Dear Editors,

We, the members of the Crystallography Open Database (COD) Advisory Board [1], have become aware of growing concerns regarding the publication, preservation and quality maintenance of crystallographic data. These concerns are well expressed in a recent IUCr letter [2]. Depending on the nature of the structure reported, other established databases exist in which authors may deposit the structural results, and in some cases, the experimental data. However, we believe that completely open deposition of data and multiple checks can ensure the quality and wide availability of scientific data as required for applications in today's world. We have, therefore, developed both a Web-based service to deposit atomic coordinates and diffraction data (as derived from crystallographic experiments) into our open-access database and a set of tools to check the quality of these data.

We wonder if you could be so kind as to recommend to your authors that, in addition to any existing deposition arrangements that are in place, they also deposit their supplementary crystallographic data into the COD when they submit scientific papers to your journals. We would, in addition, ask you to accept COD identifiers as a proof of such depositions.

Being open by its design, the COD enables the creation of multiple mirrors and backup copies. It provides, thus, archival storage of scientific data with adequate reliability. We are also ready to provide services for reviewers and editors to facilitate the peer-review of crystallographic data. Our deposition procedure follows the data validation guidelines put forward by the IUCr [3].

It should be mentioned that since our database follows the Open Access model, all material deposited into the COD is available to other databases. The COD team actually encourages the use of our data collection for any possible scientific or industrial application by putting the database into the public domain.

[1] Crystallography Open Database, August 2011, http://www.crystallography.net/.
[2] "Publication standards for crystal structures", IUCr, June 2011, http://www.iucr.org/index.html/leading-article/2011/2011-06-02#letter.
[3] "Data validation procedures", IUCr, August 2011, http://journals.iucr.org/services/cif/checking/validlist.html.