

Twitter, Facebook, and Open Access ...

... Are buzzwords, however, none of these terms were mentioned in the cover letters of the ca. 7000 manuscripts (Communications, Reviews, etc.) that



were submitted to *Angewandte Chemie* in 2009. Even though one cannot provide more than article titles in the 140 characters that Twitter allows, and Facebook is hardly scientific, an important journal like *Angewandte Chemie* should make use of any new form of communication. By the way: at the moment Twitter,



Facebook, and the RSS Feeds are the only means to being alerted to new manuscripts in EarlyView. The normal e-mail alerts are only for new issues and topic-specific alerts are also sent out when an issue has appeared. Regarding Twitter and Facebook, take a look for yourself:

http://twitter.com/angew_chem

<http://www.facebook.com/AngewandteChemie>

The pressure to communicate is all-encompassing, and this is also one of the (often overlooked) dangers of the open-access philosophy. The pressure to publish is intensified, almost like an eleventh commandment. In an excellent essay in *Gegenworte*, the magazine of the Berlin-Brandenburg Academy of Sciences, the renowned philosopher Volker Gerhardt from Berlin recently wrote (and we translate here):

“There is nothing wrong with the basic idea of open access. But for the researcher, who not only searches but also finds, open access is less of an offer but rather a norm to be executed immediately. Once a result is obtained, it needs to be published immediately if there is to be no harm to the public interest. At the same time you cannot fool yourself into believing that you are helping science with open access’ pressure to publish. Science has long suffered from

confusing quantity with quality. Ratings are replacing reason, and this is a sure indication that science is no longer judging itself by its own criteria.”

You cannot fool yourself into believing that you are helping science with open access’ pressure to publish.

Volker Gerhardt

The pressure to publish the results of publicly funded research immediately and without restriction will promote publication of the lowest publishable unit (LPU), and this will need to be kept in check: Were all results from research carried out with public money (from taxpayers, foundations, etc.) actually published? Who decides how many publications will result from a research project? These are some of the many questions that affect academic freedom, a freedom that is protected by many constitutions—and this gives us hope that things won’t get as bad as one could imagine thinking the above arguments to their end.

The pressure to publish—publish or perish takes on a different meaning—which is implicit in the idea of open access, does not only apply to authors, but also to editors and publishers, and they are subject to this pressure in more than just one sense. Firstly, they will be more than ever committed to expedite the publication of results. Should editors still insist that authors take the “nit-picking criticisms” of referees seriously and thereby delay publication? In addition to this pressure to more quickly provide the public with research results—a pressure that is already omnipresent today—there will, secondly, be

financial pressure. In the open-access business model, it is widely accepted that authors (or their funding agencies or universities) pay. This means that the earnings of the journal are directly dependent on the number of articles published. Only fools believe that editors wouldn’t then tend towards acceptance of a manuscript in the many borderline cases. And if the well-being of the paying reader is no longer paramount, then there is also no need to invest in readability—to pay attention to the quality of images and language. Of course, there have always been journals in which content and form were handled more “liberally”. Nobody needs to worry about the future of such journals; they will easily adapt to the new business model. A recently published book—*Open Access: Zur Korrektur einiger populärer Annahmen* (Open Access: A Correction of a Few Popular Assumptions), Wallstein Verlag, Göttingen, 2009—by Uwe Jochum, a well-known librarian in Constance, Germany is an extremely critical read on the subject of the business model of open-access publishing, with particular respect to the cost for libraries/institutions as well as the general public/taxpayers. He does away with the fairy tale notion that open access would be less expensive than traditional modes of publication. Scientific publishing has long moved into the online world. Nevertheless, proponents of open access still argue that publishers favor print and prohibit the use of the full potential of electronic publishing. The opposite is true: All major publishers have from the mid nineties invested heavily into electronic publishing and provided new features all the time. The most important blessings of electronic publishing—search functionalities, linking between articles/journals/publishers (Crossref), and the presentation of all sorts of multimedia as Supporting Information—have been provided for many years now and are constantly improved.

