Magn. Reson. Discuss.,
https://doi.org/10.5194/mr-2020-25-SC2, 2020

Open Access MAGNETIC RESONANCE Discussions

Interactive comment on "ssNMRlib: a comprehensive library and tool box for acquisition of solid-state NMR experiments on Bruker spectrometers" *by* Alicia Vallet et al.

Trent Franks

t.franks@warwick.ac.uk

Received and published: 23 October 2020

I think that this work is a nice step forward for the community. I have worked with Bruker previously on the topsolids project, doing similar things to what is presented in the paper. I am happy to see another option that is, perhaps, a bit more flexible than the manufacturer's release. The power handling and safety checks are very much appreciated, and necessary to prevent bone-headed mistakes. In my experience, this approach would be back-compatible with AVII systems with just a little bit of work, if it doesn't already work, especially if the guts are mostly in python.

It also appears as though it would be relatively easy to retrofit into existing pulse se-

Printer-friendly version

Discussion paper

quences using the header equations, which would make switching between pulse programming "styles" fairly seamless. Just a bit of bookkeeping to set it up.

I also think that this framework can be adapted for use with materials experiments like MQMAS or an HMQC, although the book-keeping demands for those experiments is generally less severe than for biological experiments. The optimization protocols presented here would be a great thing for materials experiments, and should help with the collection of such experiments. The protocols and pre-calculations must be written, but that should be a small task for someone familiar with the experiments.

Interactive comment on Magn. Reson. Discuss., https://doi.org/10.5194/mr-2020-25, 2020.

Printer-friendly version

Discussion paper