W2S Seminar
(Webinar series on Spintronics)

Magnetic anisotropy and Spin Seebeck Effect

Speaker:
Prof. Hari Srikanth
Department of Physics
University of South Florida, Tampa, FL USA

Date and time:
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6.30 pm
Via
Zoom

Abstract

Spin caloritronics is a topical area of interest for the spintronics community given the need for new thermoelectric/thermomagnetic devices for energy harvesting. However, the origin of spin Seebeck effect (SSE) and its relationship with surface and interface magnetic anisotropy have remained unresolved issues. In this talk I will discuss the distinct correlation between magnetic anisotropy with the field and temperature dependence of SSE in yttrium iron garnet (YIG)/Pt heterostructures as well as other systems. We have shown that the introduction of a thin intermediate organic semiconductor such as a C_{60} layer (~5nm) has a big impact on the surface anisotropy of YIG leading to increased spin mixing conductance and significant enhancement in SSE in heterostructures. Overall I will discuss the possibility of tuning the interface anisotropy for improved spin caloritronic devices.

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