For those authors that would like their publications immediately made freely available to the public (open access), *Angewandte Chemie* and her sister journals offer an open access service. After all editorial and formatting corrections have been made to a manuscript, it is then published online in an openly available format. You can find all the important information about this subject on our homepage under the keyword "OnlineOpen". Of course, we also comply with the request or pressure from research funding agencies to publish manuscripts in their unedited form after acceptance; these manuscripts are made freely available online in the format provided to us by the authors. In general we recommend that authors link on their homepage to their *Angewandte Chemie* manuscript through the "Digital Object Identifier" (DOI). Only in this way can CrossRef function correctly and full-text downloads be tallied.

What then is the business model of *Angewandte Chemie*? According to our motto "quality first", our model is based on the fact that we offer readers excellent articles from all areas of chemistry in online or printed format. For this (mostly) libraries in an academic or industrial environment pay a price, which can be compared to that of other journals, down to the level of price per article or full text access (online publishing is very transparent); in this context, *Angewandte Chemie* is excellent value.

If the published authors were to pay for everything, then the authors of roughly 20% of the submitted Communications would need to cover the cost of careful handling of the other 80% of manuscripts, which end up being rejected.

Rejection rate 2009: 78%

With that said, rejected manuscripts are often more work than the accepted ones. Now, many say that the main burden of the "filtering" process is left up to the referees, and their work is even done free-of-charge. Indeed, the efforts of the referees cannot be valued highly enough! Therefore, from now on, referees who have provided more than one referee report per month for *Angewandte Chemie* will be rewarded with a special certificate. Such acknowledge-

New: Certificate for referees

ment should make this most important activity more visible, so that it can be taken into account for evaluations, tenure decisions, awarding of prizes, and in other areas—in addition to the prevailing practice of counting the number of publications in journals with as high impact factors as possible. In that con-

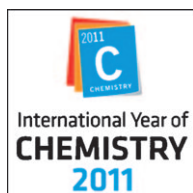
text, a relationship between the quality of a manuscript and the impact factor of a journal is generally assumed, however, this is not the case.

But back to the referees' main job: the approximately 6500 Communications submitted to *Angewandte Chemie* in 2009 had first to be read by editors who are very well-versed in chemistry—19 Ph.D. chemists currently work in the office—in order to directly reject a small number (approximately 20%) of unsuitable manuscripts and, for the most part, to pick appropriate referees. In this way, during the first ten months of 2009, we asked for approximately 18000 referee reports and received approximately 12000. That is, in 6000 cases, the referees either refused, did not answer, or they were relieved from the obligation because a referee report was no longer needed. The referee reports of course also need to be read and assessed, because not all reports are "good".

In an "author-pays world", the authors of accepted Communications must not only finance the refereeing phase of accepted and rejected Communications, but they must also pay the costs necessary to publish the many other highly read categories of *Angewandte Chemie*: from Reviews to Essays and Highlights, through Obituaries and Author Profiles. In addition to manuscript acquisitions, the selection process, and copy editing comes the development of the journal.

Table 1: Changes to the Editorial Board and the International Advisory Board of *Angewandte Chemie* at the turn of 2009/2010.

