

Research, Informatics and Graduate Studies

<https://sites.gtiit.edu.cn/research/positions/gs-2025002/>

PhD Positions in Light-Matter Interaction in Nanostructures (GS-2025002) – Group of Assoc. Prof. Ivan Savenko

Description

The Physics Program (group of Prof. Ivan Savenko) is looking for 2 PhD students to conduct theoretical research projects in light-matter interaction in novel 2D materials and superconductors. Contract duration: 3 + 1 years.

Project Details

Our research group is focused on theoretical condensed-matter physics. The group is based in two countries: southern China (Guangdong Technion-Israel Institute of Technology) and Israel (Technion). The PhD degree will be awarded by the Technion. This vacancy has arisen due to a recently awarded grant to the group leader, Dr. Ivan Savenko. We explore transport phenomena in novel two-dimensional materials (graphene, MoS₂), with optics applications to these materials, exciton-polaritons, and superconductivity. We publish in top journals and collaborate with leading experimental groups. The PhD student will be provided with all conditions for living and working (competitive salary, encouraged participation in international scientific conferences at the group's expense – we cover travel expenses and an annual vacation trip). The student will spend part of the time in China and part in Israel. The group also funds education in both China and Israel.

Keywords

2D semiconductors, 2D Dirac materials, light-matter coupling in nanostructures, Graphene, Transition metal dichalcogenides, 2D superconductors, fluctuating superconductors, valley acoustoelectric effect, strong light-matter coupling, exciton polaritons

Selection Criteria

- Master degree (or equivalent) in Physics or Material Science (essential) for PhD applicants
- Strong background and interest in condensed matter physics (preferable)
- Strong interest in 2D materials, optics and study of electric current in materials
- Strong interest in participation in multiple domestic and international conferences (in China and abroad)
- Good communication skills, good command of English (essential)
- Ability to work independently as well as in team (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/>

Application

Position

PhD

Program

Physics

Contact

Assoc. Prof. Ivan Savenko

Email: ivan.savenko@gtiit.edu.cn

[Web Page Link](#)

Application Deadline

Open till filled

Date posted

May 8, 2025

Location

Guangdong Technion – Israel Institute of Technology (GTIIT), China & Technion-Israel Institute of Technology, Israel.

Fees & Finance

[How to Apply](#)

- Application deadline: runs continuously (no deadline)
- Send required documents electronically to: ivan.savenko@gtiit.edu.cn

Contact

Assoc. Prof. Ivan Savenko

Email: ivan.savenko@gtiit.edu.cn

Web Page : <https://www.gtiit.edu.cn/en/viewStaff.aspx?staffNo=255>