviewers, whereas others invited more, even more  
 127 than four (Fig. 1B). The responses to this question illustrate the different indi-  
 128 vidual approaches of the Sub-Editors to peer review. Six Sub-Editors conduct a  
 129 second round of search for reviewers in the case of less than 25 % of the  
 130 manuscripts, while another six reported a greater number of papers that could not  
 131 be finalized after the first call (Fig. 1C). The number of unanswered calls for peer  
 132 review is rather high (expressed as the percentage of the total number of calls in  
 133 Fig. 1D). Sub-Editors found between 1 and 15 % of reviewers' reports inade-  
 134 quate (Fig. 1E), due to a complete absence of peer review ("publish as is" in con-  
 135 trast to other reports that suggested major revision or even rejection) or due to  
 136 unprofessional conduct of reviewers (humiliating or malicious attitudes). As for  
 137 the quality of the reports in terms of their usefulness to authors to improve the  
 138 manuscripts, ten Sub-Editors evaluated the reports as mostly good, while two  
 139 Sub-Editors stated that they receive the same number of good and poor reports.  
 140 Responses to this question probably illustrate the different individual criteria of  
 141 Sub-Editors. On the grading scale, Sub-Editors valued relatively highly the techni-  
 142 cal aspects of the publishing process (Table I), giving an overall average grade  
 143 of 4.3. To improve the work of the JSCS, most Sub-Editors suggested a complete  
 144 on-line submission and management system (Frame 1).

145 Reviewers who responded to the survey were from Serbia (43 % of the total  
 146 number) and from other countries (57 %, Fig. 2A). Slightly more than half  
 147 reviewers defined themselves as chemists (Fig. 2B) and approximately 70 %  
 148 were experienced reviewers (Fig. 2C). Reviewers accept to review manuscripts

149 for the JSCS for many reasons, but the predominant one is the professional ethics  
 150 of an expert who feels that it is part of his scientific activity (Fig. 2D). Reviewers  
 151 graded technical aspects of the peer review with an average grade of 4.0 (Table  
 152 II). Most reviewers (58 %) either had no additional remarks or expressed an  
 153 affirmative opinion in a free form of comments and the greatest number of sug-  
 154 gestions were focused on the introduction of a complete on-line system that  
 155 would enable easier submission and communication (Frame 2).



156

157

Fig. 2. Reviewers' responses to particular questions expressed as frequency distributions.

158

TABLE II. Reviewers' responses to questions that were recorded by scaling

Question	Grade					Average grade
	5	4	3	2	1	
Comprehensiveness of the Reviewer's Report Form	20	57	23	1	0	4.0
Period given for reviewing	20	51	25	4	0	3.9
Communication with Sub-Editors and Editor	40	39	18	3	0	4.2

159 FRAME 2. Reviewers' major suggestions and remarks grouped by topics (number of  
160 individual comments)

58 % of all comments were affirmative +:

