Environmental Science & Technology Letters

Editorial

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I Owe, I Owe, so Off To Review I Go

It is time to think about reviewer metrics. You probably had numerous anonymous reviewers for all those great papers you published last year, but did you return the favors? Did you provide as many reviews as you received? There is a lot of discussion about journal impact factors (IF) and the number of citations for a paper (N), and if you have published more than a few papers, you have probably calculated your h-index (the number of papers you have published that are cited at least that number of times). These are numbers being used to evaluate the quality of different journals as well as productivity by authors, but all this productivity rests on the peer review system, and therefore the productivity of reviewers. Maybe the review process would be improved if we had reviewer metrics as well as author metrics? How about an R-index? Or maybe an R-number or R-factor? Such metrics do not yet exist, but maybe they should be created or at least pondered. Consider these possible definitions.

THE R-NUMBER

This is just the number of reviews that you have provided over your academic career. If you track total publications, and total citations, why not just track total number of reviews?

THE R-INDEX

Divide the number of reviews you do each year by the number of papers you published that year. Hopefully neither of these numbers is zero, but just in case, define the denominator as at least unity. A typical number of reviews you receive on a manuscript you write is three. If you publish 10 papers, you probably should provide at least 30 reviews (the same number of reviews you probably received for your work), so a good R-index is 3.0. This is a nice annual measure of how you are doing in terms of providing reviews, and there is no limit on how high it can go! The great part about the R-index is you can immediately see how your annual "reviewer account" is doing (sort of a banking system for reviews). Maybe you provide a lot of reviews, and your R-index is a commendable 5.2? What if you provide very few reviews? In the latter case, you might qualify for the R^2 Club, defined as an R-index that decreases when you square it. Please do not be a member of the R^2 Club.

THE R-FACTOR

Do you provide good reviews to journals? If you do, you'll probably be rewarded with requests for more reviews from that journal. If you provide short, noncritical reviews, the best journals will not ask again. How do you know if someone is reviewing a lot for a quality journal like ES&T? Their R-factor is high. The R-factor is obtained by summing the number of reviews you provided to a journal multiplied by the impact factor for that journal and then dividing by the total number of reviews for all these journals. This produces an average "impact factor" for the journals for which you provided reviews. Is your R-factor the same as ES&T's impact factor? Is one review to ES&T really better than 10 reviews to journals with an impact factor of 1? Maybe not, but if you are receiving requests from top journals, and providing quality reviews for these journals, you will really shine on this metric. The downside? You might decide to review for only high-IF journals, and therefore you would have a high R-factor, but you could have a low R-index!

You can probably think of a few other R metrics yourself, but of course, they all have their own advantages and pitfalls. Any R-metric that we calculate has the same inherent flaw: it is just a number. It does not sufficiently account for the quality of a review or for other things, such as not accepting reviews due to time off from work for a sabbatical, leave, or being an editor or associate editor for a journal. I used to provide more than 50 reviews a year to different journals, but now most of my review time is redirected into time spent on editorial reviews, handling of manuscripts, and writing editorials (like this one). While reviewer metrics cannot quantify the quality of a review using a single number or equation, we recognize quality reviews when we see one, just like you know a quality paper when you read it. So I am not seriously advocating the development of a whole series of new metrics. But, do ask yourself the simple question: are you in the reviewer R^2 Club? If so, try to raise your R-index, but please do not sacrifice the quality of your reviews to do that. Speaking for all editors and authors, we appreciate the time that all of you high "R" achievers take to provide thoughtful, timely, and quality reviews!

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AUTHOR INFORMATION

Notes

Views expressed in this editorial are those of the author and not necessarily the views of the ACS.

Received: April 4, 2014
Accepted: April 5, 2014
Published: April 8, 2014

   dx.doi.org/10.1021/ez5001148 | *Environ. Sci. Technol. Lett.* 2014, 1, 248−248