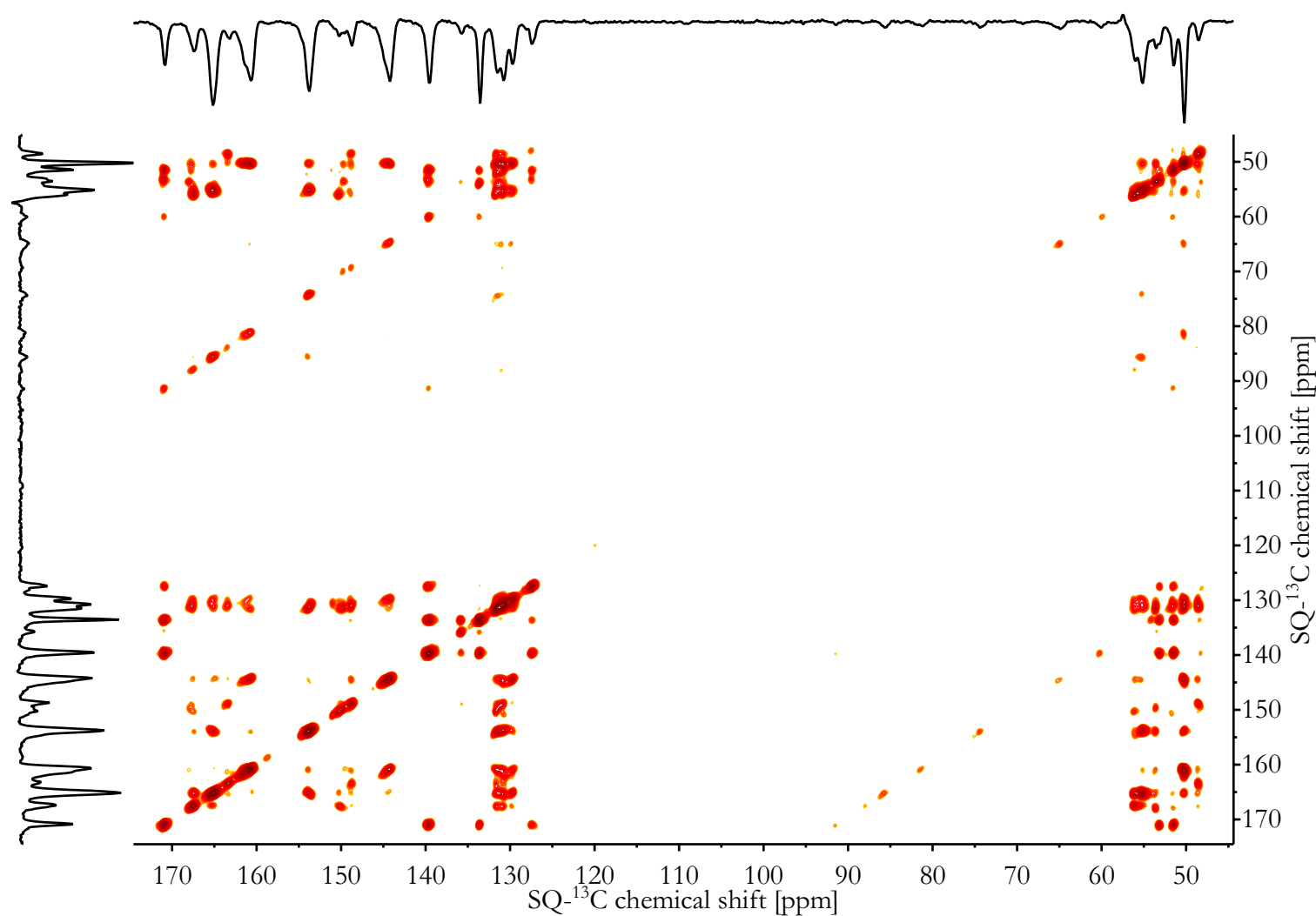




Selectively labelled bacterial reaction center of Rhodobacter sphaeroides WT under illumination

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Field strength: 9.4 T

Why is this your favorite spectrum?

This spectrum shows specifically labelled carbon atoms in a huge 100 kDa protein with very high resolution at a low magnetic field of 9.4 T and at slow spinning of 8 kHz with just a few scans. It therefore depicts the power hyperpolarisation in NMR and more specific of the the solid-state photo CIDNP effect, which helps overcoming the biggest problem in NMR: the lack of sensitivity.

Comments: The signals are generated under continuous illumination with white light by the solid-state photo-CIDNP effect. They are emissive and can be enhanced by a factor of over 10,000 compared to the thermal equilibrium.