IUCr Journals

Reviewers' survey

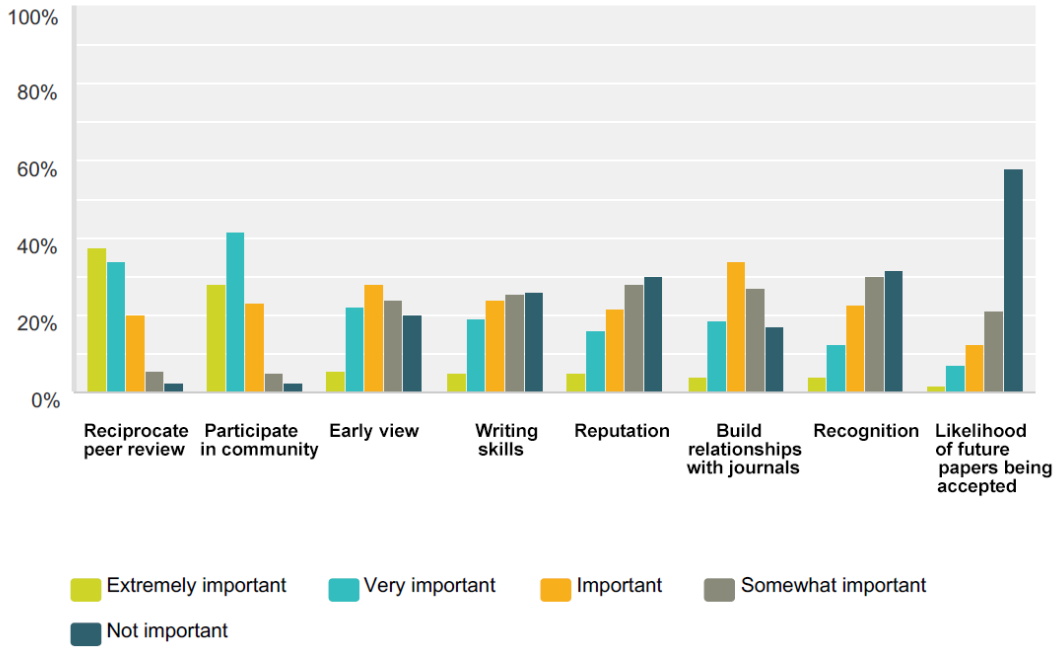
SUMMARY

A survey of reviewers of IUCr Journals was carried out in May 2016. This received a very good response with over 500 participants, many of whom were pleased to have been consulted. The biggest motivations to act as a reviewer are to reciprocate in peer review and participate in the community. Reviewing was felt to be part of the job of a professional scientist with the system only working if everyone participates. The relevance of the article to the reviewer's own research and time constraints were the biggest factors in deciding whether to accept invitations to review. It was felt that it is useful for reviewers to be able to see all the reviews after acceptance/rejection, as is common practice on a number of journals. Thanking referees is also important and this is a good time to share the reviews. Journal editors should screen for quality before sending papers out for review. It should be possible to ask for a review of specific parts of a manuscript when it contains very different techniques and the reviewer may not be an expert on all of them. In terms of rewards and recognition, information on whether the paper was accepted or rejected and the usefulness of the review were felt to be important. Discounts on open-access fees or other publication charges and free access to journal content were the most important potential rewards, along with a free copy of the final accepted article if not open access.

The full results of the survey, including individual comments, are given in the following pages. Many very useful comments were given. We will be using these to guide our policies over the next few years. If you have additional comments on how the IUCr should develop its review processes, please do not hesitate to send these to us at med@iucr.org.

Q1 We are keen to understand the reasons why you act as a peer reviewer. Please let us know which of the following statements are important in relation to your work as a reviewer.

Answered: 521 Skipped: 1



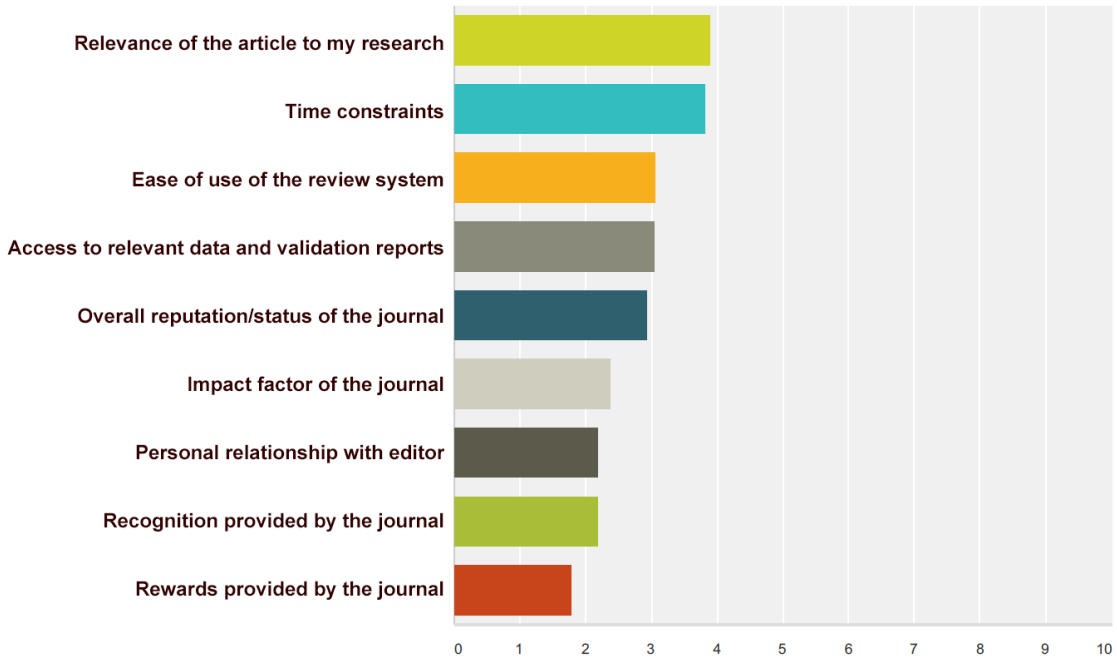
	Extremely important	Very important	Important	Somewhat important	Not important	Total
It is important to reciprocate the peer review that other members of my community undertake for my own work:	**37.33%** 193	**34.24%** 177	**20.12%** 104	**5.61%** 29	**2.71%** 14	517
Peer reviewing allows me to be an active participant in my research community:	**27.85%** 144	**41.39%** 214	**23.02%** 119	**5.22%** 27	**2.51%** 13	517
I enjoy seeing work ahead of publication:	**5.59%** 29	**22.16%** 115	**27.94%** 145	**24.08%** 125	**20.23%** 105	519
Peer reviewing helps to improve my own writing skills:	**5.23%** 27	**18.80%** 97	**24.22%** 125	**25.58%** 132	**26.16%** 135	516
Reviewing helps to develop my personal reputation and career progression:	**5.22%** 27	**15.86%** 82	**21.28%** 110	**27.85%** 144	**29.79%** 154	517
Peer reviewing helps to build relationships with particular journals and journal editors:	**4.05%** 21	**18.53%** 96	**33.78%** 175	**26.83%** 139	**16.80%** 87	518
I gain professional recognition or credit from reviewing:	**4.06%** 21	**12.38%** 64	**22.44%** 116	**29.79%** 154	**31.33%** 162	517
It increases the likelihood of my future papers being accepted:	**1.36%** 7	**7.21%** 37	**12.28%** 63	**21.25%** 109	**57.89%** 297	513

