

## **Features of magnetic proton relaxation of solvent molecules in agarose gels**

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### **Abstract**

The anomalous temperature dependences of the transverse NMR-relaxation time  $T_2$  of solvent molecules water and DMSO in agarose gels have been obtained being qualitatively explained in the framework of the three-phase model with the molecular exchange between phases. Acceleration of the transverse magnetic relaxation of solvent molecules in agarose gels is explained by the presence of few fast-relaxing molecules incorporated into the network points of a gel. The values of the activation energy of molecular exchange and of the content of molecules with short  $T_2$  time are numerically evaluated.

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