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The future of crystallization communications in *Acta Cryst. F*

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This issue of *Acta Cryst. F* features a contribution by Janet Newman and colleagues, *Crystallization reports are the backbone of Acta Cryst. F, but do they have any spine?* (Newman *et al.*, 2013). In an impressive effort, the authors examined all 264 crystallization communications (CCs) published in *Acta Cryst. F* during the year 2012. A central objective was to assess whether the CCs contained enough information for a skilled researcher to have a reasonable chance of reproducing the experiments described. As judged by the authors, 60% of the CCs in 2012 do not contain all the necessary information. While we have long been aware that heterogeneity in writing, editing, reviewing and revising a CC inevitably leads to different levels of information content from article to article, 60% is an alarming number indeed. In order to remedy this situation, efforts to streamline CCs have been under way for some time (Einspahr & Weiss, 2008). The initial focus of the streamlining project was on the collection of mandatory and recommended items to be included in an article. More recently these efforts have led to the development of publBio which is a new tool for the publication of CCs and other articles (http://publbio.iucr.org). While there may be some differences between our and the authors' appraisals of what data are missing in these articles, we assert that, if all authors of CCs were to use publBio for preparing their articles, the problems described above would largely be solved. We are currently discussing whether to make the use of publBio mandatory for CCs in the near future.

Other issues discussed in the Newman *et al.* (2013) article include the geographic distribution of CCs, the citations that CCs get, and the overwhelmingly large number of PDB depositions that have no associated CC (8321 PDB depositions in 2012 *versus* 264 CCs in 2012). While we do not have solutions to the potential problems arising from these issues, we do need to keep a close eye on these developments.

Yet another surprising issue for us is presented in Table 2 of Newman *et al.* (2013). Only 74 of the 264 CCs published in 2012 have a corresponding PDB deposition. While we had assumed that most CCs published in *Acta Cryst. F* are cited at least once, namely when the associated structure is published, this assumption is obviously far from the case, and is undoubtedly a major reason why the impact factor of *Acta Cryst. F* continues to be less than one. It is not clear why so few CCs lead to deposited structures. It could be that the projects described in the CCs are discontinued or that the structure is only published many years later. Whatever the true reason, we feel a corrective measure may be needed here as well. One suggestion would be to require that structure-factor amplitudes are deposited along with publication of a CC. These data could then be made public a number of years (three years, for example) after the publication of the CC, a practice which is well established in other fields of science, such as astronomy.

In summary, we expect that CCs will remain central to our journal in the years to come. At the same time we are aware of potential problems associated with CCs and we will do our best to make the content of our journal as useful to the community as possible. It goes without saying that we welcome any effort by others in that direction and we would also like to invite everybody to contribute to this ongoing process.

References

Einspahr, H. & Weiss, M. S. (2008). *Acta Cryst.* F**64**, 1091.
Newman, J., Burton, D., Caria, S., Desbois, S., Gee, C., Fazio, V., Kvansakul, M., Marshall, B., Mills, G., Richter, V., Seabrook, S., Wu, M. & Peat, T. (2013). *Acta Cryst.* F**69**, 712–718.