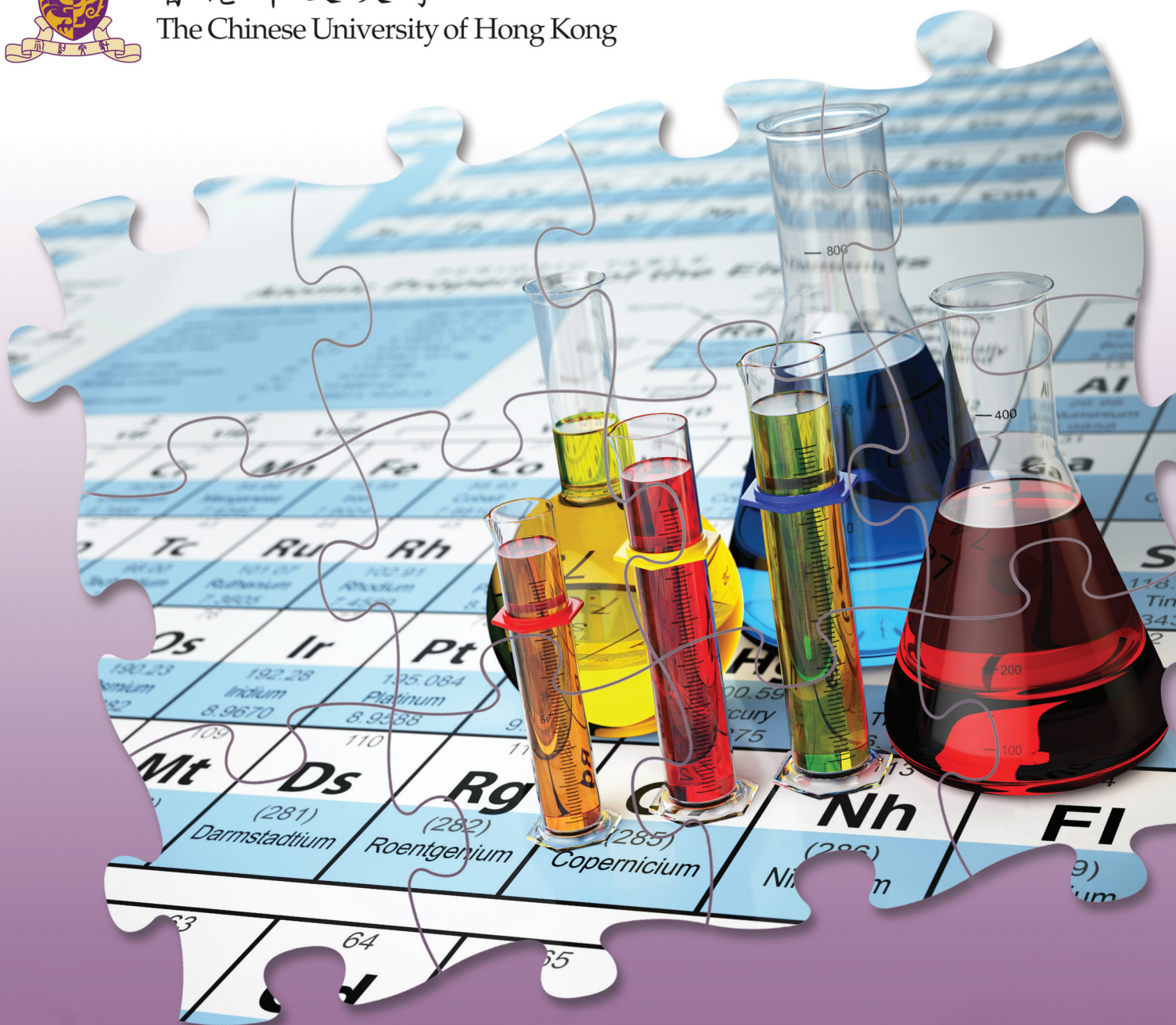




香港中文大學
The Chinese University of Hong Kong



DEPARTMENT OF
CHEMISTRY
化學系



香港中文大學理學院

FACULTY OF SCIENCE

THE CHINESE UNIVERSITY OF HONG KONG

DEPARTMENT OF CHEMISTRY

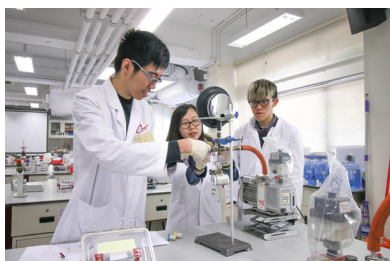
GET TO KNOW US

Established in 1956, the Department of Chemistry remains as one of the largest and best-equipped departments in CUHK. Currently, our professors are engaging in all branches of frontier research, including synthetic chemistry, organometallic chemistry, chemical biology, polymer chemistry, theoretical chemistry, mass spectrometry, nanochemistry, electrochemistry, etc. With our effort, we are committed to nurturing future scientists. CUHK BSc. students can declare chemistry major through the **Science Broad-based Admission Scheme (JUPAS code: JS4601)**. Currently there are about 170 undergraduate and 120 graduate students enrolled in the Department. The Department of Chemistry offers:

CHEMISTRY PROGRAMME

The Department of Chemistry provides solid training in general areas including analytical, inorganic, organic, physical and theoretical chemistry. In addition, students can choose from a wide range of elective courses according to their interest. Advanced and research-related courses are provided for students who need a solid background in chemistry for their further studies. Cross-disciplinary courses that focus on practical aspects such as forensic science, food testing, environmental analysis, pharmaceutical chemistry and coating chemistry are also available. In their final year of undergraduate study, students can choose between problem-based learning and undergraduate thesis as a capstone project.

Undergraduate students in laboratory classes



BACHELOR OF SCIENCE IN BIOLOGY AND CHEMISTRY DOUBLE MAJOR PROGRAMME

Conscientiously devised by the Faculty of Science, Department of Chemistry and School of Life Sciences, the **Bachelor of Science in Biology and Chemistry Double Major Programme** is designed to equip students with enhanced broadness and diversity in both fields.

