

# USF NEXUS INITIATIVE 2018 AWARD RECIPIENT

## **Hariharan Srikanth**

*Garnet Thin films with Tunable Anisotropy for Spin Caloritronics*

Spin caloritronics is an important area of research in which multilayered heterostructures are being developed for power generation and energy applications. The advantages of using spin currents include higher energy efficiency, lower power consumption and longer lifetime of devices. The figure of merit in these metal-oxide layered structures is the spin Seebeck effect (SSE). In this pilot project jointly with Prof. Manfred Albrecht's group at University of Augsburg, we intend to investigate the thulium iron garnet (TIG) system. Our goal is to explore TIG/Pt structures to enhance the SSE as well as discover new mechanisms for controlling spin transport.

### ***Partnerships:***

**Manfred Albrecht**, Ph.D., Professor

Institute of Experimental Physics, University of Augsburg (Augsburg, Germany)



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