Retraction: Vibrational evidence for the "missing link" in structural kinship between kanemite and FSM-16 mesoporous silica

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Retraction of 'Vibrational evidence for the "missing link" in structural kinship between kanemite and FSM-16 mesoporous silica' by Ewa M. Serwicka, et al., Dalton Trans., 2016, DOI: 10.1039/C6DT01600F.

We, the named authors, hereby wholly retract this Dalton Transactions article. The conclusions presented in this work are based on the assumption that all FTIR bands displayed by the kanemite sample stem from this material. This was supported by the fact that the spectrum was practically identical with the one described in the literature [ref. 27], including the presence of a weak 620 cm⁻¹ band (Fig. 1).

However, recent further investigations have established that the kanemite samples investigated in this study contain trace amount of cristobalite, whose low temperature modification displays a strong band at 620 cm⁻¹. In view of this, the FTIR spectrum feature at 620 cm⁻¹, which was taken for a link between the kanemite and the FSM-16 structures, may not be wholly conclusive of the structural kinship but originate instead from traces of cristobalite transferred from kanemite to FSM-16 during synthesis.

We are currently trying to synthesize kanemite samples free of impurities, in order to be able to re-examine its vibrational spectra and continue our research as to the possible structural links with the mesoporous silicas derived from this material.


Retraction endorsed by Andrew Shore, Executive Editor, Dalton Transactions.