

*Frauds in small molecule crystallography*

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The announcement late in 2009 [1] that a substantial number of clearly fraudulent papers had been published in Acta Crystallographica, Section E over a number of years, with an initial retraction of 70 articles, caused shock and dismay in the crystallographic community. Sadly more were to come. The revelations resulted in other problem structures being reported to the editors. They also prompted significant efforts to ensure that such practices could be detected, at least in IUCr Journals, at the point of submission. This paper will trace the background to the fraudulent submissions and describe the principal fraudulent procedures that were used, including the use of a single X-ray set data to generate several, seemingly unique structures, also metal or other element swapping to avoid a submitted structure being rejected as a duplicate. Current checking practices will be described and the success of the measures put in place to prevent a recurrence of the problems will be assessed.

[1] Harrison, W.T.A., Simpson, J. & Weil, M. (2010). Acta Cryst. E66, e1–e2

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