

# Research, Informatics and Graduate Studies

<https://sites.gtiit.edu.cn/research/positions/gS2019010/>

## PhD / Master (MSc) Positions in Food Sustainability- Group of Dr. Yigal Achmon (GS-2019010)

The Biotechnology and Food Engineering Program (group of Dr. Yigal Achmon) is looking for 2 Master and 1 PhD students to conduct experimental research projects in food loss prevention and food waste valorization by using the combination of advanced simulation and big data microbial analysis (e.g. microbiomes). Contract duration: 2 years for Master and 3 + 1 years for PhD.

### Project Details

The food sustainbiomics lab is looking for excellent postdoctoral candidates. The lab's main research areas are:

- Food shelf-life and life cycle study by combining microbiome and metabolome tools.
- Advanced food life cycle simulation system focused on volatomics gaining deeper understanding on food spoilage processes.
- Advanced food waste valorization by flavors and nutrients extraction.
- Utilizing food waste for sustainable agricultural practices (mainly biosolarization).

The lab is using a unique simulation system combining an environment controlling system with advanced analytical tools to continually monitor the evolution of volatile compounds during different food storage/process applications. We pursue a better understanding of food maturation and degradation processes for a tailor-made design of food loss and waste prevention.

### Keywords

Microbiome, volatomics, food waste, sustainable agriculture, food shelf-life, advanced simulation, life cycle assessment, reused food, food flavor, bioinformatics, biosolarization, next generation sequencing.

### Selection Criteria

#### For Master

- BSc in food science, microbiology or a related field (essential)
- Former laboratory experience (preferable)
- Good communication skills, good command of English (essential)
- Ability to work independently as well as in a team environment (essential)

#### For PhD

- Master degree (or equivalent) in Biotechnology/Food Science or a relative field (essential)

### Position

PhD/Master (MSc)

### Program

Biotechnology and Food Engineering

### Research Area

Food Sustainability

### Contacts

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[Web Page Link](#)

### Application Deadline

Open till filled

### Location

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

### Date Posted

16 Oct. 2019

### [Fees & Finance](#)

how to apply

- Strong background in microbiology (preferable).
- Strong background in food chemistry (preferable).
- Strong interest in microbiome and bioinformatics(preferable).
- Strong interest in food storage system simulation (preferable).
- Strong interest to work side by side with relevant industries (preferable).
- 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 degree: <https://graduate.technion.ac.il/en/prospective-students/>