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Retraction: Insight into the reversible structural crystalline-state transformation from MIL-53(Al) to MIL-68(Al)

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Retraction of 'Insight into the reversible structural crystalline-state transformation from MIL-53(Al) to MIL-68(Al)' by Adelaida Perea-Cachero *et al.*, *CrystEngComm*, 2018, 20, 402–406.

We, the named authors, hereby wholly retract this *CrystEngComm* article. The conclusions presented in this work were that MIL-53(Al) can undergo a reversible phase change to MIL-68(Al) when treated with DMF. The product of this reaction was characterised by comparison with a sample produced according to the literature procedure of Yang *et al.*¹ which was reported to result in pure MIL-68(Al). The PXRD of this sample matched that of a sample of MIL-53(Al) after treatment with DMF, leading to the conclusion that the sample had undergone a phase change to MIL-68(Al).

However, recent further investigations by the authors have shown that the literature procedure reported by Yang,¹ as well as that reported by Asiabi *et al.*,² when repeated in our laboratory, do not result in a pure sample of MIL-68(Al). They instead result in a combination of MIL-53(Al)_{DMF} and MIL-68(Al). Only the literature procedure report by Seoane *et al.*³ was found to result in a pure sample of nanocrystalline MIL-68(Al)_{THF} (Fig. 1). These results demonstrate that the product of DMF treatment of MIL-53(Al) was not MIL-68(Al) as originally reported in this paper, but instead was the DMF solvate MIL-53(Al)_{DMF}, as previously suggested by Hartmann *et al.*⁴

The authors would like to apologise for any inconvenience to the readers.

Signed: Adelaida Perea-Cachero, Enrique Romero, Carlos Téllez and Joaquín Coronas.

Retraction endorsed by Andrew Shore, Executive Editor, *CrystEngComm*.

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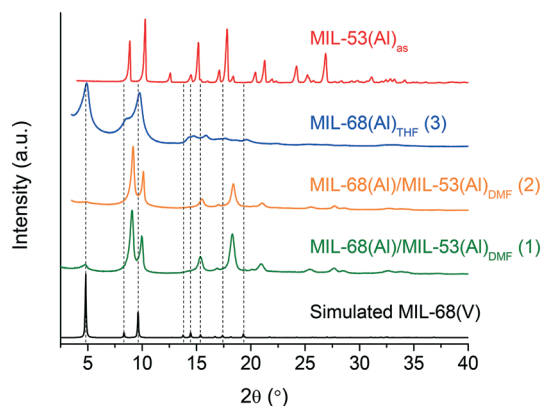


Fig. 1 PXRD patterns of the three products obtained by the authors under conditions reported by Yang *et al.*,¹ Asiabi *et al.*,² and Seoane *et al.*³ and comparison with simulated MIL-68(V) and MIL-53(Al)_{as}.

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