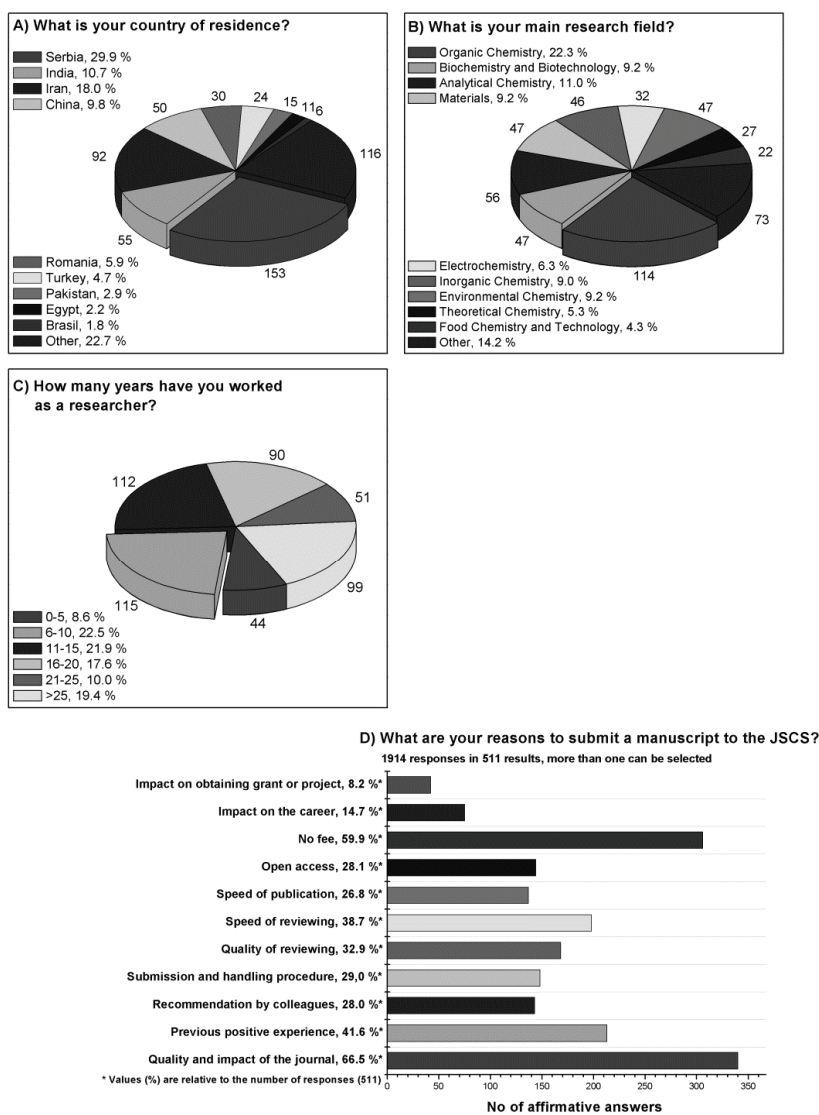
1.	Introduction of fully automatic on-line system for submission and management of manuscripts	26
2.	Free access to Scopus or other databases for the reviewers	11
3.	Prolongation of the period for reviewing	8
4.	Improvement of the Instructions for Reviewers	7
5.	Information to reviewers on the final decision on the manuscript	5
6.	Introduction of scaling in the Reviewer's Report Form	4

161 Authors who responded to the survey were from Serbia (30 % of the total  
162 number), as well as from the other countries (70 %, Fig. 3A). The affiliation of  
163 the authors illustrates the international character of the JSCS. The main research  
164 fields of the authors who submit papers to the JSCS were organic chemistry,  
165 analytical chemistry, biochemistry and biotechnology, environmental and inorg-  
166 anic chemistry (Fig. 3B). Early-stage researchers made up 31 % of all authors  
167 and the others were more experienced ones (Fig. 3C). The main reasons for sub-  
168 mitting their manuscripts to the JSCS, authors report as: quality and the impact of  
169 the journal, no publishing fee, previous positive experience and the speed of  
170 reviewing (Fig. 3D). Grading of the technical parameters related to JSCS, in-  
171 cluding periods for reviewing and publishing, resulted in an average grade of 3.7.  
172 As for the suggestions and remarks, besides no additional comments or affirm-  
173 ative opinion of 50 % of the interviewed authors, many contributors stated that  
174 they would appreciate faster reviewing and publishing after manuscript accept-  
175 ance (approximately 30 % of suggestions). A significant number of authors sug-  
176 gested improvement of the Instructions to Authors and reduction of the technical  
177 requirements for submission (especially for figures). Additionally, a few authors  
178 suggested a more careful choice of reviewers and a few recommended elevation  
179 of the criteria for article acceptance.

180 After collection of the surveys, the responses were summarized and anal-  
181 yzed. A meeting of the Editorial Board was organized on this occasion and all  
182 points were discussed individually. Certain conclusions were drawn enabling a  
183 detailed overview of the entire publishing process of the JSCS, which further led  
184 to decisions directed at improvement of the process.

