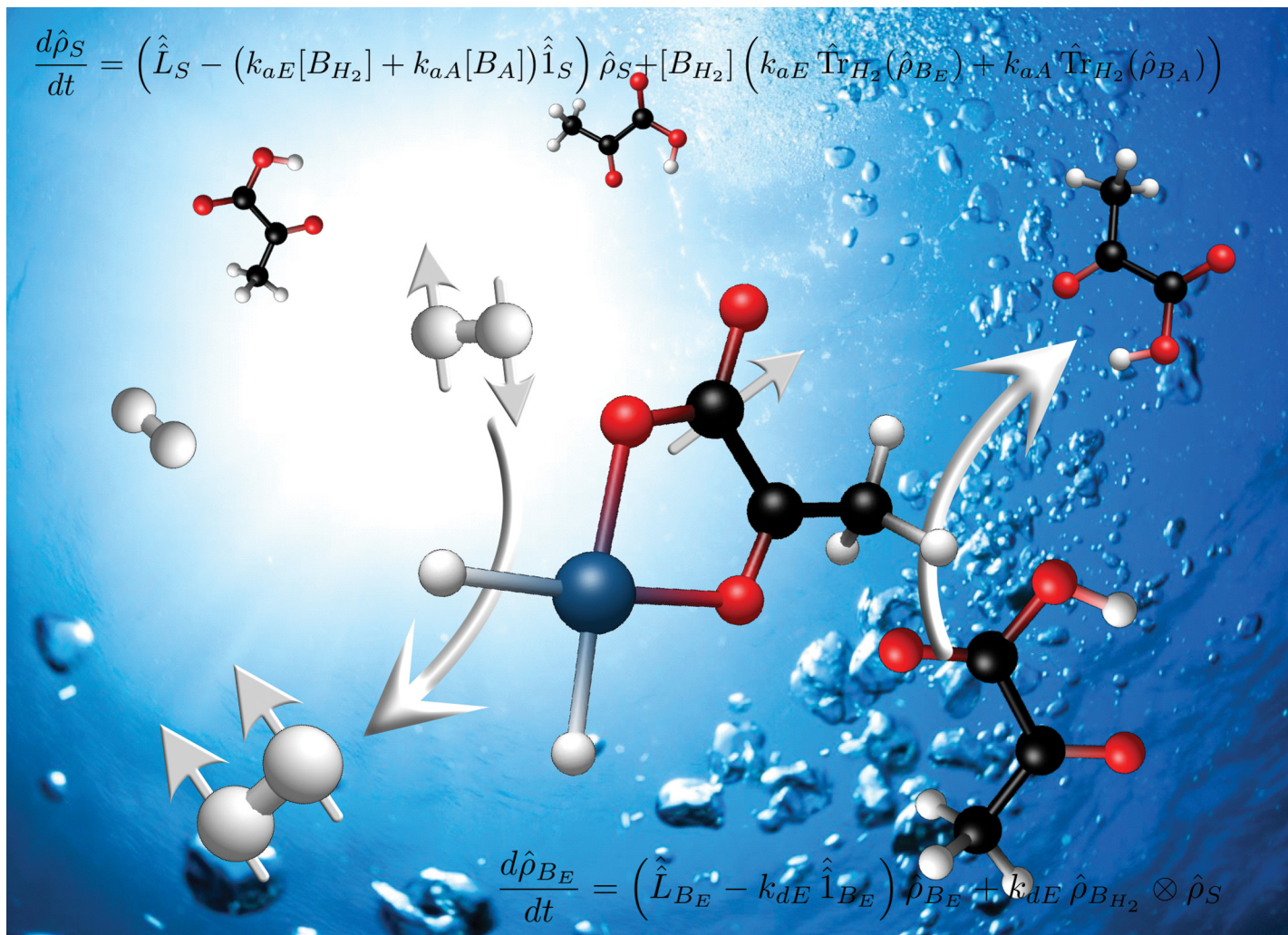




Showcasing research from the Stevanato Lab at the University of Padova (IT)

(De)coding SABRE of [1-¹³C]pyruvate

The paper presents a combined synthetic, experimental, and theoretical study of seven Ir-NHC catalysts for SABRE hyperpolarization. IPr and SIPr emerge as effective alternatives to the benchmark IMes. A fast kinetic model incorporating experimental variables guides a temperature-jump experimental protocol that boosts the free pyruvate signal by ~30%, providing a rational framework to optimize SABRE for biomedical applications.

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Molecular structures created with Avogadro: <http://avogadro.cc>.

As featured in:



See Gabriele Stevanato *et al.*, *Phys. Chem. Chem. Phys.*, 2025, **27**, 22924.