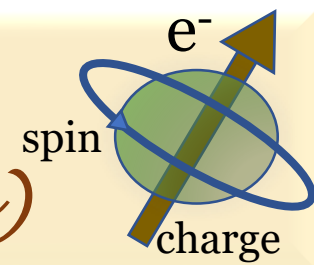




W2S Seminar

(Webinar series on Spintronics)



Spin Physics at Metallo-Molecular Interfaces

Speaker:
Prof. Oscar Cespedes
School of Physics & Astronomy
University of Leeds

Date and time:
01.04.2021 at
02.00 pm
Via
Zoom

Abstract

Carbon-based molecules have long spin coherence and diffusion times due to the small spin orbit coupling of light elements and a lack of hyperfine interaction in ^{12}C . However, it was realised a decade ago that molecular spintronics faced challenges when replicating effects from conventional devices due to bad reproducibility, low carrier mobility and degradation. Nevertheless, molecular spintronics has remained a fruitful field of research because of novel effects unique to molecular systems and, in particular, interfaces. There has been an effort to comprehend the complex spin-dependent charge interactions between molecules and metals, such as the emergence of spin ordering, changes to spin transport and the diffusion of spin states. It is here that molecular materials offer unique behaviour and tunability for multifunctional devices via charge transfer and hybridisation.

If interested to attend then please visit <https://www.niser.ac.in/w2s-seminar/index.php>