#	Other important reasons why you act as a peer reviewer (please specify):
1	Mainly, I review mss where I feel my own specific expertise is important & needed. Recognition or credit might make a difference if it actually happened!
2	To help make the manuscripts better.
3	Forces me to learn about different areas of science.
4	Be constructive
5	It may in the future be possible to get credits which can be used to offset the cost of open access publishing
6	Personal contact (& guilt) with editor
7	There is so much rubbish getting published that is over-hyped and of little relevance to anything either basic or applied. It is important to assist in directing research quality to be worthy of publishing. i.e. in an attempt to filter out all the crap getting published.
8	I help other authors to improve their product and disseminate their results. I hope they reciprocate this attitude, and the editors help them to do so.
9	The system of peer review only works if everyone participates.
10	Low quality papers should be kept off from being published
11	It improves not my writing but my analytical skills. Finding the flaws in other people's work ;). Hopefully finding the flaws in ones own work better, too. And if the authors are cooperative, it is fun to help them, make useful suggestions, and finally see an improved version of the manuscript in print.
12	I can influence what is being published an help to avoid that incorrect or misleading material is published
13	I believe in true science and good education, and want to participate.
14	I am proud to work for IUCr and specially IUCrJ I am now retired and my career progression is behind me !
15	I try to review as fast as possible to improve the time between submission and publication
16	I get asked and it seems like a helpful thing to do.
17	It broadens my view on current science in my field.
18	It's all part of the job of a professional scientist.
19	to support the peer review system from which we all benefit
20	Mainly to serve the scientific community
21	To maintain, or enhance, the high standards of scientific publishing
22	It is academically stimulating to understand deeply a new piece of work.
23	Because without peer review science could not progress. No review is out of the question, professional (paid) review is not affordable. With all its defects, peer review is the only viable option.
24	My answer to your question "It increases the likelihood of my future papers being accepted:" would be "I hope not" but there is no such option...
25	I have strong views about how science should be done. I can influence that by acting as a reviewer.
26	Peer reviewing is a critical part of the scientific process. All published work must be subject to constructive criticism without fear or favour. My current observations suggest that this important task is not being done as well as it should be - this is often due to time pressures on those capable of giving robust reviews.
27	It looks a kind of responsibility to be a reviewer as a member of the research community.
28	Know the progress of current research in this field
29	One critical reason is that it increases the quality of work in my field!
30	I hope it does _not_ increase "the likelihood of my future papers being accepted" !! I review to stop rubbish being published. I review because it is part of the job. I review because peer review is crucial to science's credibility and correctness.
31	Service to the community simply
32	Many times you learn a lot
33	To be up to date in hot topics in the journals I read the most.
34	It may influence the balance of content published in the journal. I can strongly advocate for a good paper in an area I would like to see the journal cover, or suggest sending an otherwise good paper elsewhere if it addresses a topic I would like the journal to deemphasize.
35	It is helpful for my students to see the reviewing process.
36	It is a ethical activity (if done properly) It allows to study
37	somebody needs to do this job :-)
38	To keep fair unbiased high standards for publication in my field.
39	Peer review is the foundation of modern science, without which a publication will have no credibility. Acting as a peer reviewer is an integral part of a scientist's job description, and I strive to do that job as well as I possibly can.
40	It keeps me up-to-date and it forces me to research other people works and contribution in our community.
41	To prevent crappy science from getting published.
42	duty
43	I think it is the responsibility of a scientist to review manuscripts, if they publish work.
44	I believe in science.
45	To help ensure the literature contains good science that move fields forward rather than setting them back. To help other researchers better communicate their results to enhance the impact and value of the work
46	in the first question, most papers appear prepublication in arXiv
47	As a reviewer, I can sometimes help to improve the quality of the literature that is eventually published.
48	It helps to improve the content and presentation of the work.
49	It is a mission that each scientist should undertake to keep the standards of research at a proper level. If you are responsible member of the scientific community, reviewing is one of your commitments.

#	Other important reasons why you act as a peer reviewer (please specify):
50	Avoid that nonsense goes undetected and is eventually published. This is THE most important criterion!
51	The main reason is that I feel it as a duty. We're part of this system where peer review is the standard. therefore we all have to do our bit.
52	It is my responsibility as researcher to support the process of producing reliable research results of high quality within the research community. The peer reviewing of forthcoming publications is an essential step in this process.
53	It's a key part of the current process of science. It is an opportunity to help improve communication.
54	Science would unravel without peer review. We have to do it, and we have to share it around.
55	Peer reviewing is crucial for the level of published papers in a given journal and field. It is also to avoid too much re- discovering, incorrect statements, missing knowledge of elements already published (completeness of citations) ect.
56	To keep up high standards of paper quality in those papers I think are relevant in our field, which are also those I choose to publish in.
57	I see this as one of my professional duties
58	The last two statements describe valid reasons for being a reviewer. However, I am not convinced that it works out that way.
59	I have benefit when: 1. Journals in which I publish are more important, more accurate. 2. When I can suggest a point of view closer to mine, or a question of interest for me.
60	I think that more than 50 years spent in both research and teaching Crystallography and Crystal growth, could help to improve the quality of the current literature, especially when the referee not only make corrections but like to propose as well some reasonable suggestions.
67	Its an important service to the community
68	Someone has to do it !
69	I think I help the authors of the papers I review, and the Journals to publish better papers, and to not publish those which are not good.
70	reviewing papers is another way to take responsibility of the quality of the research we are all contributing to
71	excellent opportunity to interact with younger researchers on how to conduct and communicate good science, i.e. educational aspect (after asking the editor for permission to involve another person)
72	It increases the likelihood of my future papers being accepted: DO you really consider this to be true?
73	A significant fraction of new publications in my field have major technical flaws. By peer reviewing I can help catch these flaws and thus improve the quality of publications in my field.
74	Contribute the scientific community.
75	Improve the quality of the work published! . Reviewing is anonymous: recognition???
76	None
77	I do it for Science - to try to ensure that the Scientific literature is as accurate as possible and also to try to improve the manuscripts and research of other workers.
78	Peer review (if done constructively) generally leads to better papers.
79	Helpful to see common errors made in manuscripts (e.g., not using proper citations, not enough literature background, failure to understand structural implications, failure to understand how parameters are calculated)
80	I may contribute to improve the scientific work in the scientific community where I work.
81	without peer reviewing the amount of nonsense that is published will increase. Editors should be more careful to avoid misuse of the system by reviewers (e.g.
82	Most of these questions implies an ethically incorrect behavior of the referees.
83	It helps to improve the quality of science: a different point of view can improve the quality of paper
84	To preserve the quality of the structural work being done. I have a real interest in keeping the standards for structural papers at an appropriate level. Crystallography used to come with a warning, "Children, please don't try this at home without adult supervision". In todays world, we have a lot of folks doing crystallographic work without the necessary credentials. I could go on a long rant here but won't, my guess is whoever is reading this has seen this. Problems such as: Not realizing their data is twinned. Not understanding how to chose a resolution cutoff. Wrong space group. Think that reporting the number of helices and beta strands constitutes a description of the protein fold. Have now clue how to make a stereo image, even though there is a button for it in their software. Can't label their structures. Don't know what an omit map is. etc. etc. etc.
85	I found very helpful reviewing a paper because also help me improving my own papers by training a external, objective point of view.
86	To be better informed about research advances in my field
87	Peer reviewing is an important step in improving manuscripts for the community.
88	serving the community - I expect others to afford me the same courtesy when it is my turn
89	Being crystallographer, I support the main Journal of my community.
90	We all have our favorite journals where we publish. Editors as well as the reviewers serve as the guardians to ensure the quality of an average paper in these journals. This role is very important in my opinion.
91	it improves the paper

Q2 What factors are important in your decisions to accept reviewing invitations or not?

