

# Curriculum of Chemistry Programme@CUHK

To NGAI (魏濤)

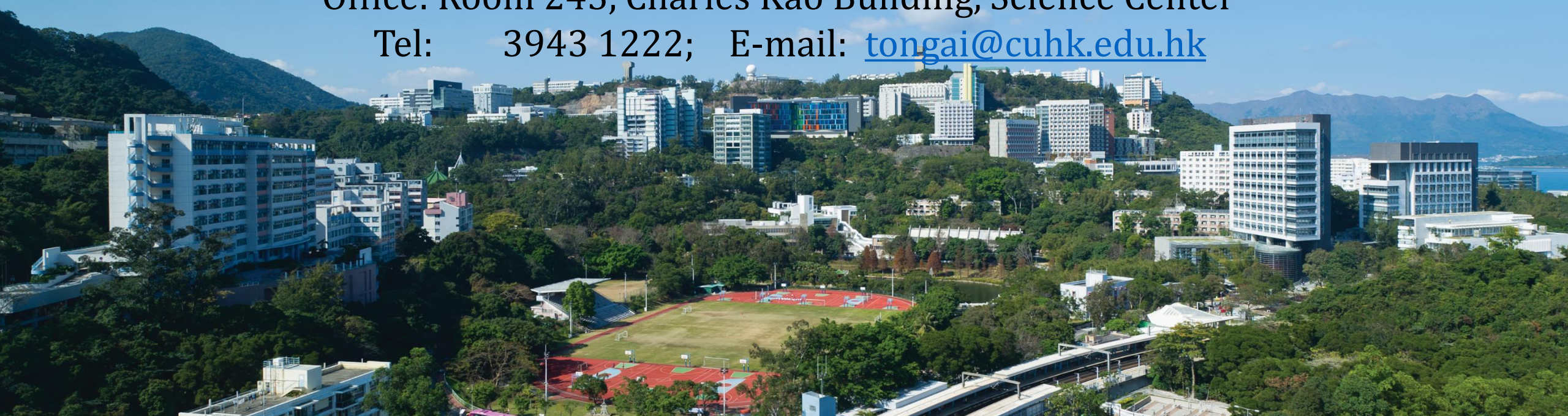
Curriculum Convenor

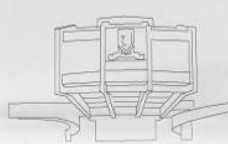
*Department of Chemistry*

*The Chinese University of Hong Kong*

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# Chemistry Streams (2<sup>nd</sup> – 4<sup>th</sup> Years)

For students of 2019/20 cohort or thereafter

## *Main Stream (68 Units)*

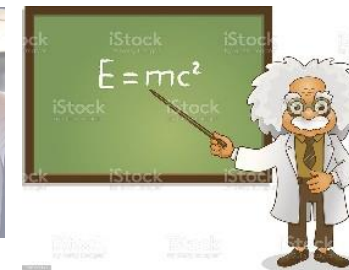
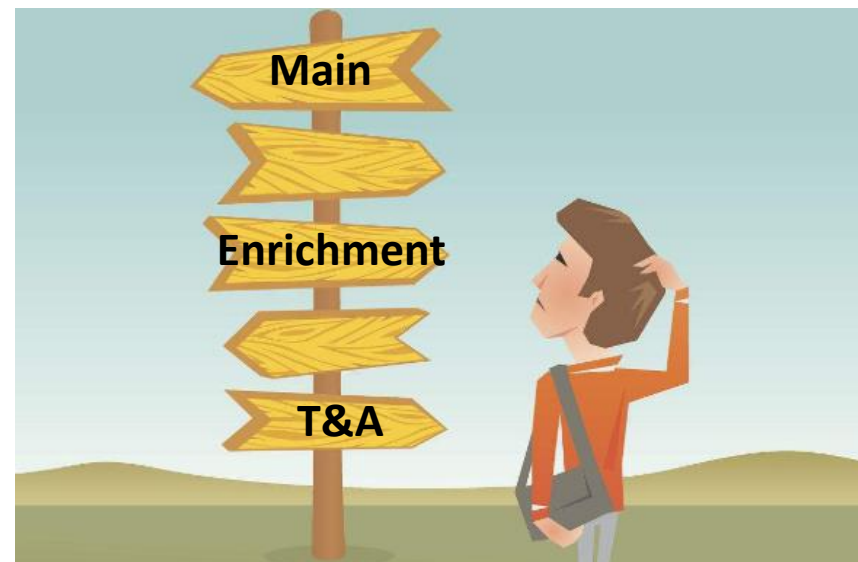
It is the **most flexible stream** bearing the least required units in major, in which students can take a wider variety of courses offered by other programmes.

