

# LIU Yang

Entry-level Chemist

An NTU chemistry graduate with experience of conducting 3 research projects as part of my coursework, well versed in theoretical and practical aspects of wet chemistry, analytical methods, organic reactions, etc. IT-savvy with a "can-do" attitude.

## EDUCATION

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### Nanyang Technological University

Singapore

*BS in Chemistry*

*Aug 2011 – Aug 2015*

- GPA: 4.45/5.0
- Went through a 1.5-year bridging course on English presentation and writing.

## COURSEWORKS

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### Enzyme-responsive Micelles for Drug Delivery

Singapore

*Honour's Project*

*Jan 2015 – Apr 2015*

- Attempted to synthesize an amphiphilic molecule based on a  $\gamma$ -glutamyltranspeptidase (GGT) probe, a well-established cancer imaging agent. The molecule was supposed to form micelles that undergo cleavage in GGT-rich malignant tissues to deliver anti-cancer drugs.

### PH-responsive Micelles for Drug Delivery

Singapore

*Small Honour's Project*

*Aug 2014 – Dec 2014*

- Synthesized fluorescent amphiphilic molecules that were able to form micelles that break in tumor acidic environment to deliver anti-cancer drugs.
- Imaged the nanostructures with TEM. Determined CMC and pKa with UV-Vis and fluorescence spectroscopy.

### Study of Metal Cluster Fluxionality by VT-NMR

Singapore

*Summer Research*

*May 2013 – Aug 2013*

- Synthesized phosphine-substituted ruthenium-antimony clusters that showed fluxionality.
- Carried out variable temperature  $^1\text{H}$  and  $^{31}\text{P}$  NMR to determine the rate constant of the fluxionality process through lineshape analysis.

## PUBLICATION

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### Synthesis and Reactivity of Ruthenium-Antimony Carbonyl Clusters

Li, Y. , Ganguly, R. , Leong, W. K. and Liu, Y. *Eur. J. Inorg. Chem.*, **2015**: 3861-3872.

## CCA

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### Publicity Officer

Singapore

*NTU Astronomical Society*

*Aug 2011 – Jul 2012*

- Designed publication posters and brochures with Photoshop and Indesign. Worked with other members to organize and promote stargazing events.

## TECHNICAL STRENGTH

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| • Advanced | Wet Chemistry, UV, IR & NMR Spectroscopy, Excel VBA |
| • Beginner | HPLC, GMP, Photoshop                                |