Answered: 516 Skipped: 6



	Extremely important	Very important	Important	Somewhat important	Not important	Total	Weighted Average
Relevance of the article to my research:	**33.72%** 173	**35.09%** 180	**21.44%** 110	**8.19%** 42	**1.56%** 8	513	3.91
Time constraints:	**29.92%** 152	**35.43%** 180	**25.39%** 129	**6.50%** 33	**2.76%** 14	508	3.83
Ease of use of the review system:	**10.51%** 54	**27.43%** 141	**29.96%** 154	**21.60%** 111	**10.51%** 54	514	3.06
Access to relevant data and validation reports:	**13.62%** 70	**22.76%** 117	**31.91%** 164	**18.68%** 96	**13.04%** 67	514	3.05
Overall reputation/status of the journal:	**8.81%** 45	**24.07%** 123	**31.51%** 161	**24.46%** 125	**11.15%** 57	511	2.95
Impact factor of the journal:	**3.90%** 20	**12.87%** 66	**29.04%** 149	**27.10%** 139	**27.10%** 139	513	2.39
Personal relationship with editor:	**5.27%** 27	**9.96%** 51	**19.34%** 99	**30.08%** 154	**35.35%** 181	512	2.20
Recognition provided by the journal:	**3.37%** 17	**8.91%** 45	**26.93%** 136	**26.34%** 133	**34.46%** 174	505	2.20
Rewards provided by the journal:	**2.55%** 13	**3.93%** 20	**15.91%** 81	**26.33%** 134	**51.28%** 261	509	1.80

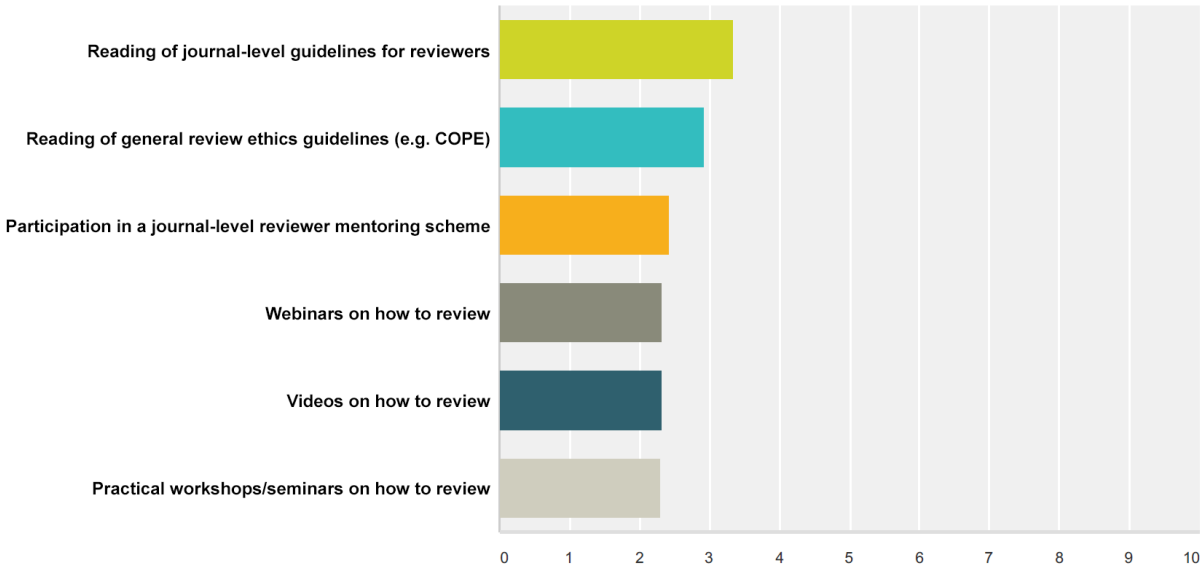
#	Other important factors (please specify):
1	Most compelling when I feel there may be something wrong, or something especially good, that other reviewers might miss
2	whether I think I can understand enough about the article to do a good job of reviewing it.
3	none
4	Editor's attitude in using my review. A Journal asking only for my review motivates me better.

#	Other important factors (please specify):
5	I generally accept doing reviews. I know how hard it is for editors to find competent reviewers. Exception are taken when I am really not competent, when the editor clearly abuses and when the editor has an ulterior motive or has already accepted the paper and the review is just to improve the article.
6	However, I detest journals that try to publish only sensational papers, such as Nature and Science. They do not deserve the reputation that is being attributed to them.
7	The editor should have performed a pre-selection (what I think is mostly done), because peer-review is only somewhat fun, if the manuscript is not totally nonsense (in which case it is rather annoying).
8	Recognition of reviews would be nice, for instance at the end of the year, publish an official list of names of reviewer and how many articles were reviewed by each reviewer?
9	Whether my expertise can contribute anything
10	Although acting as a referee for many years and many journals, Recognition and Rewards from journal to reviewers is something I'm definitely not familiar with. Thus I'm not able to comment on their importance. They could have some, nonetheless.
11	proximity to my areas of expertise
12	One doesn't want more than one paper to review at the same time.
13	That it falls within my area of competence. This is different from my research interests.
14	The single biggest constraint for reviewing articles is time. My day job takes 6 days a week. To review an article means several hours 'lost' from the 7th day, my only day 'off'.
15	Quality of the abstract - very poorly written abstracts are likely part of a poorly written paper, and these are just hard work to review.
16	Fluent English
17	Whether paper abstract indicates it is worth reading or not...
18	I like to have reasonable time frames, since i have to schedule it amongst other activities. I do not like to review things which I do not feel technically competent to review. I am annoyed when I receive something to review that I think the editors should have rejected outright. (Rarely if ever happens with IUCr journals)
19	While I've marked recognition/rewards provided by the journal as important, I'm yet to see any of these in practise. I have therefore not taken these into account when accepting review invitations in the past, but would if they were available.
20	What rewards?
21	Capacity to understand the research presented
22	I am not aware that any journal provides important rewards for reviewer duties. Some provide free access to publications but this is not important for 99% of the reviewers as they have free access through their institution any way.
23	My expertise in the topic of the manuscript.
24	If I have competence in the field If I have time to dedicate to a serious reading of the contribution
25	short papers with clear statement of novelty, main content, where the paper is heading to
26	Journals do not provide any rewards. Just opposite, one good review generate many more requests.
27	I never refuse when I can help.
28	JAC review system should be improved.
29	I rarely turn down a request to review, until now because I will retire very soon!
30	What rewards? Reviewing is an extremely thankless task.
31	Extremely important is my estimation of if my expertise in the area is high enough to provide a qualified review with a reasonable effort. Also extremely important is if I perceive a conflict of interest either because I am working on something too close to the topic, so don't want to be influenced by seeing other work before publication, or because I have worked before with one of the authors. Also important is my perception of the importance of the work itself. If based on the abstract I think the work is unimportant or misguided I am less drawn to accept the assignment especially if it is also in a "low tier" journal.
32	Relevance of my particular expertise to the subject of the paper.
33	How is my review actually considered? I once spent days in writing a six-page review for Acta B, asking major revision and to see the revised manuscript. Which instead went to press without a further review process! If a reviewer asks to see the revised version, he MUST get it! I had a similar experience with a non-IUCr journal and I have asked the editor to put me on a black list and never send me again a manuscript. I didn't do the same with that Acta B manuscript only because it is a IUCr journal, but such an experience is very frustrating - one wonders why he has spent so much time for nothing!
34	If a journal allows a excessive use of supplemental material I will turn the reviewing down. In my opinion a manuscript should be self contained and only in exceptional cases some supplemental information should be added.
35	Whether I publish in the journal
36	time is the main one, and so factors like ease of use play a big role for me. I won't mess with a bad system.
37	Several of those factors (#4,5,6,7) *could* tilt me to do more reviews, if they actually existed.
38	generally this is my impression if I am competent to judge a given ms which means that I must have impression that this ms is focused on the field of my interests.
39	It must be a journal I would also publish in.
40	Interesting article, perhaps not very relevant for my work.
41	Availability of source code, if it's a paper describing computational methods.
42	reputed society journals over open access predators

#	Other important factors (please specify):
43	Reputation of editors
44	I Only review for Open Access articles/journals
45	I don't believe I've ever received a reward for reviewing.
46	"Rewards" provided by the journal are not really rewards. Access to journals are already paid for by my institution, so no motivation there. A reduction in the University's subscription would flag up to my employers the value of peer review. They only look at money - nothing else counts. Community and reputation do not count. Personally, I liked the old system of a CD voucher for a quick return.
47	I answered 'very important' to 'Relevance of the article to my research', since it is the closest to what I meant: relevance of the article to my field(s) of expertise.
48	One essential factor in the decision to accept is the relevance of my expertise in the topic of the manuscript. The overall reputation of the journal is also "somewhat important" because in principle it sets a threshold of quality for the manuscript. In principle, the knowledge of the editor has the same role, I know that a first selection has been made from the Editor, and I know i am contact because my expertise is relevant (as the editor knows my competences) unfortunately I have accepted to review incredibly poor manuscripts, and this is an unfortunate waste of time.
49	My knowledge of the topic
50	Article needs to be in my area of research - but not necessarily directly related.
51	If the article is close enough to my area of research that I can provide a useful review, then I accept the reviewing invitation.
52	Do I respect how the journal has treated previous reviews and submitted papers.
53	Clarification: poor access to relevant data and validation reports is not a grounds for not accepting reviewing invitations, but for rejection of the manuscript if such data are not provided when requested.
54	None
55	The most important, not mentioned at all in the list above, is that I am qualified ie knowledgeable to referee the contents of a paper that I agree to referee.
56	Personal competence in evaluating the paper
57	My competence as a reviewer
58	Personal invitation by the editor to review is very important as is not too tight time constraints. Three weeks time for the review is a must.
59	- accordance of expertise and content

Q3 What training would be most helpful for reviewers?