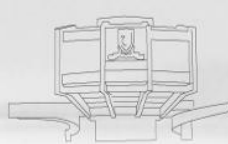
## *Enrichment Stream (72 Units)*

It is specifically designed for students who wish to **further their studies in graduate programmes** in chemistry or related fields.

## *Testing and Accreditation Stream (70 Units)*

It is designed for students who wish to join the **testing and accreditation industry** after graduation.





# Streams – Requirements & Application

## For students of 2019/20 cohort or thereafter

### *Enrichment Stream (72 Units)*

#### Requirement

- (1) Eligible students should declare before the end of Year 3
- (2) Students should submit a research title proposed by a Prof. for UG Thesis I/II at declaration
- (3) CGPA >3.0 for all CHEM2000 level or above courses
- (4) Enrichment stream students with CGPA <3.0 would be dropped out from the stream

#### Application procedures

- (1) Applications should be submitted in person to CHEM General Office **with transcript**

### *Testing and Accreditation Stream (70 Units)*

#### Requirement

Selection will be based on:

- (1) GPA of STOT, Fundamentals of Spectroscopic Analysis, Analytical Chemistry, Integrated Chemistry Lab I & II
- (2) A written statement of purpose
- (3) Interview performance

#### Application procedures

- (1) Applications should be submitted via email ([chemistry@cuhk.edu.hk](mailto:chemistry@cuhk.edu.hk)) **with transcript & written statement of purpose**
- (2) Eligible students will be invited to attend the interview in June/July

*\*Students not choosing any stream would be considered as staying in the Main Stream.*

## Main Stream

## Enrichment

## Testing &amp; Accreditation

1<sup>st</sup> year

- Faculty Package

2<sup>nd</sup> year

- Student Oriented Teaching
- Analytical Chemistry
- Main Group Chemistry
- Fundamentals of Spectroscopic Analysis

# Study Schemes

3<sup>rd</sup> year

- Instrumental Analysis
- Organic Reactions: Reactivity and Selectivity

- Conjugated Molecules and Synthetic Polymers / Materials Chemistry (**choose 1**)
- 1 CHEM elective (4000 level)

- Conjugated Molecules and Synthetic Polymers
- Materials Chemistry
- **Advanced Organic Chemistry Lab / Physical Chemistry Lab II (choose 1)**

- **Accreditation of Lab Tests**
- **Quality Testing Lab**
- **Food Testing and Environmental Analysis**

4<sup>th</sup> year

- Problem-based learning (**PBL**)
- **3** CHEM electives (4000 level)

- **Thesis**
- **4** CHEM electives (4000 level)
- At least **4 consecutive weeks** of outside Hong Kong exposure (exchange/research/internship programmes)

