PhD / Master (MSc) Positions in Magnetic Nanolayers and Nanostructures – group of PD Dr. habil. Amitesh Paul (GS-2020001)

The Materials Science and Engineering Program (group of Paul) is looking for 2 PhD/Master students to conduct experimental in magnetic nanolayer materials related to fundamental aspects of interface magnetism.

Contract for PhD: 3 + 1 years.

**Project Details**
Modern facilities for the growth of thin film samples using ultrahigh-vacuum sputtering and atomic layer deposition as well as state-of-the-art laboratory thin film characterization tools (X-ray diffraction, X-ray reflectometry, SQUID magnetometry, TEM) will be available. Our group extensively uses leading international Quantum Beam facilities (neutron/synchrotron science facilities and ion beam accelerators) as major research tools. Our specialty technique is polarized neutron reflectometry, small-angle-scattering in specular and off-specular modes and X-ray absorption. We work in a collaborative international environment.

**Keywords**
Magnetic nanostructures, multiferroics, magnetic oxide films, stress/defect engineering of novel physical properties, electronic/structural instabilities or phase transitions in magnetic thin films, polarized neutron/X-ray reflectometry.

**Selection Criteria**
- BSc degree for Master (MSc) / Master degree (or equivalent) in Physics or Material Science for PhD (essential)
- Strong background in condensed matter physics (preferable)
- Strong interest in thin film deposition and/or structural/magnetic characterization (essential)
- Strong interest in polarized neutron reflectometry or polarized synchrotron spectroscopy (essential)
- Strong interest to work temporarily at large-scale research facilities in China, Europe, United States, Japan and/or Australia (essential)
- Good communication skills, good command of English (essential)
- Ability to work independently as well as in a team environment (essential)
- Ability to author scientific reports and co-author scientific publications (essential)
- The PhD candidate must fulfill the requirements for admission to the Technion Graduate School and needs to comply with its regulations leading to the PhD/Master degree: [https://graduate.technion.ac.il/en/prospective-students/](https://graduate.technion.ac.il/en/prospective-students/)

**Position**
PhD/Master (MSc)

**Program**
Materials Science and Engineering

**Research Area**
Magnetic Nanolayer Materials Related to Fundamental Aspects of Interface Magnetism

**Contact**
PD Dr. habil. Amitesh Paul
Email: amitesh.paul@gtiit.edu.cn

**Web Page Link**
[https://sites.gtiit.edu.cn/research](https://sites.gtiit.edu.cn/research)

**Application Deadline**
Open till filled

**Date Posted**
02 March 2020

**Location**
Guangdong Technion – Israel Institute of Technology (GTIIT), China & Technion-Israel Institute of Technology, Haifa

**Fees & Finance**
how to apply