Answered: 513 Skipped: 9



	Extremely important	Very important	Important	Somewhat important	Not important	Total	Weighted Average
Reading of journal-level guidelines for reviewers:	**15.49%** 79	**30.39%** 155	**32.75%** 167	**15.10%** 77	**6.27%** 32	510	3.34
Reading of general review ethics guidelines (e.g. COPE):	**9.80%** 50	**21.57%** 110	**32.16%** 164	**24.51%** 125	**11.96%** 61	510	2.93
Participation in a journal-level reviewer mentoring scheme:	**3.52%** 18	**14.68%** 75	**27.20%** 139	**30.33%** 155	**24.27%** 124	511	2.43
Webinars on how to review:	**3.94%** 20	**12.43%** 63	**25.25%** 128	**27.61%** 140	**30.77%** 156	507	2.31
Videos on how to review:	**5.14%** 26	**11.86%** 60	**23.72%** 120	**27.47%** 139	**31.82%** 161	506	2.31
Practical workshops/seminars on how to review:	**3.71%** 19	**11.91%** 61	**23.44%** 120	**32.23%** 165	**28.71%** 147	512	2.30

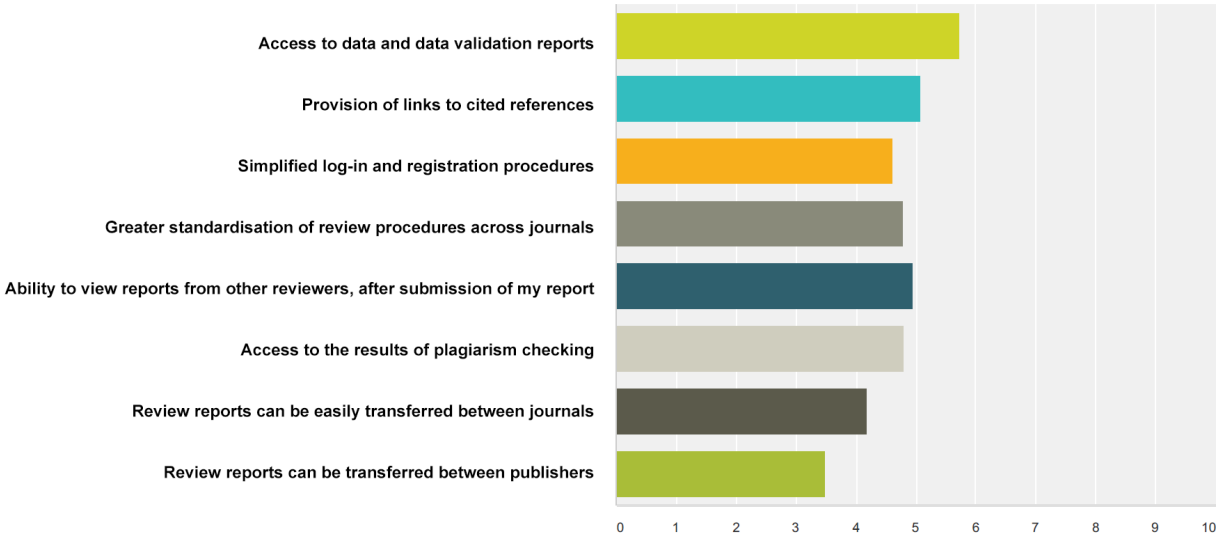
#	Other training that would be helpful (please specify):
1	My answers are on what I'd guess would help if I were starting out. By now I've learned from being on both ends of the process for many years.
2	I am now semi-retired, have been doing reviews for long enough .... I would hope most reviewers have experienced enough ill-informed reviews of their own papers to know what to aim for, but perhaps I am too naïve.
3	Organizing Journal or Company reviewing criteria workshop to commonly discuss and fix criteria.
4	Reviewers are readers. I say all the things that me as a reader finds.
5	Necessary training depends on the experience of the reviewer, both in terms of reviews performed (and seen what the other reviewers wrote) and reviews received for their own manuscripts. The more experience you got, the less important is training. Training that you get from your supervisor can also be helpful. When I was a PhD student, my supervisor gave the one or other manuscript that he received for review and that fit to my expertise to me and asked me to write a review, which he checked afterwards, so I could learn this early.
6	It would be much more helpful if the IUCr would quit with the most annoying practice of flipping the preview pages.
7	The quality of a review could be improved, and the review process simplified, by stating only a few and simple rules (e.g. not to be offensive) and making some of the decisions by answering pre-defined questions. This is already almost perfectly implemented in the IUCr reviewing system. One slight improvement could be the pre-structuring of the review text. Personal comments are most interesting and important, but one could structure them into several categories, e.g. a short

#	Other training that would be helpful (please specify):
	reviewer-based impression of the overall essence of the manuscript, specific comments on a conceptual basis, another pre-defined text mask for mentioning typos/formal issues. Simply a structure to remind the reviewer slightly on all important things to check, but without referring to lists or much text to read (guidelines) before but rather self-explaining by the system of implementation.
8	Trainig cannot substitute any knowledge about the matter, about the problems discussed in a ms.
9	I feel we have too much training. I believe that ethics, responsibility are most important in reviewing someones work. Unfortunately I have many times observed a kind of trend certain groups always publishing in the same journals and others being blocked just because of the authors name. One suggestion would be to remove the author list from the review package, in the same way as reviewers are kept anonymous to the authors.
10	As a researcher, you're rarely alone and can ask colleagues for help when facing your first experiences with peer- review. I don't see training as important because, well, we're lacking time for peer-review, for writing, and ultimately for research. So enough with training. I could understand and would even support some specific, web-based resources, usable at any time, provided by a journal. However it would be so much more useful to have this for all journals... just a dream...
11	I have been reviewing for many years and do not feel I need more training
12	Training like workshop may be possible for PhD students. After that, I don't think researchers would attend - too busy. Videos could be helpful as they are always available.
13	Indication of whether correcting English is the job of the reviewer
14	I have ranked these quite low even though I agree they are important. But I honestly would not dedicate time to watch webinars and attend lecture unless they were held at a conference (IuCR, ECM etc). The reviewer mentoring is an interesting idea. Although I have not participated I really like the eLife model where reviewers see each other reviews and meet/contact each other to discuss a common response. This more than anything should give a balanced review.
15	when the decision is made whether to accept or reject, all reviewers should see all the reviews so that they can also see what others thought of the manuscript.
16	Training should be provided during PhD studies or postdoctoral stays at the latest.
17	I don't believe reviewing may be subject to any kind of training. That would only bias the reports
18	checklists of what to look for
19	I think it is mostly learned by experience but it is important to have context and expectations established.
20	perhaps a sample review or two would be useful
21	Publishing in the journal and other journals
22	I agree that junior reviewers should be better trained. I have observed refereeing by PhD students and postdocs who had no idea what they were doing.
23	Knowing of other reviewers comments and discussing with them before the reply is given to the author
24	Supervised review should be part of training grad students and post-docs.
25	In the early days, I asked for critical feedback from the editor, which I found very helpful. The problem with webinars/videos/workshops and excessive reading is that I'm already snowed under, so taking several hours to review the rules I'm reluctant to do.
26	Submitting many papers to many journals and receiving reviewer's comments from time to time are most important. Also success in acceptance is a good training to become a good reviewer.
27	Ethical rules …..
28	are you joking? You 'learn' to review when you become an author! If you can write a paper you can review it!
29	For seasoned reviewer this is not important. You can not train reviewer - training is on the job.
30	I guess training comes from reviewing more and more...
31	I must be honest, that if reviewing also involved having to spend more time LAERNING how to review, I would probably do less of it. Only because there is only 24 hrs in a day, not because of any belief
32	As time constraints are a big hindrance, these points might be helpful for first time reviewers. Experienced reviewers will have a quick glance at the specific guidelines of the journal. An extensive list of questions provided by the review system is helpful
33	Knowing a normalized standard for a particular journal would be very helpful in the review process.
34	People won't waste time on your reviewing lessons unless you compensate them for their time. Time is what we (scientists) don't have!
35	Answers depend on how experienced the reviewer is. I don't think I need any of them at this point, but early in my career some training would have been valuable. I answered somewhat important" on some because they could be valuable, but not necessarily important if other training has taken place. For instance, I think a useful process worth promoting is PI mentoring of grad students and postdocs, through inviting them (with journal editor permission) to participate in the review process. A few such experiences are very valuable training. Journals could in theory also provide such training, but that may involve unneeded and cumbersome bureaucracy.
36	Mostly reviewer training would be helpful for people just starting their careers, but then it would be best for them to be trained by their supervisors or institutions.
37	All good ideas. But would candidate reviewers find the time? We all are on a very tight schedule...
38	All of those could help, but are highly dependent on the actual content. They could just as likely be a frustrating waste of time.
39	Better training of reviewers would be really fantastic, but we are all very time-limited. But it is of existential importance for science.
40	Most important is to be a recognized, long working specialist in the field. No idea if a training helps a lot .
41	This is a matter of expierience and professional honesty. I am now almost 30 years in science and I have a feeling that I know which is a novelty, what is interesting and new where is this border between information and science. In order to accept something, first, I have to convince myself that a given ms is introducing something new and goes beyond just

