# Research, Informatics and Graduate Studies

*https://sites.gtiit.edu.cn/research/positions/rf-2021007/*

## Research Fellow in Soft Wearables Lab of Prof. Yan Wang (RF-2021007) – Group of Assoc. Prof. Yan Wang

The Chemical Engineering Program (group of Yan Wang) is looking for 1-2 scientists to conduct research projects in soft electronics and their biomedical applications.

Contract duration: 2-3 years.

### Project Details

Current commercial wearable electronics are mainly based on rigid circuit boards which do not have true 'wearability' on curvilinear, soft human skin. To achieve better signal quality, soft wearable electronics have been arising as a result of the synergy between healthcare and technology. Soft biomedical devices can be seamlessly integrated to human skin or other biological tissues for ambulatory bio-signal monitoring. Such seamless integration enables accurate, continuous, and long-term acquisition of biometric information without the necessity for an external power supply or bulky connecting wires. We are seeking for highly motivated postdoc researchers to join our group and engage in exciting research towards ambulatory health care using soft wearables. We work in a collaborative international environment, with scientists with diverse backgrounds and expertise. Welcome to contact Prof. Wang for further details.

### Keywords

nanomaterials, materials design, nanofibers/wires, flexible/interface design, mechanical engineering, smart textiles, energy devices, electronics skins, biomedical sensors, health monitoring, human-machine interfaces

### Selection Criteria

- Have obtained a Ph.D. degree in the last 2 years or will obtain a Ph.D. degree by July 2022 (essential)
- A passion for research, optimistic, with strong teamwork skills(essential)
- Strong background in chemistry, chemical/electrical engineering, materials science and engineering, or other related fields (essential)
- Ability to conduct scientific research and write scientific papers independently; have published academic papers in related fields (essential)
- Applicants with research background in nanomaterials preparation/characterization, flexible electronics, bioelectronics, functional polymers, wearable electronics, etc. are preferred.

### Application Materials

- CV and cover letter
- Research proposal
- Three referrers
- Degree certificates with certified English translation for both the PhD and master's degrees

### Benefits

**Program**
Chemical Engineering

**Contact**
Assoc. Prof. Yan Wang

Email: yan.wanghh@gmail.com

Web Page Link

**Application Deadline**
Open till filled

**Date posted**
October 14, 2021

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

- Total annual salary: RMB 330,000 up / year (depending on qualifications of the candidate, including government subsidy)

Extra benefit:

- housing at GTIIT, China (Rental paid by candidate)
- Kid schooling fee subsidized or qualified kids can enroll in GTIIT AIS
- Annual health check
- Professional conference travel allowance
- Professional assistance offered to apply for Talent fund and Research fund
- Qualified candidate can receive RMB 140,000 living subsidy
- Work life balance
- World class Faculty team mentoring,
- Advanced lab equipment and devices

**PI Introduction**

Dr. Yan Wang is an assistant professor, independent PI in the Department of Chemical Engineering at Israel Institute of Technology, Technion-Guangdong. Dr. Wang completed PhD in 2018 at Monash University majoring in Chemical Engineering, under the supervision of Prof. Wenlong Cheng and Prof. George P. Simon, with a focus on stretchable electronic skin sensors and energy devices. From 2019 to 2021, Dr. Wang worked as a postdoctoral researcher in Prof. Takao Someya's group (a pioneer of flexible electronics) at The University of Tokyo, mainly focusing on ultrasoft nanomesh skin electronics and its application in long-term health monitoring. She joined GTIIT in November 2021.

In soft electronics field, Dr. Yan Wang has published > 30 peer-reviewed scientific papers in flagship journals like **Science, Science Advances, PNAS, Advanced Functional Materials, Advanced Energy Materials, ACS Nano, and Materials Horizons** in the last five years, with an h index of 20. She also applied for 1 Chinese patent, 1 US patent, and 2 Japanese patents. Some of her research works were featured by *CNN, Science, Nature Materials, Tech Explorist News, New Atlas, Innovations Report, Utokyo focus, Miragenews Azosensors, Technology Networks, News Mynavi, Phys Org, Nanowerk, Science Daily, Newsbeezer, News Break, Florida News Times, Chemical & Engineering News* and *major Australia medias, such as Herald Sun, Australia SBS evening news, and 9 news*.

**Awards:**

2019 Chinese Government Award for Outstanding Self-financed Students Abroad

2018 Nanoscale Horizons Outstanding Paper Runner-up Award 2018

2017 Postgraduate Travel Grant Award

2014–2018 Monash International Scholarship, PhD program

2014 National Postgraduate Scholarship

2014 Honour of Excellent Graduation Thesis

2014 Outstanding Postgraduate Award

2013 'Challenge Cup' Bronze Award

After joining Guangdong Technion (GTIIT), Yan will continue focusing on materials

development and the practical implementation of soft wearables in real-life situations. The research directions include but are not limited to the following:

1. Nanomesh enabled wearable/implantable electronic devices for applications in biomedical applications, human-machine interfaces, VR/AR experiences, etc.
2. Design, fabrication, and implementation of ultrathin on-skin sensors/sensor arrays.
3. Investigation and application of unconventional nanowire-based materials in the field of soft optoelectronics.

We are seeking for highly motivated MS/PhD students/postdocs/research assistants to join our team and engage in exciting research towards ambulatory health care using soft wearables. We work in a collaborative international environment, with scientists of diverse backgrounds and expertise. The lab has sufficient space and funding, brand new laboratories and offices, a first-class public research platform, and a good working environment. Welcome to contact Prof. Wang for further details.