Powder Diffraction PDJ Journal of Materials Characterization



 $MoK_{\alpha 1}$ PXRD pattern of MOF $Co_2(dobdc)$ appended with propanethiol

CAMBRIDGE



Appended propanethiol molecules within the Co₂(dobdc) framework

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Powder Diffraction

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On the Cover: The invited manuscript in this issue of *Powder Diffraction* entitled "Crystal Structure of 1-propanethiol-Co₂(dobdc) from Laboratory X-ray Powder Diffraction Data" by Lefton, Pekar, Sethio, Kraka and Runcevski demonstrates the potential of PXRD and particularly the capabilities of combined Rietveld refinement with soft restraints. The left cover figure shows the high-resolution data collected using MoK_{a1} radiation. The right cover figure shows the MOF framework (lines) and the appended propanethiol guest molecules (spheres) within the pores of the metalorganic framework (MOF) Co₂(dobdc).

Powder Diffraction is a journal of practical technique, publishing articles relating to the widest range of application—from materials analysis to epitactic growth of thin films and to the latest advances in software. Although practice will be emphasized, theory will not be neglected, especially as its discussion will relate to better understanding of technique.

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