3. RESULTS AND DISCUSSION

The inclusion of the prepuise means that each subsequent scan starts from the condition in Equation (4) we can normalise the effects of T1 relaxation out as usual – thus removing one of the common problems in fast PGSE sequences.

Such a simple sequence has many advantages:
1. Relates chemical shift information.
2. Can be used on samples with many components.
3. Separates out relaxation from diffusion attenuation.
4. As easy to implement and analyse as the standard sequence.
5. Can include water suppression simply by replacing the π pulse with a binomial one (i.e., PGSE-Watergate).
6. Can be implemented using bipolar gradients to reduce eddy current effects.
7. Is applicable to both Fe(III) and restricted diffusion.
8. One (or more) prepuises are included which increase accuracy by reducing mismatched gradient pulse effects at high applied gradient strengths.

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REFERENCES