

**Synthesis and characterisation of a new templated mixed valence
titanium(III/IV) phosphate: MIL-131 or
 $\text{Ti}^{\text{III}}\text{Ti}^{\text{IV}}(\text{OH})\text{F}_4(\text{HPO}_4)(\text{PO}_4)(\text{N}((\text{CH}_2)_2\text{NH}_3)_3)$**

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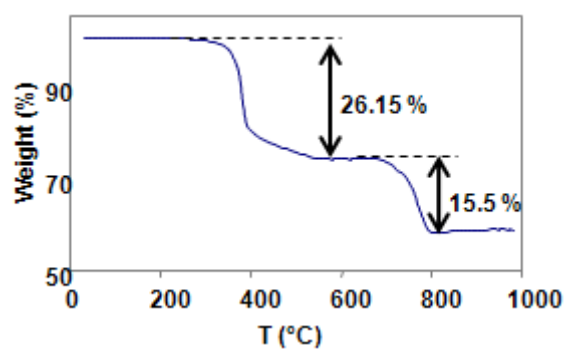


Figure S1: TGA of MIL-131 under air atmosphere (heating rate of 3°C/min).

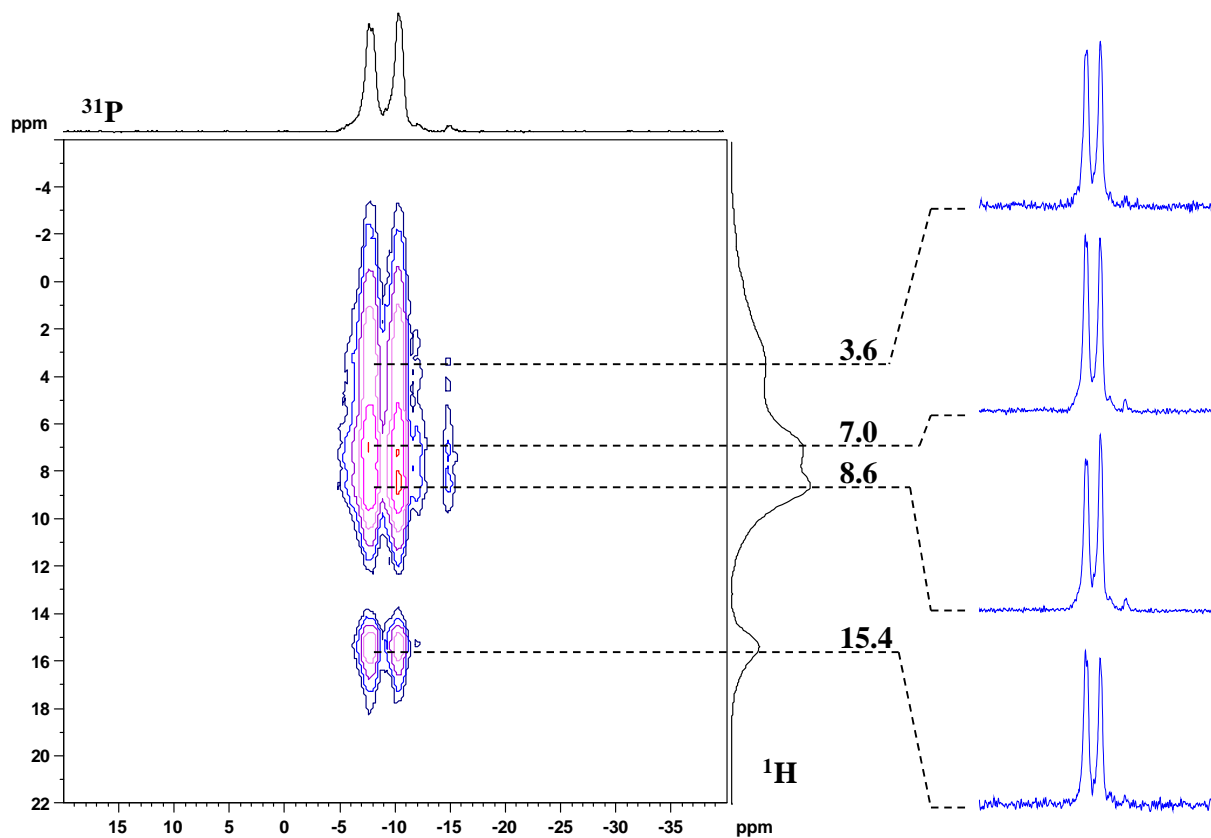


Figure S2 : $^{31}\text{P}\{^1\text{H}\}$ NMR HeteroCorrelation CPMAS spectra of MIL-131. Rotation speed : 30 kHz; contact time : 2 ms.

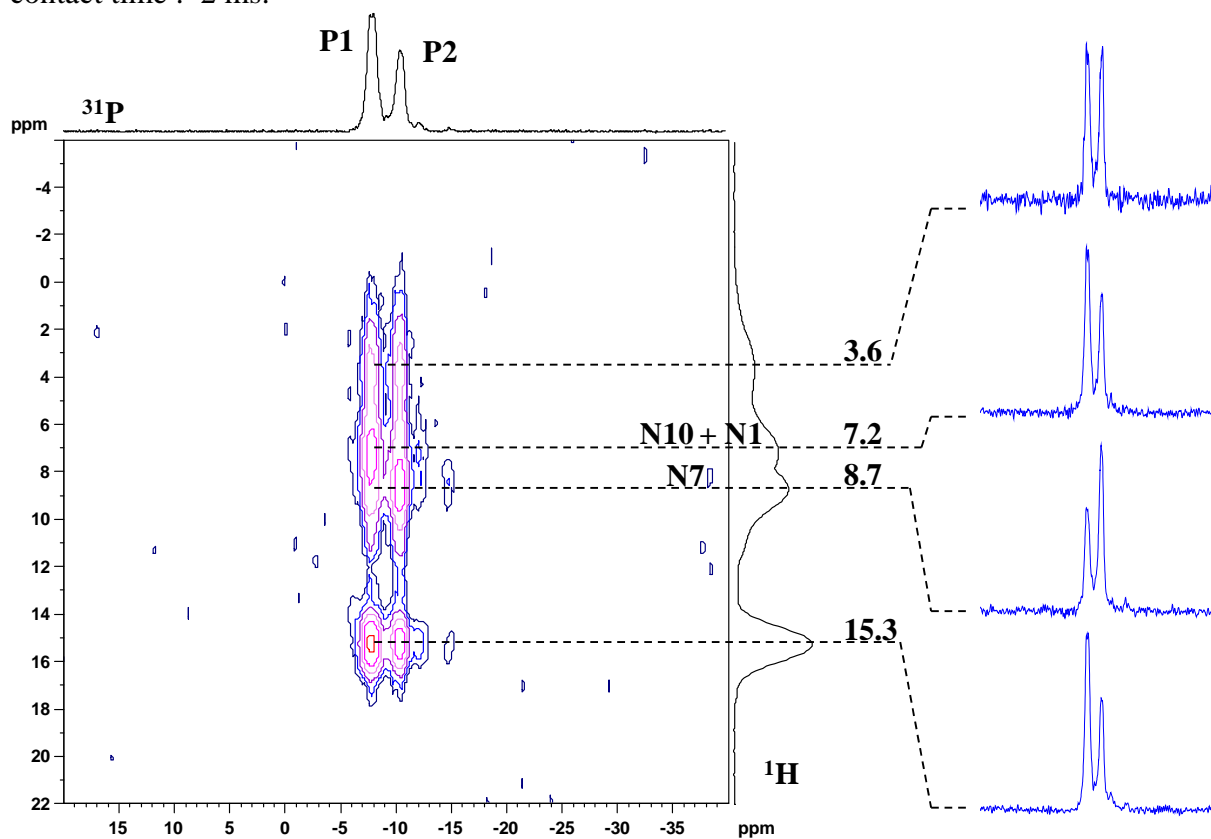


Figure S3 : $^{31}\text{P}\{^1\text{H}\}$ NMR HeteroCorrelation CPMAS spectra of MIL-131. Rotation speed : 30 kHz; contact time : 0.2 ms.