#	Other training that would be helpful (please specify):
	a collection of results from different techniques.
42	I think that the activities listed here are useful for improving review skills. On the other hand, I cannot imagine to spend substancial time on videos or other things, especially not if they are journal specific.
43	especially important for those at the start of their reviewing career.
44	hints from editors on the expected journal quality
45	I think all of these things could be important to the less experienced members of the community, but for those educated in times past, these things were I think better emphasised ad absorbed during student/post doc days.
46	A better feedback from the Journal / the Editor would be helpful. I am getting disappointed when, occasionally, the paper which I recommend (I think arguably) to reject is still published in an almost unchanged form. Or, it is rejected and then appears published in the same state in another Journal.
47	Exchange of the reviewer's experience
48	Provide specific examples of helpful and unhelpful review practices. Consider giving feedback to early-career reviewers on the helpfulness of their review.
49	I have tried to answer from the point of view of a young reviewer at their first experience. Best of all is mentoring from an experienced person in the same research group.
50	I have marked most of these as not important because I think many established reviewers would not use them. The main problems being that their many reviewers who seem to forget what their responsibilities are and are biased by advancing their own cause / protecting their own sphere. New reviewers would be more open to training in which case I think short 5 minute video would be good to make them think about their responsibilities
51	Best would be to take a long term look and train during PhDs as a kind of Reviewer Masterclass; OK this is for next generation scientists but would also help the students in their writing and reflections.
52	A training set for new referees comprising the easier through to more difficult cases as examples would be most useful. This could be supplemented by examples of what are acceptable quality figures.
53	None
54	Insight in how other reviewers, reviewed a manuscript has given a lot of insight.
55	I like the suggestion of the journal level reviewer mentoring scheme. To often, folks send in their reviews, and that's it. No feed back on whether the right decisions were made or not. One problem with the blind review process is that the reviewers don't get to speak with each other. Not sure how to solve that problem, but I frequently learn from other reviews of the same manuscript, but I also even more frequently see stuff that is seriously misguided and impacts the decision. It has not been clear to me how to change that, unless there was some way for the reviewers to amend their reviews once they are available - prior to the decision being made. I know this would slow down the review process, but I think it would help a journal to have consistently good reviews. Perhaps it could be done at the level of an e-mail conversation between the editor and the reviewers??
56	In my opinion, the best way to learn how to review is to get familiar with the publishing process of the journal from the authors point of view (or from the corresponding authors point of view).
57	Time is a huge issue. I can't imagine most reviewers would have the time to do these things, however laudable.
58	Example reviews
59	- scientific expertise - unbiased, non-patronizing attitude

Q4 Please rank the following ideas as possible ways of making peer review more efficient:

Answered: 506 Skipped: 16



	1	2	3	4	5	6	7	8	N/A	Total	Score
Access to data and data validation reports	**21.97%** 96	**18.76%** 82	**18.31%** 80	**13.96%** 61	**9.84%** 43	**6.86%** 30	**5.72%** 25	**2.75%** 12	**1.83%** 8	437	5.71
Provision of links to cited references	**18.44%** 90	**15.57%** 76	**15.37%** 75	**10.86%** 53	**10.66%** 52	**7.38%** 36	**7.38%** 36	**11.89%** 58	**2.46%** 12	488	5.07
Simplified log-in and registration procedures	**17.29%** 78	**13.75%** 62	**9.76%** 44	**10.42%** 47	**9.76%** 44	**10.64%** 48	**10.20%** 46	**16.41%** 74	**1.77%** 8	451	4.61
Greater standardisation of review procedures across journals	**13.68%** 58	**10.38%** 44	**13.68%** 58	**15.09%** 64	**11.56%** 49	**11.79%** 50	**9.20%** 39	**8.25%** 35	**6.37%** 27	424	4.78
Ability to view reports from other reviewers, after submission of my report	**12.53%** 57	**16.04%** 73	**13.19%** 60	**13.85%** 63	**13.85%** 63	**12.53%** 57	**8.13%** 37	**6.15%** 28	**3.74%** 17	455	4.95
Access to the results of plagiarism checking	**11.06%** 47	**13.41%** 57	**15.53%** 66	**14.35%** 61	**14.59%** 62	**12.24%** 52	**8.24%** 35	**7.53%** 32	**3.06%** 13	425	4.81
Review reports can be easily transferred between journals	**8.21%** 34	**7.00%** 29	**9.90%** 41	**14.01%** 58	**10.39%** 43	**14.49%** 60	**16.91%** 70	**7.73%** 32	**11.35%** 47	414	4.18
Review reports can be transferred between publishers	**3.95%** 17	**7.91%** 34	**6.05%** 26	**9.07%** 39	**11.63%** 50	**12.79%** 55	**16.98%** 73	**20.00%** 86	**11.63%** 50	430	3.48

Q4 Please indicate any other ways in which you think the review process could be made more efficient:

