

Students' Annual Webinar

Studying fast exchange processes by CEST NMR: How far can we go?

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CEST NMR experiments have now been well established to study 5 to 50 ms dynamics in biomolecules. However, recent studies show that much faster exchange processes can be studied using CEST. We have used high B1 CEST to test how far we can go in terms of exchange rates by studying the folding-unfolding dynamics of PSBD (Peripheral Subunit Binding Domain) that folds on the ~10-100 microsecond timescale. We find that by supplementing the temperature dependent CEST data with other constraints we can extract thermodynamic parameters for the folding transition.

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5:00 PM