

Zero Field- and Longitudinal Field- μ SR Studies of Quasi-One-Dimensional Organic Conductors.

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Zero field (ZF)- and longitudinal field (LF)- μ SR measurements of organic quasi-one-dimensional spin-Peierls material, TMTTF₂PF₆ were performed. Similar to other spin-Peierls compounds[1], significant increase of muon spin depolarization rate below spin-Peierls transition is observed. We surmise that this behavior results from the slowing down of the electrical fluctuations due to the opening of the gap in the magnetic excitation spectrum. LF- μ SR spectra also suggest that some fluctuations exist at low temperatures.

[1] S. J. Blundell et al., J. Phys.: Condens. Matter **9** L119 (1997)

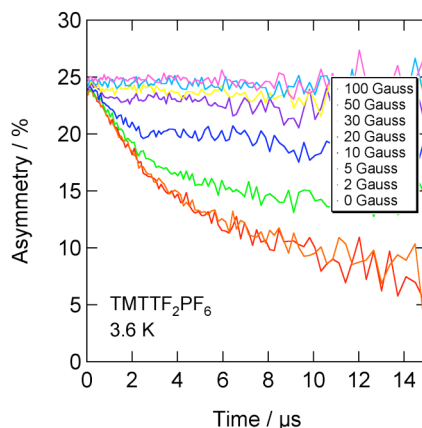


Figure 1. LF- μ SR time spectra of TMTTF₂PF₆ below spin-Peierls transition temperature.