CUHK-UNIVERSITY OF MANCHESTER DUAL UNDERGRADUATE DEGREE PROGRAMME IN CHEMISTRY

The Department of Chemistry of CUHK and the Department of Chemistry of the University of Manchester collaboratively offer the **CUHK-University of Manchester Dual Undergraduate Degree Programme in Chemistry**. In this four-year Dual Degree Programme, students will study at **CUHK** for the **1st and 2nd years**, and then at the **University of Manchester** for the **3rd and 4th years**. Upon completion of this Dual Degree Programme, students obtain two Bachelor Degrees of Chemistry (one from CUHK and one from the University of Manchester).

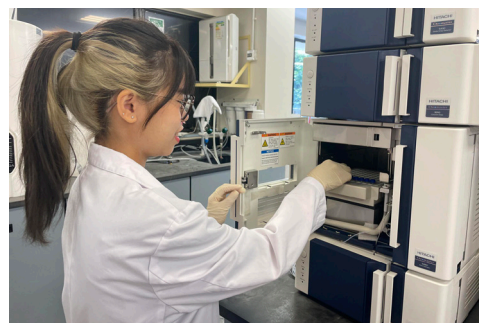
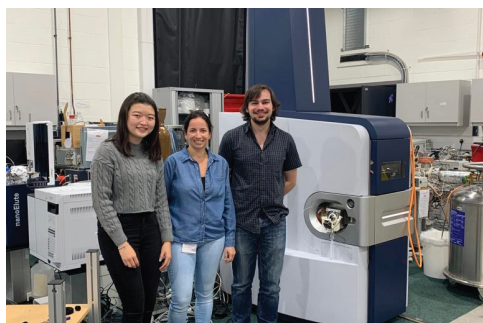
SCIENCE, TECHNOLOGY AND RESEARCH STREAM (STARS)

Hosted by the Faculty of Science, it intends to admit top students with strong ability and interest to gain wider exposure and research experience during their undergraduate studies. It aims at training future research scientists. Students will need to complete an experiential learning for not less than 4 consecutive weeks outside Hong Kong. It would extend students' exposure and thus make them appreciate new cultures, hone language skills, grow confidence, and prepare for a career in a globally connected world.



CLEAR ARTICULATION PATH

The Department offers graduate MPhil-PhD programme which involves coursework and a thesis embodying the results of original research. Normally, financial assistance in the form of postgraduate studentship is provided.



INTERNSHIP OPPORTUNITIES TO ENRICH EXPERIENCE

Internship opportunities in different sectors, including private companies, secondary schools and testing and certification labs, are available to students. These allow students to acquire hands-on experiences which enrich their learning, and gain exposure to chemistry-related industrial and commercial sectors.



