Zhe (Cyril) Xu

Flat 1, 33 Perham Road, London, W14 9SR
07482056456 • uccazxu@ucl.ac.uk

Education

University College London, UK
(December 2021 – Present)
- PhD in Chemistry

University College London, UK
(October 2020 – October 2021)
- MSc. Molecular Modelling (Distinction)

Imperial College London, UK
(October 2016 – July 2020)
- BSc. Chemistry with Management (High Upper-Second Class)

London School of Economics and Political Science, UK
(July 2018 - August 2018)
- Summer Programme: Strategic Management

Abbey College Cambridge, UK
(September 2014 – June 2016)
- A-levels: Mathematics: A*, Chemistry: A, Physics: A

Research Experience

Postgraduate Researcher, Dr Robert G. Bell, University College London, UK
(October 2020 – October 2021)

- Computationally studied the CO_2/H_2O competitive adsorption in defective Metal-organic Frameworks (MOFs) using periodic DFT and Monte-Carlo simulations
- Investigated how structural and electronic properties of defective MOFs affect the adsorption capacity and selectivity
- Aimed to propose strategies for the reticular design and synthesis of novel functional materials for carbon capture and conversion

Undergraduate Researcher, Prof. Patricia A. Hunt, Imperial College London, UK
(February 2019 – March 2019)

- Modelled and predicted the formation of Boron-Phosphorous Frustrated Lewis Pairs (FLP) by DFT
- Investigated the importance of non-covalent intermolecular interactions between Hydrogen atoms in FLPs
- Tabulated, analysed and visualised experimental data by Python

Inorganic Laboratory Assistant, Prof. Hongwei Hou, Zhengzhou University, China
(July 2016 – August 2016)

- Reviewed existing literatures on synthetic targets
- Prepared NMR data for individual products

Other Experience

Specialist, Apple, Regent Street, London, UK
(October 2021 – Present)
- Uncover customers' needs and provide exceptional services by creating excitement around Apple products, presenting the right solutions that enrich customers' life
- Actively educate customers about product features and the Apple ecosystem across the product line
- Assist team members in visual merchandising and backstage stock replenishments
- Very high Net Promotor Score (100/100) and positive customer feedbacks

Department Open Day Volunteer, Imperial College London, UK
(June 2019 – September 2019)
- Demonstrated undergraduate laboratory experiments
- Presented personal experiences to 50+ audience by PowerPoint
- Assisted organisers in logistics

Customer Host, Fortnum & Mason, London, UK
(November 2018 – April 2019)
- Customer engagement in professional manners at a high-end retail establishment
- Coordinated with other departments to ensure adequate stock level

General Assistant, Loon Fung Chinatown, London, UK
(February 2018 – August 2018)
- Negotiated prices with buyers and suppliers and built sustainable client relationships

Front Desk Volunteer, Commemoration Day 2017, Imperial College London, UK
(October 2017)
- Assisted disabled guests to correct venues

Events

Participant, Protein Structure Fundamentals: Searching – Analyzing – Modelling de.NBI workshop, Hamburg, Germany
(September 2019)

Participant, RDKit User Group Meeting 2019, Hamburg, Germany
(September 2019)

Participant, Milestones in Molecular Simulations Symposium, Imperial College London, UK
(June 2019)

Skills and Interests

Computer:
- DFT: Gaussian, CP2K, NWCHEM
- Empirical: GULP, DL-POLY
- Monte-Carlo: DL-MONTE
- General programming: Python (Intermediate), Fortran 90 (Elementary)
- High Performance Computing
- LaTeX

Languages:
- Chinese (Native)
- English (Fluent)
- German (Elementary)

Interests:
- Swimming
- Hiking
- Travelling

References

Available upon request