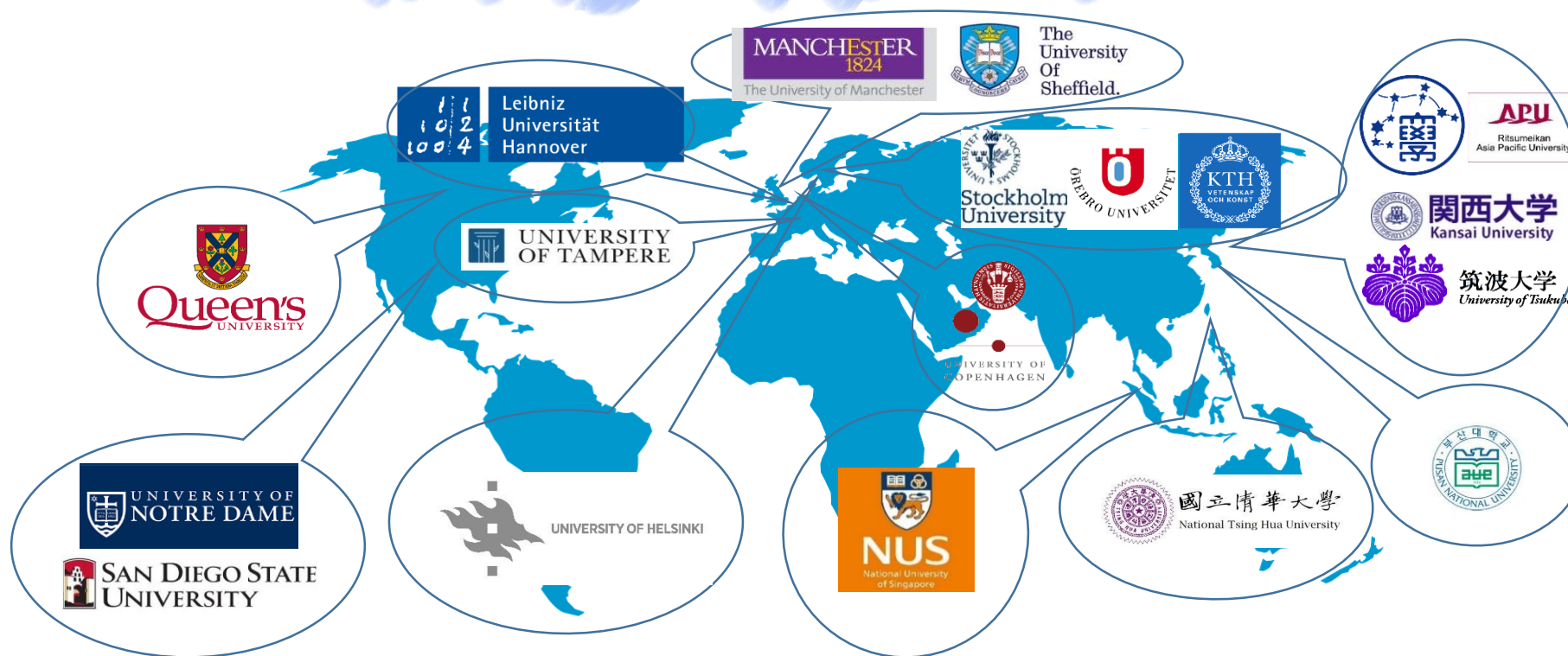
- **PBL (T&A)**
- **Internship in Accredited Lab**
- Advanced Analytical Chemistry / Mass Spectrometry / Bioanalytical Methods / Chemical Applications in Forensic Sciences (**choose 2**)



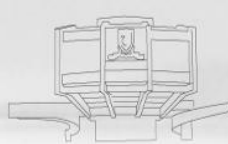
# Experiential Learning



## Undergraduate International Exchange



- Overseas exchange – 1 semester/year; **Not recommend in the final year.**



# Experiential Learning



## Overseas Summer Research



**KANSAI  
UNIVERSITY**



**國立中央大學**

National Central University



**國立清華大學**

National Tsing Hua University



**國立交通大學**  
National Chiao Tung University



**NUS**  
National University  
of Singapore



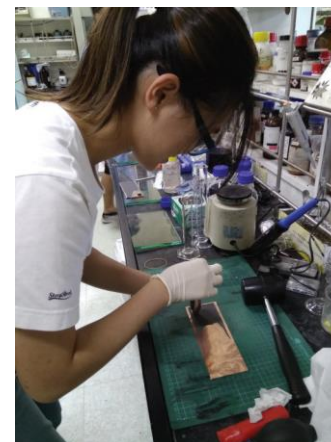
Kansai (Osaka, Japan)



