

# Research, Informatics and Graduate Studies

<https://sites.gtiit.edu.cn/research/positions/rf-2021009/>

## Research Fellow Position in Alternative Fuels for Internal Combustion Engines (RF-2021009) – Group of Assoc. Prof. Pavlos Dimitriou

The Mechanical Engineering Program (group of Pavlos Dimitriou) is looking for one scientist to lead experimental and simulation research projects in alternative fuels (hydrogen, ammonia) combustion and energy recovery solutions for power generation and marine applications.

Contract duration: Initially for one year, renewable up to three years

### About the University

**Guangdong Technion-Israel Institute of Technology (GTIIT)** is a public technological institute and non-profit research university in Shantou, Guangdong province, China. GTIIT is the first Sino-foreign cooperative university with an independent legal personality to introduce high-quality higher education resources from the Technion-Israel Institute of Technology. Technion is a prestigious public research university based in Haifa-Israel, well-known for research innovations. Since 2004, Technion has celebrated three Nobel Prize laureates and is consistently ranked as a top-100 university. The vision of GTIIT is to become a world-class international university, conducting cutting-edge research in science and technology.

### Project Details

Current global efforts to cut greenhouse gas emissions have urged the need for essential steps towards independence from fossil fuels. China has pledged to achieve a carbon-neutrality by 2060, and in this effort, the group focuses on alternative solutions for power generation and marine applications. The research activities will include alternative fuels such as hydrogen, ammonia, biofuels and synthetic fuels combustion to power compression- and spark-ignited internal combustion engines. The work will consist of experimental testing on brand new engine testbeds and simulation analysis of combustion fundamentals and air path systems.

### Keywords

Internal combustion engines, power generation, alternative fuels, hydrogen, ammonia

### Selection Criteria

- PhD degree in Mechanical Engineering or any relevant discipline is essential.
  - Strong background with prior experience (experimental and/or simulations) in combustion and internal combustion engines.
  - Experience with setting up engine testbeds (preferred)
- Good communication skills, good command of English (essential).
- Chinese language skills (preferred but not essential)
- Ability to work both independently and in a team environment (essential)
- Ability to author /co-author scientific reports and publications (essential)
- Willingness to participate in other research projects (essential)

### Benefits

### Program

Mechanical Engineering (Robotics)

### Contact

Assoc. Prof. Pavlos Dimitriou

Email: [pavlos.dimitriou@gtiit.edu.cn](mailto:pavlos.dimitriou@gtiit.edu.cn)

[Webpage Link](#)

### Application Deadline

Open till filled

### Date Posted

14 December 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

### **Application**

Application deadline: **Open till filled**

Send below required documents electronically to: [pavlos.dimitriou@gtiit.edu.cn](mailto:pavlos.dimitriou@gtiit.edu.cn)

1. CV (including publication list) and a short research plan outline (up to one page in length).
2. Contact details for three letters of recommendation (one from the PhD mentor)
3. Degree certificates with English translation

Should you need more details, please contact Asst. Prof. Pavlos Dimitriou: [pavlos.dimitriou@gtiit.edu.cn](mailto:pavlos.dimitriou@gtiit.edu.cn)