

Xiujie Weng

+86 13688913262 | +1 4435707219 | xweng8@jh.edu

Education

Guangdong Technion – Israel Institute of Technology (GTIIT)

Bachelor of Science in Chemical Engineering

Dual degree from GTIIT and Technion-Israel Institute of Technology (GPA:83.5/100)

Shantou, China

08/2018 – 06/2022

Johns Hopkins University (GPA:3.67/4)

Master of Science in Engineering, Chemical and Biomolecular Engineering

Baltimore, United States

09/2022 – Present

Research Experience

Research Project: Integrated photocatalytic spheres for fouling control

Supervisor: Prof. Zhong Ziyi

Shantou, China, 03/2021- 06/2022

- An extension research project to apply the synthesized photocatalysts into application to deal with a wider range of pollutants such as pigment and antibiotic
- Independently develop a sphere coated with Carbon Nitrate type catalyst and design a suitable reactor for water filtration and most effective catalyst contact.
- Conducted experiments to synthesize and screen photocatalysts, of which cobalt-C₃N₄ is the most effective. Modify the synthesized photocatalysts to improve its functions in different situations.
- Practiced and became proficient in catalyst synthesis methods, including Precipitation, Hydrothermal (HT) method and others; Operated XRD and ICP to examine the effects of the synthesized catalysts.

Research Project: Sn and Al modification of Self-pillared zeolite

Supervisor: Prof. Michael Tsapatsis

Baltimore, United States, 05/2023-Present

- Synthesized and characterized Self-pillared zeolite; Mainly doing XRD, Argon Physisorption and surface titration.
- Modified the Self-pillared zeolite by grafting tin or aluminum. Tested catalytic activity of resulting materials via alcohol dehydration and MPV reduction.
- Operated reaction and relative reaction chemicals calibration in a reactor gas chromatography.

Internship

Guangdong Jia Yong Industry Co. Ltd

Shantou, China, **07/2020 – 09/2020**

- Worked in the chemical company to learn the ins and outs of the production process of tooth pastes and shampoo
- Shadowed a senior chemical engineer in his daily work, including feeding treatment, industrial process optimization, sample testing, data collection and analysis, machine maintenance, and safety control etc.
- Communicated and coordinated with third party (quality testing organizations) to ensure the chemical production process meet government standards

Leadership & Extracurricular Activities

Tech lead for large-scale school events, GTIIT news and public affairs department, and English club

- Recognized commercial photographer; Highly proficient in different graphics and audio editing software such as Photoshop, Da Vinci Resolve, Final cut pro X, Adobe audition etc.
- Responsible for photo shooting, video editing, backstage management for 20+ campus events all four years
- Leading various teams of five to ten to organize large-scale school events, including Christmas Celebration, and New Year Celebration for over 600 audience

Skills & Interests

Laboratory Techniques: Analytical lab (Acid/base titration, Redox titration, Flame tests, Electroanalysis, Solubility tests), NIR analysis, NMR analysis, XRD, Argon Physisorption, HPLC, TLC, ICP and GC-MS.

Technical Skills: MATLAB, Python, CAD, LaTeX, Photoshop and ChemDraw

Language Skills: Mandarin, English, Teochew and Cantonese