185 All participants in the survey, in one way or another, strongly supported the  
186 idea of a fully automatic on-line system: a) Sub-Editors in order not to have to  
187 remind or thank reviewers by themselves and not to have to archive all reports  
188 and letters to authors as their own database, b) reviewers in order to have the  
189 ability to quickly review the abstract on-line, to have a direct choice to accept or  
190 decline to review and to have access to an on-line Report Form and c) authors in  
191 order to facilitate the submission step and to speed-up the reviewing process.

192 Members of the Editorial Board agreed that a complete on-line system would  
 193 improve the management of the JSCS and the decision was made to practice  
 194 exclusively on-line communication from March 2015.



195  
 196

Fig. 3. Authors' responses to particular questions expressed as frequency distributions.



197 TABLE III. Authors' responses to questions that were recorded by scaling

Question	Grade					Average grade
	5	4	3	2	1	
	Share of the number of responses, %					
Comprehensiveness of the Guide for Authors	22	41	27	5	5	3.7
Usefulness of the Reviewers' Reports	19	46	27	5	3	3.7
Period for reviewing	22	36	30	9	3	3.6
Period for publishing	19	38	31	7	5	3.6
Communication with Sub-Editors and Editor	35	37	23	3	2	4.0

198 FRAME 3. Major suggestions and remarks of authors, grouped by topics (number of individual comments)  
199

50 % of all comments were affirmative +:	
1. Speeding-up reviewing and publishing process	150
2. Improvement of the <b>Instructions for authors</b> and reduction of technical requirements for manuscript submission	88
3. Better choice of reviewers and "blind" review	30
4. Promotion and advertising of the JSCS	15
5. Increasing the number of published articles per year	12
6. Periodical special issues	5
7. Invitation of respectable scientists to write review articles	5
8. Addition of new research fields (chemical education, nano-chemistry, chemistry in agriculture)	5

200 It was noticed that similar number of reviewers suggested longer (expected)  
201 and shorter (unexpected) period for reviewing which initiated deeper data  
202 analysis. Reviewers who were also authors could not separate these two roles and  
203 the impression of the author dominated the impression of the reviewer.

204 Authors who suggested faster publishing do not seem to differentiate clearly  
205 between peer review and publishing. Members of the Editorial Board agreed to  
206 contribute personally to speed-up the reviewing part by faster communication  
207 with (potential) reviewers and/or by increasing the number of initially invited  
208 reviewers. It is, however, difficult to stimulate researchers to review for the  
209 JSCS. Many invited persons do not respond at all, many refuse, some accept but  
210 never send the report and a considerable number of reviewers send inappropriate  
211 reports. The reasons for such a situation may be seen as a lack of profession-  
212 alism, not very good opinion on the JSCS based on the journal's ranking and/or  
213 prejudices. Potential reviewers from West Europe and North America are among  
214 those who most frequently do not respond or decline to review. A similar attitude  
215 towards the journal is also valid for the (potential) authors. When nationalities of  
216 the JSCS authors were analyzed, it became obvious that contributors from West  
217 Europe and North America are rare.

218 The second part of the publishing process, which includes the actual print-  
219 ing, can hardly be faster, as there are many accepted papers and the JSCS is

220 already publishing more articles per year than similar non-profitable journals run  
221 by scientific societies. Since accepted papers receive DOI numbers and are avail-  
222 able in an on-line version of the journal few days after their acceptance, the print-  
223 ing step is not crucial from the point of article visibility by the scientific com-  
224 munity. Steps will be taken to see how this part of the process could also be  
225 improved.

226 It was interesting to notice that certain number of authors suggested the  
227 application of more rigorous criteria for the evaluation of manuscripts. In their  
228 opinion, some of the published articles should not have been accepted. Thus, a  
229 considerable number of our authors have the potential to produce high quality  
230 papers and they will certainly be engaged as reviewers if they agree.

231 Instructions to Authors and Reviewer's Report form were revised and new  
232 versions up-loaded. Moreover, the Editorial board decided to reduce the technical  
233 requirements for figures and to make small alterations if necessary without  
234 asking authors to do so.