Answered: 49 Skipped: 473

#	Responses
1	Firm assurance that I'd be asked, if a paper might be accepted before I got my review submitted!
2	Determination and clear communication of the evaluation criteria.
3	Access to the cited literature would be tremendously useful, even if that is unrealistic.
4	an open review as practiced by eLife would be extremely helpful, as it would eliminate biased reviews that are influenced by personal resentiments of reviewers, Also the publication of the combined reviews of the referees is very helpful as the readers see what points of critique have been raised by the referees and addressed by the reviewers
5	that we stop these stupid automated systems ! A single word report makes it easier to send to the co editor, rest is Publisher's work, not scientists'
6	well-defined rating system
7	Most important: No flipping of preview pages
8	It could be better incentivized; as it stands now, reviewing is basically an altruistic activity (for which one suffers, given the time constraints stemming from all the daily minutiae, at least in U.S. academia). Also, there could be better communication between editors and reviewers.
9	A transfer between reports is useless: The main idea is just to establish independent reports!
10	provision of links to earlier papers of the authors to prevent "self-plagiarism"
11	Simplified access to the review material
12	Tranfer of review report is nonsense : it means that authors do not take into account reviewers comments prior to resubmitting ??? Access to data (except the specific case of cif files) is an issue : I don't trust the peer-review process enough for that. What's the point in viewing the reports from others reviewers AFTER submission ? who is gaining anything from this ? possibly be informed of the final decision, and collecting the reports on this occasion could provide little help. With browsers keeping tracks of logins and passwords all-around, I don't see how much more simplified could be theses procedures. Many journals already provide links to cited references.
13	Co-ordination between publishers (and journals for a particular publisher - generally OK for IUCr) to minimize request to review all at the same time
14	Reviewing of specific parts of a manuscript not all of it when containing very different techniques for which the reviewer may not be expert in all of them.
15	I would like to have a common reviewer response, ie. the reviewers share their review and send a common response
16	prescreening of papers by editors, clear deadlines for reports, systematically exclude late or bad referees
17	Double blind review. Elimination of filtering at the editorial stage by junior scientists.
18	No matter what you do it remains a substantial, voluntary, effort that is not always possible to do. Alignment between reviewer expertise and manuscript topic is essential.
19	Please don't ever ask us to annotate pdfs.
23	More filtering of articles at editor level to avoid getting unreadable articles on the reviewers desk
24	Standardized review form for boilerplate review summary
25	I like the elife editorial/review process, which sees the reviewers work as a team.
23	not receive too much paper to review
24	Have figure legends on same page as figures!!!
25	Direct annotation of docs. This survey page was horrible.
27	Ability to view other reviews doesn't make it more efficient, but it does make it more rewarding. I appreciate journals that send me an email letting me know of their decision and providing me copies of the reviews.
28	The biggest problem in the review process is linked to the fact that a single reviewer is rarely able to judge all aspects of a paper. Papers are nowadays collaborations between several instituts including experts from strongly differing areas of science. You might be an expert in one area of the paper but rarely of all areas. As an experimentalist I will e.g. not be able to judge the correctness of a theoretical ansatz, a theorist will not be able to judge the correctness of the data collection and analysis. In a perfect world there would be different referees for different parts of the article.
29	Probably covered in the options above, but manuscripts already rejected by other journals should be clearly labelled as such, possibly with the reviewers' reports made available.
30	Allow review to be submitted by E-mail. Assurance from Editor that a review has been given due consideration, before asking to re-review.
31	All htese are great suggestions and would help a lot
32	Reviews should be written positive even when the manuscripts are rejected. Put appropriate questionaire to direct them. Good reviews or those leading to significant improvement of an article can be recognized by publishing along with the article on the web.
33	Different journals have different scopes so I do not think that standarisation procedures would work correctly. But the other points such as transfer of opinions or access to data and data validation procedures or plagiarism checking could be useful.
34	A single meta-server to send manuscripts with one single submission to a whole cohort of journals in a sequential or parallel manner.

#	Responses
35	data and validation of the science presented could/should be included with the manuscript - it would save time asking for it....
36	Some of the ranking places are equal. This question/answer is somewhat misleading. For example my 4 and 6
37	Prizes for fast review? (e.g. < 1 week gets an Amazon credit)
38	specific questions from the editor that may help the reviewer focus her/his expertise although manuscript is perhaps outside own area
39	a link directly to the file for review
40	Can you think of a database of reviewers containing their fields of expertise (the way the reviewers define.choose them)?
41	Web portals that are optimal for reviewers (easy, not "yet-another-password") rather than optimal for the publisher/editor. Who's doing the unpaid work?
42	Asking reviewers to provide scores on most important criteria such as value of scientific findings, originality, completeness(how well demonstrated), trustworthyness of results and analysis, topicality etc compared with existing publications in the field of study
43	Manuscript coming with a short comment from editor
44	open access to paper and reports all registered readers of the journal and possibility to comment the process on an open forum whther the authors so desire
45	Access to a list of relevant literature. Ie one does one's best but assistance from a search engine derived list would be great.
46	Editors should more thoroughly screen manuscripts for scientific quality before sending papers out for review
47	The "ability to view reports from other reviewers" will ruin the impartiality of the review process.
48	Give reveiwers enough time. Give feedback to reviewers in particular if recommendations are not followed.
49	instant link to journal for review

Q6 Below we list a number of ways that journals provide rewards and recognition to their reviewers. We would be grateful if you could indicate which of these would be most important to you.

Answered: 506 Skipped: 16

	Extremely important	Very important	Important	Somewhat important	Not important	Total	Weighted Average
Information from the journal about whether the paper that you reviewed was accepted or rejected:	**37.97%** 191	**34.99%** 176	**20.28%** 102	**4.97%** 25	**1.79%** 9	503	4.02
Discount/waiver on open-access fees:	**26.19%** 132	**28.17%** 142	**23.21%** 117	**11.71%** 59	**10.71%** 54	504	3.47
Discount/waiver on other publication charges:	**24.50%** 123	**28.29%** 142	**23.71%** 119	**12.95%** 65	**10.56%** 53	502	3.43
Feedback from the journal on the usefulness/quality of your review:	**19.48%** 98	**31.61%** 159	**29.82%** 150	**10.14%** 51	**8.95%** 45	503	3.43
Free personal access to journal content:	**25.10%** 126	**25.70%** 129	**22.31%** 112	**13.55%** 68	**13.35%** 67	502	3.36
Post-publication metrics related to the articles you have reviewed:	**9.98%** 50	**18.56%** 93	**29.54%** 148	**23.15%** 116	**18.76%** 94	501	2.78
Discount on books:	**13.20%** 66	**17.80%** 89	**21.80%** 109	**21.60%** 108	**25.60%** 128	500	2.71
Acknowledgement on the journal's website:	**7.00%** 35	**18.80%** 94	**23.60%** 118	**25.20%** 126	**25.40%** 127	500	2.57

	Extremely important	Very important	Important	Somewhat important	Not important	Total	Weighted Average
A personal thank you note from the editor:	**4.58%** 23	**11.95%** 60	**26.10%** 131	**30.68%** 154	**26.69%** 134	502	2.37
Credit automatically awarded on a third party site (e.g. Publons):	**4.55%** 22	**10.74%** 52	**19.21%** 93	**24.17%** 117	**41.32%** 200	484	2.13
A certificate from the journal to acknowledge review effort:	**4.97%** 25	**9.34%** 47	**18.49%** 93	**22.47%** 113	**44.73%** 225	503	2.07
Reviewer of the year awards from the journal:	**4.64%** 23	**9.68%** 48	**16.94%** 84	**21.98%** 109	**46.77%** 232	496	2.03
Name being published alongside the paper as one of the reviewers:	**3.04%** 15	**6.88%** 34	**13.36%** 66	**19.03%** 94	**57.69%** 285	494	1.79
Possibility of publishing your review:	**3.20%** 16	**6.20%** 31	**12.20%** 61	**20.40%** 102	**58.00%** 290	500	1.76

