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Coexistence of spin crossover and magnetic ordering in a dendrimeric Fe(III) complex

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Abstract

© 2015 AIP Publishing LLC. The magnetic properties of a new dendrimeric spin crossover Fe(III) complex, [Fe(L)2]+PF6, where L = 3,5-di[3,4,5-tris(tetradecyloxy) benzoyloxy]benzoyl--salicylidene-N-ethyl-N-ethylene-diamine, are reported for the first time. EPR studies show that this compound undergoes a gradual spin transition in the temperature range 70-300K and has antiferromagnetic ordering below 10K. Mössbauer spectroscopy at 5K confirms the presence of magnetic ordering in the dendrimeric iron complex.

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