Chan Yi Yan
Artec Chemical Company Limited
internship participant

"During the three months internship, I was fortunate to enter the research and development team. I was tasked with developing a new ingredient formula for products and had chances to use different kinds of instruments. The biggest reward in this internship is getting to know the importance of persistence and learnt from failures."



Mo Chulan
Graz University of Technology
exchange participant

"In terms of stepping out of comfort zone, it is not solely about external improvement such as building a new interpersonal relationship, but also about self-improvement such as developing confidence and knowledge. From my perspective, exchange is a great time to discover my potential while trying something new."



Cheung Cheuk Lam
Kansai University
summer research participant

"Through this exchange programme, I was able to experience the differences between local and international research environments, which provided me with new insights on my research of interest. Working in a completely new environment also allowed me to acquire new skills and knowledge."

OVERSEAS EXCHANGE AND SUMMER RESEARCH PROGRAMMES TO EXTEND HORIZONS AND ENRICH KNOWLEDGE

The Department provides Chemistry major students with exchange and research opportunities. In recent years, some of our students spent a term or a whole year in Canada, Denmark, Japan, Singapore, Taiwan, etc. to extend horizons in overseas exchange programmes. Summer research programmes were also conducted to enriches students' learning and research experiences in overseas top universities such as University of Warwick (UK), Kansai University (Japan), National University of Singapore (Singapore), National Tsing Hua University, National Central University and National Chiao Tung University (Taiwan).

COURSE STRUCTURE WITH HIGH FLEXIBILITY



1st Year	<ul style="list-style-type: none">• Faculty package• Fundamentals in Physical Chemistry
2nd Year	<ul style="list-style-type: none">• Student Oriented Teaching• Analytical Chemistry• Main Group Chemistry• Fundamentals of Spectroscopic Analysis• Organic Functional Groups: Structure and Reactivity• Atoms and Molecules• Thermodynamics and Chemical Equilibrium• Integrated laboratory courses
3rd Year	<ul style="list-style-type: none">• Instrumental Analysis• Transition Metal Chemistry• Organic Reactions: Reactivity and Selectivity• Chemical Kinetics• Main theme laboratory courses• Two advanced Chemistry elective courses
4th Year	<ul style="list-style-type: none">• Problem-based Learning or Undergraduate Thesis• Three advanced Chemistry elective courses

Faculty Package

Required:

- Principles of Modern Chemistry
- Essential Physics **OR** General Physics **OR** University Physics I – Introduction to Mechanics, Fluids and Waves

Electives (choose at least one course from the below list):

- University Mathematics for Applications
- University Mathematics
- Methods of Matrices and Linear Algebra
- Honours University Mathematics
- Basic Concepts in Biological Sciences
- Introduction to Biological Sciences
- Introduction to Life Forms in the Biosphere
- Introduction to Statistics
- Statistics for Life Sciences

Advanced Chemistry Elective Courses

Examples of the Courses:

- Chemical Applications in Forensic Science
- Chemistry in Biofuel
- Pharmaceutical Chemistry
- Food Testing and Environmental Analysis
- Accreditation of Laboratory Tests
- Bioorganic Chemistry and Chemical Biology
- Organometallic Chemistry and Catalysis
- Nanoscience and Nanotechnology
- Electrochemical Energy Conversion and Storage
- Advanced Inorganic Chemistry
- Advanced Analytical Chemistry
- Quantum Chemistry
- Coating Chemistry
- Colloids and Surface Chemistry
- Industrial Chemistry
- Asymmetric Organic Synthesis
- Advanced laboratory courses

WORK HARD, PLAY HARDER

Both the Department and Chemistry Society organise a wide range of social and recreational activities to interested students. Not only can it be beneficial to students' development, but it also creates a harmonious and friendly study environment.

AMPLE CAREER PROSPECTS

Our graduates' careers are highly diversified. Many of them are taking prominent positions in different sectors, including:

- Secondary school principals
- Professors / lecturers in local and overseas tertiary institutions
- Chemists and forensic scientists in government laboratories
- Scientific officers in the Department of Health and Environmental Protection Department
- Senior executive officers in chemistry-related businesses and industries
- Researchers in scientific research and development sectors



Inauguration Ceremony of Chemistry Society



Graduation Photo



Graduation Dinner

DEPARTMENT OF CHEMISTRY | 化學系

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