

Research Openings in Wireless Sensing, Magnetics and Nanoelectronics at MIT

Multiple positions available for students interested in **MS/PhD** as well as **postdoc position** in the new Nano-Cybernetic Biotrek (NCB) (<http://www.mit.edu/~profsarkar/>) research lab at MIT. NCB aims to fuse nanoelectronics, applied physics, and biology with two major research directions:

- develop **novel nanoelectronic devices** (such as **Quantum Devices, Spintronics, Neuromorphic**) employing ingenious device physics and smart nano-materials for achieving extreme energy efficiency and scalability;
- merge such next generation technologies with living-matter creating **unique nanomachine-bio hybrid systems**, with **remote control** and **wireless communication** abilities to achieve unprecedented possibilities for probing/sensing and modulating (for therapeutics) our brain and body.

1> OPENINGS FOR GRAD STUDENTS (deadline Dec 1st)

NCB is seeking students with strong background in either of the following:

- Electromagnetism, Antennae, RFID, wireless sensing, RF engineering, magnetic resonance
- magnetic materials and devices, magnetics, Spintronics
- Nanoelectronics, Electronic devices, solid state physics, electronic circuits, Neuromorphic devices

2> OPENING FOR POSTDOC IN WIRELESS SENSING

NCB has opening for postdoc in **wireless sensing of chemical and biological signals**. The postdoc will conduct research to design and develop wireless sensing technologies, transmitter/receiver systems, RF circuit, **implantable and wearable antennae** for diverse applications in wireless **energy harvesting**, sensing, magnetic resonance imaging and **biomedical** applications. Strong background in electromagnetism, antenna design and RF engineering is required.

More details about the openings and application steps can be found at <http://www.mit.edu/~profsarkar/positionsavailable.html>