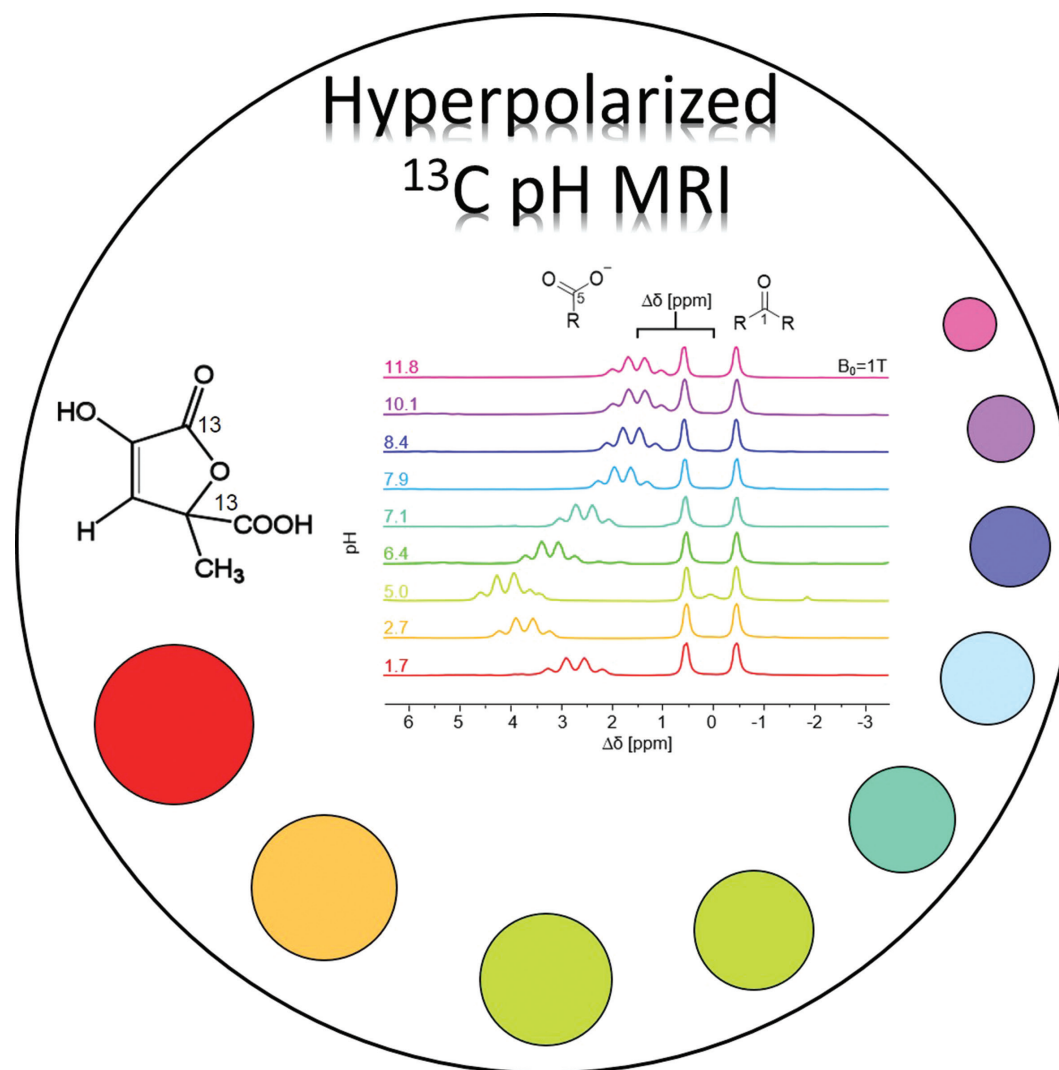


# nMR is Science



*Hyperpolarized  $[1,5-^{13}\text{C}_2]$ zymonic acid in  $\text{D}_2\text{O}$*

**Christian Hundshammer, 2015**

Nuclear Medicine Department | Klinikum rechts der Isar

**Field strength:** 42.58 MHz

**Why is this your favorite spectrum?**

I love the spectra because they describe the basic idea of hyperpolarized pH *in vivo* pH imaging. The stacked spectra show hyperpolarized  $[1,5-^{13}\text{C}_2]$ zymonic acid at varying pH values at 1 T magnetic field strength measured on a tabletop NMR spectrometer (Magritek). The scalar couplings of the carbon-13 atoms with their attached protons can be nicely seen as a doublet and a quartet. I did a night shift in the lab to record the series, because we can just polarize and measure one sample at a time.