

Extreme magnetic separation of geminal protons in protonated *N,N,N'*-trimethyl-1,8-diaminonaphthalene. A puzzle of the fourth methyl group.

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Monoprotonated *N,N,N'*-trimethyl-1,8-diaminonaphthalene demonstrates fast exchange of H(in) and H(out) protons, in which a counterion (BF₄⁻) and Br⁻ were tested) participates. The process can be frozen below 185 K revealing a tremendous magnetic separation (up to $\Delta\delta = 11.6$ ppm) of these otherwise equal NH protons with the enzyme-like proton transfer and a ~ 7 kcal mol⁻¹ energetic barrier.

Adres publiczny

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Strona internetowa wydawcy

<https://www.acs.org/content/acs/en.html>