Numerous semiconducting and metallic magnetic materials have been found to exhibit characteristic two-frequency $\mu^+\mathrm{SR}$ precession signals in high transverse magnetic field (HTF-$\mu^+$SR), but skepticism remains over the assignment of these spectra to muons associated with de Gennes’ legendary magnetic polaron (MP) or spin polaron (SP). This is understandable, since the SP picture is a radical departure from “conventional wisdom” about both muonium and magnetism. It is therefore incumbent upon both advocates and adversaries of this interpretation to present as much spectroscopic evidence as possible in support or contradiction of the SP picture.

We therefore performed an initial study of several nominally dissimilar materials with nearly identical SP-like HTF-$\mu^+$SR spectra (see middle column).

**References**