#	Other rewards/recognition that might encourage you to review an article (please specify):
1	Encourage authors to acknowledge major contributions/corrections suggested by a referee, by name if the referee approves.
2	It would be nice to be able to query a db to get a list of the papers I have reviewed yearly for my performance review. Reporting on my timeliness might encourage more quick responses.
3	Comment: a TANGIBLE way to acknowledge our work is much better than thousand words
4	Give full rights to post the publishers-final-pdf of one of my articles on my website
5	Do not ask me to review papers on subjects that are outside of my skills. When you ask me to review a paper, give me immediate access to the full paper, so I that can decide straight away if I will be able to fully understand it. DO NOT FLIP PAGES !!!
6	There are some great ideas here that I have not seen implemented. I really like the idea of future metric information.
7	The most important reward seems to be, that the review process itself is kept efficient, in order to shorten publication times for one's own work.
8	Acknowledgement in a list of referees published in the journal once per year
9	Difficult to fill in this question as I think it is important that many of these are NOT done.
10	Discounts/waivers that were useable across publishers?
11	"Post-publication metrics related to the articles you have reviewed: " Does this means that as a reviewer, you're supposed to accept all the papers you're reviewing ????
12	Protection of anonymity (in this regard the idea of publishing reviewer names in any way in to me a nonsense)
13	Don't let people who don't review for a journal (after being asked) publish in that journal. There needs to be stick as well as carrot.
14	Mostly I think reviewing is just part of the job. Most important is knowing if you are doing a good job. Little presents like fee waivers are very nice and appreciated -- I would probably not send work to IUCrJ if I had to pay, since my budget is very limited at the moment. One journal gave me a credit towards a volume from the publisher, and I was able to purchase an ebook. That was nice.
15	none
16	Because the job of the reviewer is a fundamental responsibility of every practicing scientist, I don't believe that ego- inflating ceremonial rewards are necessary. If anything, they may in extreme cases affect the effectiveness of the reviewer. Having tangible perks that allow scientists from financially struggling labs to gain access to pricey material will be beneficial, as it will remove some of the invisible barriers to the normal practice of science in developing countries and impoverished institutions. Feedback on the effectiveness of a review is crucial: I was never trained how to review articles and had to learn on the job. It would have been (and still would be) very beneficial to me to know whether I was on the right track.
17	Money.
18	A copy of the final accepted article if it is not open access
19	Reviewers are normally paid a salary by their institution. While doing a review the reviewer is not working directly for his/her employer. The employer has to pay high subscription fees for having access to journals. This is obviously not fair. The subscription fees for the institution should be reduced if its employees do a over propotional number of reviews.
20	Again, more strict follow of reviewer's requests - unless they are unreasonable or out of target.
21	I think some journals are doing this - but it would be nice to have selected (read interesting) reviewer comments and replies published along with the article.
22	I would not appreciate lifting reviewer anonymity.
23	I think rewards based on timeliness of response could be useful. Most of the rewards mentioned are pretty useless to me, though some are nice like reduced fees or subscription rates etc. . I think it might change my behavior if I lost rewards progressively the later my review was. It is a bit cheesy perhaps, but I have a ToDo list as long as my arm, and deciding when to do something before something else can sometimes pivot on small things like that.

#	Other rewards/recognition that might encourage you to review an article (please specify):
24	i dont want to be named as a reviewer.
25	There are to possibilities either opinions which are strickly confidential or signed opinions published alongside with the ms. Or a mix approach with some opinions confidential ones and the rest of them signed and published. I personally think that it is far more difficult to write a signed opinions which is published together with a given ms. This is like preparing a separate short article - maybe such opinions should be paid.
26	A reward that preserves anonimity is most welcome but not required.
27	Caution must be taken on rewards as this might encourage reviewers to accept more manuscripts
28	author cover letter addressed to potential reviewers
29	One does not have to be awarded a prize for everything one does.
30	accelerated review processing of reviewers' manuscripts
31	I really like the idea of reviewers getting access to the journal's content as a thank you. I also like reducing open- access fees for reviewers since open-access is very important to me
32	It is understood that a scientist who publishes 1 paper should review about 3 other papers (divided by the number of coauthors). However it is an effort and not everyone may wish to spend time reviewing others' papers. I don;t know whether a symbolic payment (say 20 EUR) for each review would make people more enthusiastic; but science is not really a business, it a style of life.
33	(Financial) recognition sent to the University's Finance Office for REF (UK HE) purposes. Finance do not care about anything other than money or metrics that improve REF score or improve University's league table positions. Academic reputation of individuals is of no importance whatsoever in Finance offices. As a result, we are under pressure not to review articles, but spend more time on income generation or our own publications. Sad, but true.
34	reviewers passport containing metrics- so you can accumulate a rough score or scores indicating things like (1) how quickly you respond (2) usefulness of your reviews / technical insight (3) scientific insight (4) average jounal impact factor of reviews (5) acceptance ratio and (6) crucially number of papers reviewed in last x years
35	Starbucks card. 8-)
36	Please note: the possibility of the "Name being published alongside the paper as one of the reviewers" would be extremely important not for the acknowledgement of the reviewer, but to "help" the reviewer taking greater care in the review process. If one considers the peer review operation as a sharing of the responsibility of the quality of the results, then it would be extremely importanant for the readers to know who shares the responsibility of the publications. We know that certain domains of research are really very restricted, and the review process results in an incestuous exercise.
37	Istead of rewards, You could make simpler t osend a review report
38	The above should suffice.
39	I review because I feel sense of duty to my community, not because of any possible rewards.
40	- anonymous acknowledgement in the paper should be encouraged by the editor when the review was helpful

Q7 Please add any additional comments you have regarding improving the review process.

Answered: 75 Skipped: 447

#	Responses
1	I am grateful for the opportunity to rethink about this subject. Very many papers are published recently, so efficient publication is being required. Sometimes authors get tired of waiting to resolve conflicts among reviewers and editors. In this mean, editors' role becomes more important. By the way, I'm surprised at a reviewing process, in which my paper was refereed by a non-anonymous reviewer recently. Indeed, we were informed about his/her name. I felt such comments have rather higher power of persuasion, because we could recognize that he/she made comments based on the disclosed background. In this case the paper was luckily accepted. However, this information is rather valuable when a paper is rejected, even if it is disclosed after the reviewing process.
2	At the end of reviewing one does not know what happend with the review report. It would be nice to obtain a copy of the paper as soon as it is accepted. Very often all suggestions and criticism are completely ignored by the authors. This is quite frustrating. At least the reviewer should be informed why.
3	Easing off on the pressure to get thru that stage so quickly that there's no chance for a busy reviewer to do a thoughtful & thorough job.
4	Thank you for the opportunity to be a reviewer for IUCr journals. I appreciate the learning process and being able to contribute to the community.
5	Thank you for a well structured questionnaire!
6	Comments should be helpful, 'dans la mésure du possible'
7	Good lines of communication between editor/co-editor and reviewer so it is simple to contact them if there are any issues or delays.
8	Nag emails need to be automated. 1 week before deadline. Then 2 days. Then every day...
9	We need to uniform the attitude of the reviewers for the better. Some of us are just keen on offering negative or even worse judgemental criticisms. This kills the reviewing process and deters others to accomplish their work. It is also extremely deceiving to receive (as an author) poor reviews if one strives to offer best ones. Editors MUST take action against this plague.
10	My aim is to help improving the papers (or if hopeless to reject them)
11	We are: - fed up by automated systems that flag you every 15 days, yes we are always late ! You have to know this ! - fed up with anonymity, a referee better argues if he feels recognizable. By the way, I am Daniel Chateigner - fed up with articles that we strongly reject and that finally appear. - overwhelmed by referees procedures of stupid titles. Hopefully IUCr refrains a bit non-expert scientists - wanting to open our own articles
12	Moving away from anonymous reviewing needs some very careful thought. Review by "facebook" i.e. listing of reviewers names and comments is a radical departure and may have unpredictable consequences.
13	If you once again ask me to review a paper and send me a preview with flipping pages, forget about it.
14	Some examples of good and useless reviews will be helpful. People are so busy that the ideas with respect to seminars, webinars etc. are probably not practical.
15	A more direct (anonymous) contact with the authors could be useful, because many times misunderstandings arise on both sides, which could be easily resolved if one could comment several times back and forth. I think of a structure like a comment section on a blog, where one can discuss issues in a thread-like structure. Of course, there should be some regulated way of when to stop and, e.g., wait for a revision and when to finally decide and also some prevention (somehow) not to allow meaningless discussions.
16	Personal interaction with the editor is very important
17	Allow referees to be either known or anonimous
18	For some reviewers honoraries are important but not for me
19	It could be interesting to verify if reviews differ if the list of authors and their home institutions are not available to the reviewers. Quite often I have, as reviewer, encountered difficulty in reading the article due to language issues. This should not invalidate the publication. I could make many suggestions and comments on how to improve the language issues , but am not sure that as a reviewer I should be doing it as (1) authors may find it offensive (2) I'm also not sure it is the role of the reviewer to do so and if I do it will it be kept anonymous? In a previous question it was asked if it would be interesting to have one's review published. In principle it is a nice idea if it could be published like an introduction to the articles that are being subject of the issue in which the reviewed article will appear.
20	Thanks for caring about this !
21	I had no idea of the existence of Publons, thank you for this new piece of information!!!
22	None
23	Page 5 of this survey does not work properly on my computer. Please ignore this page.
24	There are already too many journals. I would recommend reducing the number of journals so there is more time that reviewers can dedicate to good quality articles.
25	Any move to standardise manuscript formatting across all journals would improve efficiency of preparation (for authors) and the reviewing process. It is unlikely to happen given the differing focus of each journal, but would be a worth goal to work towards.
26	N/A
27	IUCr review process is already very good from both reviewer and author point of view. I would simply say: Do not throw the baby out with the bathwater. Change for change's sake is to be avoided.
28	Keep track of the number of requests to a given reviewer - and try not to overburden your reviewers.
29	Thanks for the review - good questions!