**WARWICK**  
THE UNIVERSITY OF WARWICK



Warwick (UK)



National Central  
University (Taiwan)



Warwick (UK)



# Experiential Learning

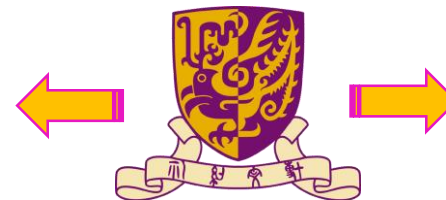


## Overseas Summer Research

Internship opportunity in **leading chemical company**

2018 summer: CUHK-BASF-Fudan Internship Programme

- Working at BASF (Shanghai) for **2.5-3 months**
- Department: **cover flight ticket**
- Fudan University: **cover accommodation and meal**



BASF is definitely an **international** company. All colleagues are from different countries ... Russians, Germans, Chinese, Indians... all gather to be **innovative** and come up with **impressive ideas**.



# Experiential Learning



Overseas Study Trip



*Soochow (2018 Summer)*





# Experiential Learning

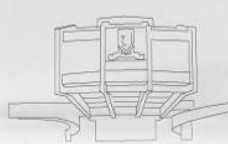


## Overseas Study Trip



Lanzhou and Dunhuang (2019 Summer)

CUHK-CHEM

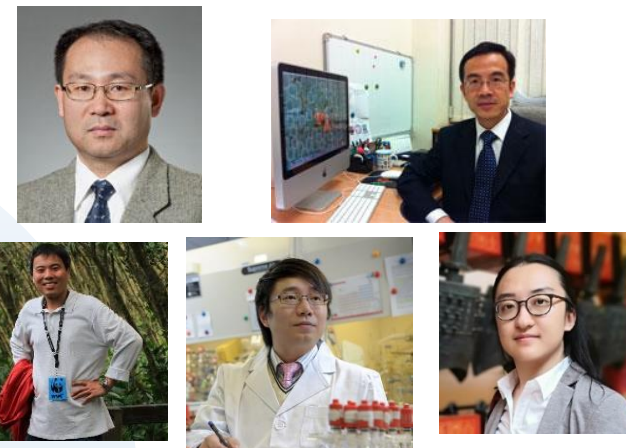


# Professors in Department

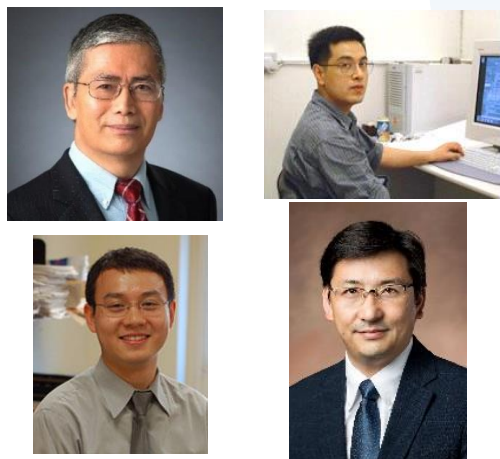
## Organic Chemistry



## Inorganic Chemistry



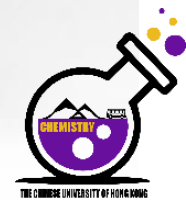
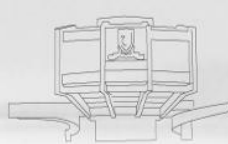
## Physical Chemistry



Material Science  
 Nanoscience  
 Bioinorganic  
 Chemical biology  
 Biophysics  
 Soft matter  
 Polymer  
 Synthetic biology

## Analytical Chemistry





# Academic Advising

- *Two-level* advisory system
- Every student is assigned a **Level I Advisor**
- Each student is required to meet with Level I Advisor once every academic year
- Students may discuss study-related issues with Level I Advisor
- Students with GPA **below 2.0** will meet with **Level II Advisor** to work out possible approach for improvement





# Any Questions?