235 For the moment, the comments and suggestions that raised the greatest con-  
236 cerns were dealt with and some new approaches applied. Other conclusions that  
237 could be drawn from the responses in the questionnaires and members of the  
238 Editorial board will continue to analyze the data, both at the level of the entire  
239 journal and at the level of sections run by particular Sub-Editors.

240 The Editorial Board thanks all participants of the survey who have helped to  
241 evaluate the publishing process in the Journal of the Serbian Chemical Society  
242 and to become aware of the imperfections. It is also hoped that the actions  
243 undertaken after the survey will be welcomed by past, present and future con-  
244 tributors.

#### 245 SUPPLEMENTARY MATERIAL

246 The questionnaires that the sub-editors, reviewers and authors were requested to fill out  
247 OnLine are available electronically from <http://www.shd.org.rs/JSCS/>, or from the corres-  
248 ponding authors on request, as portable document format (pdf) files.

249 *Acknowledgment.* This survey and article resulted as part of scientific activity in the  
250 COST Action TD1306 "New Frontiers of Peer Review (PEERE)".

#### 251 И З В О Д

252 АНКЕТА О ЧАСОПИСУ „JOURNAL OF THE SERBIAN CHEMICAL SOCIETY“ –  
253 ОБЕЛЕЖАВАЊЕ ШТАМПАЊА 80. ГОДИШТА

254 ОЛГИЦА НЕДИЋ<sup>1</sup> и АЛЕКСАНДАР ДЕКАНСКИ<sup>2</sup>

255 <sup>1</sup>Институт за примену нуклеарне енергије (ИНЕП), Универзитет у Београду и <sup>2</sup>Институт за хемију,  
256 технологију и металургију, Центар за електрохемију, Универзитет у Београду

257 Часопис Journal of the Serbian Chemical Society (JSCS) је научни часопис Српског  
258 хемијског друштва и ове године се обележава 85 година његовог излажења и излазак 80.  
259 годишта. После толико година објављивања научних радова, жеља Уредништва је била да  
260 утврди шта аутори, рецензенти и подручни уредници мисле о часопису и уређивачкој

261 политици, и могу ли њихове процене и предлози помоћи да се делатност часописа по-  
262 бољша. Упитници анкете су послати е-поштом испитаницима. Добијени одговори су ана-  
263 лизирани и овде су приказани само најопштији и најзначајнији подаци. Оцене, комен-  
264 тари и предлози су показали да је већина учесника у поступку објављивања задовољна  
265 постојећим начином рада и уређивачком политиком, али мисле и да би се одређени  
266 технички детаљи поступка могли побољшати. Након сагледавања добијених одговора,  
267 Уредништво је донело одлуку да уведе високо-аутоматизовани кориснички сервис за  
268 пријаву и обраду радова и тако убрза поступак рецензирања и објављивања, и да појед-  
269 ностави и додатно појасни Упутство за ауторе и Рецензентски формулар. Све наведене  
270 новине су уведене 1. марта 2015.

271

(Примљено 6. марта, прихваћено 6. априла 2015)

272

#### REFERENCES

- 273 1. K. Iyengar, V. Balijepally, *Scientometrics* **102** (2015) 5  
274 2. J. Garner, A. L. Porter, N. C. Newman, *Scientometrics* **100** (2014) 687  
275 3. C. W. Holsapple, *J. Am. Soc. Inform. Sci. Technol.* **59** (2008) 166  
276 4. P. O. Seglen, *Br. Med. J.* **314** (1997) 498  
277 5. A. Dekanski, *J. Serb. Chem. Soc.* **79** (2014) 1561  
278 6. S. Bojović, *Bull. Soc. Chim.* **49** (1984) 751  
279 7. A. R. Despić, J. A. Jovanović, B. Ž. Nikolić, D. Vitorović, *The Serbian Chemical Society.*  
280 *History, organization, activity*, Serbian Chemical Society, Belgrade, 1996.