

Editorial: Behind the Scenes

Peer reviewing – An old tradition with new demands

The concept of peer reviewing has been known since 1665, when Henry Oldenburg introduced it for the Philosophical Transactions of the Royal Society, but in its essence it might even be traced back to Ishaq bin Ali al-Rahwi (854–931) in his *Ethics of the Physician*. The main idea is that an author's scientific work is subjected to the scrutiny of other experts – the peers – in his or her field. The editor acts as the mediator and is needed as a contact person for both parties and as a decision maker. However, modern peer reviewing has the drawback of slowing down the publication process through an increase in manuscript-handling time.

Speed has clearly become an important issue. Online article repositories enjoy increased popularity even at the cost of scientific quality. Have things been better in former times? Einstein's famous papers from the year 1905 all moved quickly through the reviewing process and were published within a few weeks. That, however, was an exception, and no external refereeing was involved: The *Annalen der Physik* editors Max Planck and Wilhelm Wien were in charge of the reviewing themselves. Today, science is much more diversified and specialized, and editors are strongly dependent on reviewers' expert opinions to ensure the high quality of articles. To still enable fast publication times,

Laser & Photonics Reviews asks its reviewers to submit their manuscript reports within two weeks. Some people argue that this is too much to ask and add that reviewers get neither fame nor money for their work. Yes, true. But reviewers do get insight – valuable insight. *Laser & Photonics Reviews* clearly puts some extra demands on its referees, because the length of review articles tends to exceed that of original papers significantly. In addition, review articles usually demand an overview of subjects that results from significant experience, which reduces the number of potential referees. For LPR, 6.7 review requests are required on average for each article, with an average of 2.2 referees providing a report. Those people make article-based scientific communication possible, and they do it because articles, especially review articles, are simply interesting!

Notably, there is quite a spread in the quality of refereeing. Reports range from single-phrase comments, such as “Good article, should be published as is” or “Reject. No new insight” to elaborate reports that are several pages long and nicely numbered and spiced with well-intended citation suggestions. It is important to keep in mind that a solid base of information is required for any decision on manuscripts. Thus, we encourage people working actively in science to support their fellow researchers by providing them with useful feedback; that is, reports that are meaningful and that add to the value of the manuscript in question. The careful reading of manuscripts does help you as a referee to understand new concepts and may encourage you to rethink your own approach to the problems involved. It gives you insight well ahead of everybody else who will read the article only weeks or months later. It is also a task that requires a sense of responsibility.

LPR is a double-peer-review journal with fast reviewing times of around 45 days on average from submission to first decision. In total 130 days are needed on average from receipt of the manuscript to online publication. In these times characterized by ever-increasing time pressure, *Laser & Photonics Reviews* will do its best to ensure the highest quality. We are very glad and thankful that for this journal we have sufficient support from reviewers all over the world who devote precious time to improving and ensuring the quality of our articles. With this in mind, I wish you pleasant reading.

Guido W. Fuchs
Editor Laser & Photonics Reviews

