

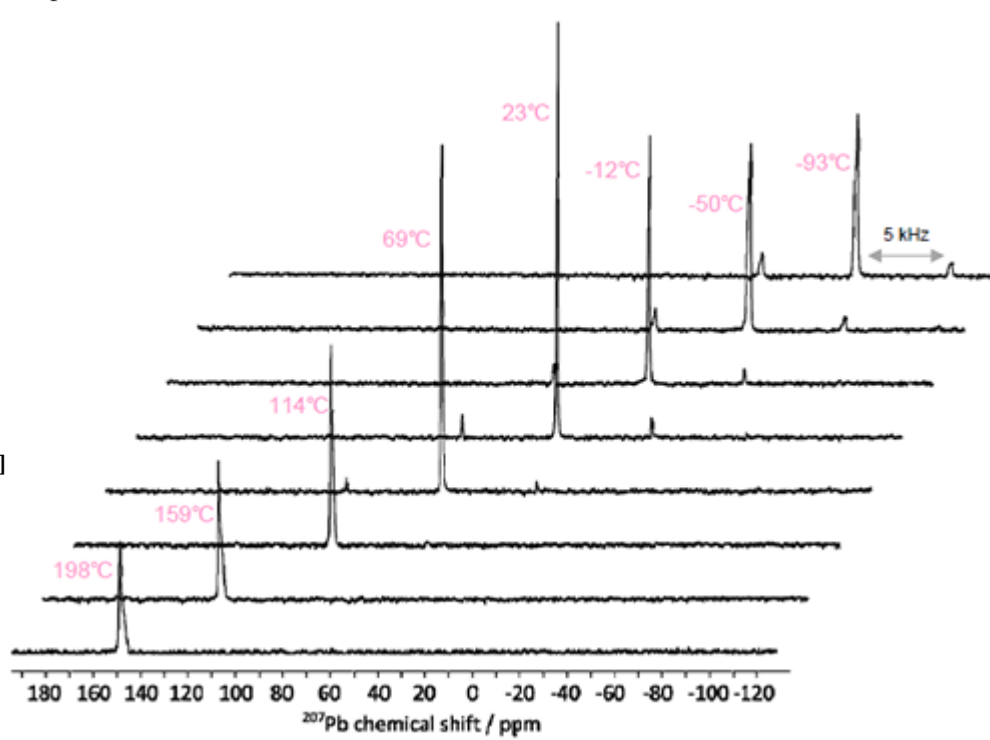
## NEW extended VT HXMAS probe From -100 to 200 °C in narrow-bore magnet!

NM160010E

The wide temperature range HXMAS probe achieved -100 ~ 200 °C of sample temperature by a newly developed spinning module. This probe is available in a narrow-bore magnet due to newly designed thermal insulation and exhaust systems.

<sup>207</sup>Pb solid state NMR spectra for Pb(NO<sub>3</sub>)<sub>2</sub> are shown in the following. The chemical shift of <sup>207</sup>Pb signals indicate -100 ~ 200 °C of sample temperature.

JNM-ECZ600R  
 3.2mmHXMAS/VT  
 sample: Pb(NO<sub>3</sub>)<sub>2</sub>  
 MAS : 5kHz  
 $\delta = T \times 0.753 \text{ ppm} / ^\circ\text{C}[1,2]$



\* An additional option may be needed to achieve 200 °C sample temperature.

\* A heat-resistance zirconia sample tube is required above 150 °C.

## References

- [1] A. Bielecki and D.P. Burum, *J. Magn. Reson. A*, 116, 215-220 (1995).
- [2] T. Takahashi, et. al., *Solid State Nuc. Magn. Reson.*, 15, 119-123 (1999).