Leaving members	New members
Editorial Board	
Dr. Michael Dröschner, Evonik Degussa, Essen	Prof. Matthias Beller, Leibniz-Institute for Catalysis, Rostock
Prof. Martin Jansen, Max Planck Institute for Solid State Research, Stuttgart	Dr. Stefan Buchholz, Evonik Industries AG, Düsseldorf
Prof. Horst Kessler, Technical University, Munich	Prof. Claus Feldmann, University of Karlsruhe
Prof. Rolf Mülhaupt, Albert-Ludwigs University, Freiburg	Prof. Martin Suhm, University of Göttingen
Prof. Martin Quack, Eidgenöss. Technische Hochschule, Zürich (Switzerland)	Prof. Herbert Waldmann, Max Planck Institute of Molecular Physiology, Dortmund
International Advisory Board	
Prof. Peter Dervan, California Institute of Technology, Pasadena (USA)	Prof. Carolyn Bertozzi, University of California, Berkeley (USA)
Prof. Frans de Schryver, Katholieke Universiteit Leuven, Heverlee (Belgium)	Prof. Michael Grätzel, Ecole Polytechnique Fédérale de Lausanne (Switzerland)
Prof. Richard R. Ernst, Eidgenöss. Technische Hochschule, Zürich (Switzerland)	Prof. Craig Hawker, University of California, Santa Barbara (USA)
Prof. Jean Fréchet, University of California, Berkeley (USA)	Prof. Susumu Kitagawa, Kyoto University (Japan)
Prof. Yuan-Tse Lee, Academia Sinica, Taipei (Taiwan)	Prof. Ian Manners, Bristol University (Great Britain)
Prof. Stephen Mann, Bristol University (Great Britain)	Prof. Michel Orrit, Leiden University (Netherlands)
Prof. Eiichi Nakamura, The University of Tokyo (Japan)	Prof. Masakatsu Shibasaki, The University of Tokyo (Japan)
Prof. Seiji Shinkai, Kyushu University, Fukuoka (Japan)	Prof. Chi-Huey Wong, Academia Sinica, Taipei (Taiwan)
	Prof. Ahmed Zewail, California Institute of Technology Pasadena (USA)



On the one hand, the production process must advance: today everything from the submission to publication of a manuscript takes place online—this costly transformation has taken less than a decade—and accordingly it is necessary to continuously invest in hard- and software (including personnel training). Furthermore, a journal must meet the demands of changing reading habits (see my mention of Facebook and Twitter above)—and it can't let its “mission” out of sight. The most recent innovations in this area are the Author Profiles (since Issue 1/09), the online presentation of outside and inside cover pictures as “covers of the week,” (since Fall '09) and the first “History in the Making” Essay (in Issue 48/09), more of which

will follow. In this Essay, Reinhard Jira describes the development of the Wacker oxidation, which was published for the first time in *Angewandte Chemie* 50 years ago. In the 1950s, Reinhard Jira

New 2009: Author Profiles, Covers of the Week, Eyewitness Essays

was himself involved in this research project and, as a young chemist, was a co-author of the initial publication.

The further development of *Angewandte Chemie* occurs in close coordination with the Editorial Board, and we continually receive helpful suggestions also from the International Advisory Board. Because *Angewandte Chemie* is owned by the Gesellschaft Deutscher Chemiker (GDCh or German Chemical Society), and not, for instance, by Wiley-VCH or John Wiley and Sons, the members of these bodies are appointed by the GDCh after consultation with the Editor. In 2010 there will be a few routine term changes that will affect these groups (see Table 1). Also on behalf of Wiley-VCH and the GDCh I would like to thank the Editorial Board and the International Advisory Board members that are leaving for their great dedication and the new members for their willingness to help through words and deeds. The “newbies” will be introduced in more detail in the News section of this Issue, and I am sure that they will promote the development of *Angewandte Chemie* with all their power. We look forward to producing an appealing journal by using a proven business model also in the year of the upcoming 50th volume of the Interna-

tional Edition of *Angewandte Chemie* (2011), which will also be the International Year of Chemistry.

Peter Göltz

PS: Speaking of anniversaries: On May 21, 2010, a symposium, “Frontiers of Chemistry: From Molecules to Systems”, will take place in the heart of Paris at the Maison de la Chimie. This symposium will wrap up many activities



surrounding the 10th anniversary of the sister journals *ChemBioChem* and *ChemPhysChem*. The opportunity to listen to four Nobel laureates—G. Ertl, J.-M. Lehn, R. Tsien, and A. Yonath—and six other renowned scientists is surely something special, and in Paris! This “chemistry fest” won't be forgotten. You can find more information at www.chembiophyschem.org.