Dynamic Nuclear Polarization Studies of TANOL/water-glycerol Solutions

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Dynamic Nuclear Polarization (DNP) studies of TANOL/water-glycerol solutions were performed at 1.53 mT. The samples have either various water-glycerol ratios at constant concentration or various concentrations at a constant water-glycerol ratio. The low field EPR spectra were recorded, the DNP parameters(enhancement factors, coupling constant, leakage factor) were determined, electronic relaxation times were measured. Depending on the values obtained, the interactions between nuclei and electrons are discussed.

Key words: DNP; EPR; Relaxation; Nitroxides.