DYNAMIC POLARIZATION of NUCLEI in HD MOLECULES
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Dynamic polarization by "solid state effect" of protons from H₂D₂ molecules in liquide state at 20°C, in contact with a charcoal, had been achieved.

The charcoal is a saccharose charcoal prepared at a temperature of 400°C, following the method of the "Groupe Français d'Etudes du Carbone" (G. F. E. C.). The surface, measured by BET method, is 65 m²/g, and the charcoal contains 3 × 10¹⁹ paramagnetic centers per gramm.

Maximum enhancement A of nuclear polarization for protons in HD at 20°C is similar to those obtained in benzine at room temperature or in liquid methane, pentane and propane above their triple point (A ≈ 20). Polarization and relaxation times are of the order of few seconds. The enhancement of nuclear polarization for deuterons is weaker (A ≈ 2). This result will be discussed as well as a comparaison with the results of experiments with H₂ molecules both in liquid and gaseous states.