## Advertisement for JRF position at IIT Hyderabad

**Project title:** Development of passive magnetic microwave devices: FEM simulation, material synthesis and fabrication

**Name of the investigators:** Dr. Arabinda Haldar, Phys, Dr. Abhishek Kumar, EE and Prof. Shiv Govind Singh, EE

**Abstract:** There is a growing civilian and military demand in RF/microwave-based systems for effective and new ways of utilizing the increasingly crowded electromagnetic spectrum. Magnetic ferrites are well known for their extraordinary RF performance in a wide frequency range. We are interested in self-biased magnetic materials and thin films for the miniaturization of microwave devices. This project aims to develop suitable materials for RF/microwave applications followed by the fabrication of the devices.

**Scope:** The candidate will have a chance to work in this interdisciplinary team of experts. The project includes FEM simulation of electric/magnetic components, synthesis of magnetic materials, thin film depositions, and microfabrication of devices.

**Period:** 3 months, extendable up to 2 years

Remuneration: RS. 31,000 per month + HRA

Qualification: Masters in microelectronics/physics or equivalent with 70% marks or equivalent CGPA

Age limit: 35 years

**How to Apply:** Candidates who fulfill the eligibility criteria, please send your resume to the <a href="mailto:hari.prasad@ee.iith.ac.in">hari.prasad@ee.iith.ac.in</a> mail id by 30/09/2022.