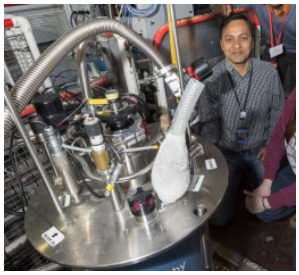

Contribution ID: **41** Type: **not specified**

Universal method to extract the average electron spin relaxation in organic semiconductors from muonium ALC resonances

Monday, 11 September 2023 18:00 (10 minutes)

"Muon spin spectroscopy and in particular the avoid level crossing (ALC) technique is a sensitive probe of electron spin relaxation (eSR) in organic semiconductors. In complex ALC spectra, eSR can be challenging to extract, as it requires the modelling of overlapping ALCs, where covariance between parameters can result in significant uncertainties. Here we demonstrate a general method
to extract eSR rate, which is independent on the number of ALCs resonances present, whether they overlap or not, and what the muonium hyperfine (isotropic and anisotropic) parameters are. This
can then be used as guidance for undertaking experiments efficiently. We will show this method used in TADF material and some organic molecules."

Presenter: ZHANG, Licheng (Queen Mary University of London)

Session Classification: Early Career Presentations

Track Classification: Early Career Presentation