

26 July 2021

Dear Editor,

Please find below our response to the editor comments on our article "Solid-State ¹H Spin Polarimetry by ¹³CH₃ Nuclear Magnetic Resonance".

We are extremely grateful to the editor for evaluating our manuscript very positively, and we have addressed below all the comments raised by the editor.

The editor comments are given in black, our response in blue and our amendments to the manuscript in purple.

We will submit a revised version of manuscript "mr-2021-25".

Please do not hesitate to contact me if you require any further information.

Yours, Stuart J. Elliott.

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Dr. Stuart J. Elliott Address: Department of Chemistry, University of Liverpool, Liverpool L69 7ZD, United Kingdom Email: Stuart.Elliott@liverpool.ac.uk Telephone: +44 (0) 7805 888 763

Editor Comments: Daniel Abergel.

Thank you for submitting your manuscript to Magnetic Resonance.

We are delighted to contribute to Geoffrey Bodenhausen's Festschrift.

You have addressed the issues raised by the reviewers, and I will be glad to accept your manuscript for publication.

We thank the editor for this positive outcome.

The sentence in line 280: "Once the ¹³C NMR peak CoG normalized deviation δ_{ω_0} falls below zero the ¹H polarization $P_{\rm H}$, rapidly drops towards negative ¹³C NMR peak CoG normalized deviations δ_{ω_0} (with decreasing ¹H polarization $P_{\rm H}$)." does not make much sense to me.

We thank the editor for raining this point. We have amended this sentence in the manuscript to:

Once the ¹³C NMR peak CoG normalized deviation δ_{ω_0} falls below zero the ¹H polarization $P_{\rm H}$ rapidly drops towards negative values, see the Supplement.

The modified Figure 6 with a best fit of the linear region and negative values of δ_{ω_0} does not appear in the ms.

We find the current Figure 5 far more intuitive, and it also provides a much clearer link to the level of ¹H polarization $P_{\rm H}$. We included this Figure in the finalized version of the response letter and will keep it as such in the manuscript.

The initials QC should be changed to QS in the Acknowledgements.

This change has been made.