#	Responses
30	No mention of Editors... my experience has been lights and shadows, both as reviewer and as author. Editors are really important
31	Other than the odd thank you emails from selected journals, I am not really aware of what "rewards" if any are given to reviewers, Discounts are a great suggestion
32	It would be useful to have an option to annotate and comment directly within the manuscript text. After all reviewers submit their feedback, these comments could be made visible to all reviewers and authors. The authors should have an option to respond directly to those notes at the same place. For updated manuscripts it would be helpful to provide a highlighted differences with respect to previous drafts.
33	standard procedures among journals/editors are certainly appreciated
34	There are two things that turns me off: 1. When author and editor just ignore my requests - it makes my work unimportant and useles 2. When editor reject paper without review for unscientific reasons.
35	Split the review process in two parts and keep for the reviewing process only the scientific content as all others things like language, citation style can be done by an english reviewer. This may help non native reviewer.
36	No comments besides already mentioned.
37	I was unsure by what was meant as far as transfer of reviews across journals and publisher. I believe in fair reviewing, so for me there is a difference in an author transferring a positive review for a rejected paper to another journal, and automatic transfer of a negative review. I think a paper receiving a negative review should be given the fair chance of a new, independent review
38	JAC submission system and reviewer interface could be improved.
39	Articles are not free, but the reviewing process is expected as service. It is not a good way, the journal should pay back to the reviewers in some way. The editors should give points to the reviewers according to some scheme, even the review process is not fast, if it is done very seriously, it must be congratulated. If the editors and the reviewers are not fair, there should be a way that the authors give negative points to them, and it must be seen in public.
40	This is perhaps implicit to the suggestion that it would be good to see the referee reports from other reviewers after submission of my own review, but this should be in the context of being able to discuss and revise reports subsequently to reach consensus, as is done in reviewing for eLife.
41	List of reviewers at the end of a volume (once a year), as done by some journals?
42	Please keep the amount of allowed supplementary information limited. The uncontrolled growth of this increases the reviewers' burden. In fact it causes me to accept less reviewing requests.
43	Patience. Of course quite often we been asked to review a ms when we are overload with other obligations. SO both editors and reviewers should have some patience. I do not think that all ms have to be processed within 2 weeks:). Slower but more careful.
44	There are very harsh reviewers, even if they have not understood the paper. There should be some feedback from the editor to the reviewing system so that these reviewers are not selected again, or at least they have a warning of being particularly impolite. On the other side, there are very good reviewers who make a thorough and constructive revision. These reviewers should also be labelled as good reviewers and have more chances to be selected again.
45	One problem I always have with reviewing is accessing references in subscription journals. Typically I might need to look at 3-5 references quoted by the authors. Since I work in a small biotech we do not have online subscriptions to many journals and visiting the university library would be very time-consuming. Clearly it's not fair to expect my company to pay for reprints of the references that I need to look at (which may be from a different publisher of course), and I'm expected to commit to reviewing the paper before knowing which reprints I will need.
46	Except for exceptional cases of true competition, sufficient time (say 3 weeks) should be allocated to provide a review.
47	it takes quite a long time - for very little thanks - it seems a win win for journals - others do the research, write the paper, pay to publish, reviewers work for free, we then have to pay for the publications!
48	Some questions are strange, e.g. relationship to editors.
49	The review process can be "two-blind" process, i.e. reviewer also should not know the names of authors. This prevents undesirable overestimated value of the manuscript in the case of the reviewer knows authors of manuscript.
50	1. I've found the IUCr review process reasonable but it could be much faster (I admit I took 4 weeks last time). Maybe you could incentivize fast reviews with an open-access discount, or small prizes? 2. The review process isn't the main bottleneck with IUCr journals anyway - as an author it's a bit dismaying when an article gets accepted within a month but takes another three months to be published online. You should just post the review PDFs as soon as the editorial decision is made. 3. Optional "unblinding" of reviewers.
51	I think journals linked to scientific societies should make more use of the fact that reputation and profits of these journals go into e.g. fellowships and meetings for the community
52	Locating suitable reviewers that can give fair and constructive suggestions and critical comments.
53	After a paper that I've reviewed is accepted or rejected, I'd like to have a possibility to read all referee reports on that paper.
54	Hopefully you will consider my reviewers passport idea. I think this would help science massively mainly weening out reviewers who just sit on papers or who are incredibly hard on their contemporaries compared to their own accomplishments.
55	It is the first questionnaire on this topic that I am filling in. Thanks for the initiative and good luck with the evaluation of the results.
56	I have difficulties with many journals procedures with several links and questions. I suppose o be the reviewer, not being interrogated! As far as I know, review is not a punishment. In order to review a paper I have to disclose lots of information and fill hudreds of forms with crosses and ticks. In the past I would get a letter with a copy of the manuscript and some questions. I would answer the questions, add comments, cut the address on the original envelop, stick it on a new one and send back! Very simple. I never send information about the colour of my socks ! No password, no login, no id number, no nothing. Just my review ! I have no problems to pay for the envelop and the stamps !
57	The IUCr Journals login and website to gain access to articles one accept's to referee and to submit one's review are amongst the most efficient I work with. Well done

#	Responses
	to the designers and developers of it. The very difficult to answer question on the IUCr referee's form is 'what will be the impact of this article?'. I am quite prepared, indeed happy, to answer 'is the article significant and new?' which is at least based on what has gone before this new article. But to be asked to predict the future?! I realise that many other journals ask the same 'Impact prediction' question. Recently I bought a copy of the Research Impact Handbook. It is very interesting and does try to instruct the researcher in making ie planning the best impact they can for their research results. The Kudos used by IUCr Journals is of similar intent. Maybe some day we will all get expert at ensuring we work on only impactful research. But would Faraday for example have predicted an impact for his research on electricity? Curiosity driven research, to sum up, cannot guarantee impact but should be significant and new.
58	The review standards of scientific papers in the scientific community is slowly declining and it is up the scientific community to try to arrest this decline by whatever means that we can. As time and expertise are two of the most important factors, perhaps the community of retirees should be tapped more extensively to improve the overall review process.
59	Sometimes the scheduled time for review is pretty short, it goes from two weeks, this is limited for some seasons of the year, when we are teaching the appying exams.
60	The major problem I have to act as reviewer is the lack of time. As a full professor, I am always under pressure with teaching, research and academic duites an I have to reject about 75% of review requests (I get more or less one per week). I would love to be more involved as I believe the review service is a major mission for scientists and improves our scientific background but I truly find it hard to get extra-extra time for it.
61	Thanks for this survey
62	Journals should compile lists of reviewers who are responsive and those who are not, so that an editor doesn't have to waste time trying to get reviews from poor referees. It would also help to compile lists of reviewers who are already on editorial boards.
63	It's a lot of work but is required for publication quality
64	In next time, I will do my best for reviewing ASAP.
65	Several journals give me only 10-14 days to complete a review. Although I spend only 4-6 hours per review, it can often take me more than two weeks to find that block of time. Three or four weeks would be more reasonable
66	I may be hopelessly old-fashioned, but I believe that the primary impetus for reviewing should be a recognition that, as members of the community, we all have a duty to pitch in and do our part.
67	Thank you, Cherif Matta
68	correcting language and grammatical errors are a time-waster.
69	Nothing
70	In my opinion, double-blind refereeing is the fairest way to review to remove any bias.
71	Good luck, and thanks for thinking about it.
72	Some of the question indicate a trend to break the anonymity of the review procedures. I vehemently object any development of that sort, as it will ruin the very fundamental issue of unbiased and independent review procedure.
73	To me the three best rewards would be, in this order: a) to get to see the other reviews (I'm not certain of the general policy in this area), b) to get free personal access to all IUCr journals (our library does not provide access to all of them), c) one open-access voucher for every three or so reviews.