

Ying-Hsuan Liu

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EDUCATION

- PhD.** 09/2018-Present
Department of Chemistry
McGill University (Canada)
GPA: 3.8/4.0
- M.S.** 09/2016-07/2018
Department of Chemistry
National Taiwan University (Taiwan)
GPA Overall: 3.60/4.30
- B.S.** 09/2012-06/2016
Department of Applied Chemistry
Double Major: Undergraduate Honors Program of Interdisciplinary Science
National Chiao Tung University (Taiwan)
GPA Overall: 3.99/4.30
Rank: 4/45

AWARDS AND HONORS

- Government Scholarship to Study Abroad (GSSA)** 06/2019-05/2021
Authorized by Taiwan Ministry of Education
✧ Only 12 people receiving this award in the field of science in 2019
- Differential Fee Waiver (DFW)** 09/2019-04/2020
Authorized by McGill University

RESEARCH EXPERIENCE

- McGill University (Canada)
09/2018-Present
Graduate Student, Molecular Design/Synthesis for π -Electron Functional Materials Research Group
Advisor: Prof. Dmitrii Perepichka
Exploration of n-type organic semiconductors via synthesis of small molecules
✧ Manipulated molecular packing in solid state through halogen-bonding *supramolecular* interaction
- National Taiwan University (Taiwan)
07/2016-07/2018

Graduate Student, Molecular Design/Synthesis and Spectroscopy/Dynamics Research Group

Advisor: Prof. Pi-Tai Chou

Exploration of excited-state charge/proton-transfer reactions via synthesis and UV-Vis spectroscopy

- ✧ Evaluated *excited-state intermolecular proton-transfer reactions* via rational design of NR-H types quinoline derivatives.
- ✧ Quest of *gigantic Stokes shifted* molecular systems via N-amination; their design, synthesis, photophysics and applications.

National Chiao Tung University (Taiwan)

07/2014-09/2015

Undergraduate Student, Polymer Structure Research Group

Advisor: Prof. Jiun-Tai Chen

Fabrication of Hierarchical Structures by Electrospinning on Anodic Aluminum Oxide Templates

- ✧ Evaluated the impact of water on *electrospinning technique*.
- ✧ Fabrication of electrospun fibers with *hierarchical structures* in one-step process.

WORK EXPERIENCE

Industrial Technology Research Institute (ITRI, Hsinchu, Taiwan)

10/2015-01/2016

Intern, Material and Chemical Research Laboratories (MCR)

- ✧ Synthesis of polymeric phase transition materials.

OTHER EXPERIENCE

McGill Taiwanese Graduate Student Association (MTGSA)

06/2019-Present

President

- ✧ Organized activities to enhance the cohesion of Taiwanese students at McGill University

Wu Ta-You Science Camp 15th

07/31/2016-08/05/2016

Participant

- ✧ Communicated with professors and students in diverse research areas.

Hong Kong University of Science and Technology (Hong Kong)

02/2016-06/2016

Exchange Student

- ✧ Molecular design/synthesis in Prof. He Yan's Laboratory.

National Chiao Tung University Tainan Area Alumni Association (Taiwan)

07/2014-06/2015

Activities Director

- ✧ Organized more than five activities and camps.
- ✧ Consultation and coordinator with other members.

PUBLICATIONS

1. "Catalytic Type Excited-State N-H Proton Transfer Reaction in 7-Aminoquinoline and Its derivatives", *in preparation*.
2. **Ying-Hsuan Liu**, Yu-Jing Chiu, and Jiun-Tai Chen. "Hierarchical and Spiral Polymer Structures: Direct Electrospinning on Porous Anodic Aluminum Oxide Templates." *Macromolecular Chemistry and Physics* 220.15 (2019): 1900169.
3. Chiu, Yu-Jing, Mu-Huan Chi, **Ying-Hsuan Liu**, and Jiun-Tai Chen. "Fabrication, Morphology Control, and Electroless Metal Deposition of Electrospun ABS Fibers." *Macromolecular Materials and Engineering* 301, no. 8 (2016): 895-901.