MAGNETIC VISCOSITY IN VANADIUM CHROMICYANIDES

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9.7 cm

We have synthesized $V[Cr(CN)_6] \cdot nH_2O$ and $VO[Cr(CN)_6] \cdot nH_2O$ molecular based magnets belonging to the Prussian blue family of compounds. Previous results [1] demonstrate that the transition – metal hexacyano complexes are promising components for the construction of molecular – based magnets high – T_c magnets. In this paper we report on the synthesis, characterization and magnetic viscosity in $VO[Cr(CN)_6]{\cdot}nH_2O$ and $V[Cr(CN)_6] \cdot nH_2O$ compounds. Obtained results display a logarithmic behavior of the magnetization versus time dependence in accordance with Street-Woolley theory based on activation energy concepts [2].

[1] S. Ferlay, T. Mallah, R. Quahes, P. Veilleth, M. Verdaguer: Nature **378** (1995) 701.

[2] R. Street, J.C. Wooley: Proc.Phys. Soc., A**62** (1949) 562.

13.4 cm

Subject category :

3. Transition Metals, Alloys and Compounds

Presentation mode :

poster

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