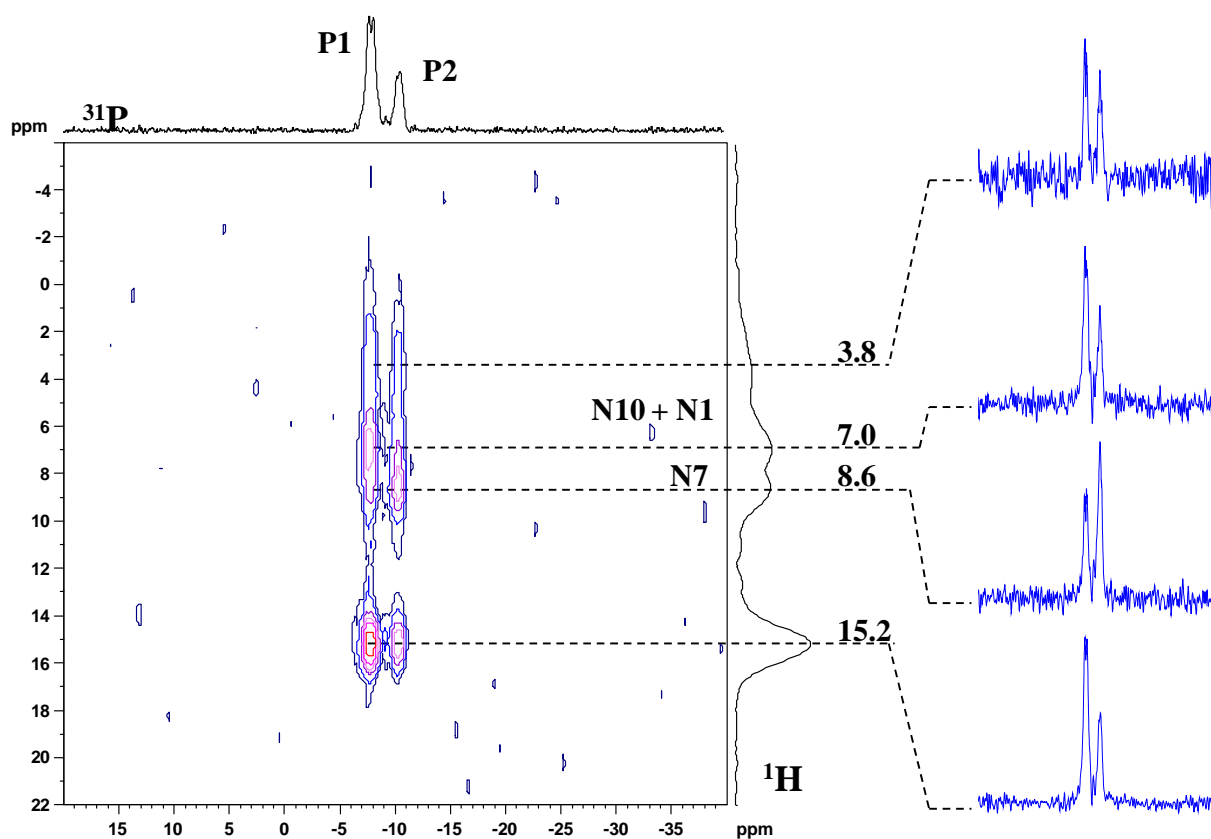


Figure S4 : $^{31}\text{P}\{^1\text{H}\}$ NMR Hetcor CPMAS spectra of MIL-131. Rotation speed : 30 kHz;
contact time : 0.02 ms.

References

- (1) Roisnel, T.; Rodriguez-Carvajal, J. In *Abstracts of the 7th European Powder Diffraction Conference*, Barcelona, Spain **2000**, 71.
- (2) Favre, V., <http://www.objcryst.sourceforge.net/fox/>
- (3) Rodriguez-Carvajal, J. In *Collected Abstracts of Powder Diffraction Meeting*, Toulouse, France **1990**, 127.