



**SHKU**  
**Science**

FACULTY OF SCIENCE  
THE UNIVERSITY OF HONG KONG  
香港大學理學院

# RESEARCH POSTGRADUATE STUDIES @HKU SCIENCE

Pursuing research eminence  
at Asia's World City

SCIENCE CREATES KNOWLEDGE

# Internationalisation and diversity



THE most international university in the world [2022]



40%

of academic staff members are from overseas



~600


research students from over 13 countries

A **global network** where  
**intellectual minds** meet



## Research Assessment Exercise [RAE] 2020 by the University Grants Committee [UGC] affirmed **HKU Science's world-leading research position**

HKU Science's performance in the latest Research Assessment Exercise (RAE) 2020 by the University Grants Committee (UGC) was very encouraging. Among the five Units of Assessment (UoA) to which HKU Science submitted, under the Panels of Physical Sciences and Biology, we outperformed other local universities and achieved the highest percentage of 4\* ratings in three UoAs including Chemistry, Earth Sciences and other Physical Sciences, and Mathematics and Statistics, affirming our world-leading position in the aforementioned fields. Overall, 83% of the research submissions by HKU Science's 118 eligible staff was rated as world-leading (4\*) or internationally excellent (3\*).

	Percentage judged to be "world-leading" [4*] and "internationally excellent" [3*]	
Unit of Assessment (UoA)	HKU Science	Sector-wide average
Chemistry	99% (Highest in 4* in the UoA)	92%
Physics & Astronomy	95%	91%
Earth Sciences & Other Physical Sciences	85% (Highest in 4* in the UoA)	 77%
Mathematics & Statistics	82% (Highest in 4* in the UoA)	77%
Biological Sciences	62%	61%

**#4** in Asia (2022) 

**#30** in the world (2022)

**#48** in world reputation (2021)

**#3** in Asia (2022)



**#10** World graduate employability (2022)

**#21** in the world (2023)

**3** Members of Hong Kong Academy of Sciences

**5** Members of Chinese Academy of Sciences

**5** State Natural Science Awards

**5** Fellows of foreign academicians

**Plus** many prestigious international awards and honours

Remarks: Accumulative number of awards

### Top-notch Scholars

**18%** of professorial staff are the world's Top 1% scholars  
[Clarivate Analytics' Essential Science Indicators 2021]

### Research Eminence

**6** Areas of Excellence (AoE) projects



**3** HKU-CAS Joint Laboratories



**1** State Key Laboratory in Synthetic Chemistry

- Excellence in basic research, aiming high in applied and strategic research
- Most supportive of interdisciplinary research

### Well-established Faculty

**> 80**

years of science  
education history

**~ 150**

professoriate staff

**> 2,700**

undergraduate  
students

**~ 600**

research  
postgraduate  
students

**> 700**

taught  
postgraduate  
students

**> 27,000**

alumni

### Extensive Collaborations with World-class Universities

### Cutting-edge Research Facilities

### Robust Funding

Projected funding of **HK\$807 million** for the following InnoHK projects:

#### Health@InnoHK programme

##### The Laboratory for Synthetic Chemistry and Chemical Biology

- aims to produce innovative, high-impact and leading-edge interdisciplinary research in the area of drug discovery and development

#### AIR@InnoHK programme

##### The Hong Kong Quantum AI Lab

- multi-disciplinary programme which combines big data/ machine learning, computational science and experiments to discover new energy materials and devices

# HKU Presidential PhD Scholar Programme (HKU-PS)

As a part of the HKU Presidential PhD Scholar Programme, a prestigious scholarship package, namely, the HKU Presidential PhD Scholarship, is offered to attract top candidates from around the world to pursue full-time PhD studies at HKU.

The HKU Presidential PhD Scholars will receive strong academic and training support from the University, e.g. individualised advisory service, training in teaching, chances to rotate among different research labs/disciplines, and more opportunities to interact with leading scholars. A group of distinguished Faculty members will also give advice, provide additional mentorship and training opportunities, and oversee the academic career paths.

## Hong Kong PhD Fellowship Scheme (HKPF)

Established in 2009 by the Research Grants Council (RGC), the Hong Kong PhD Fellowship (HKPF) Scheme aims at attracting the best and brightest students in the world to pursue their PhD studies in Hong Kong's universities.

Those who are seeking admission as new full-time PhD students in Hong Kong universities funded by the University Grants Committee (UGC), irrespective of their country of origin, prior work experience and ethnic background, should be eligible to apply. Applicants should demonstrate outstanding qualities of academic performance, research ability / potential, communication and interpersonal skills, and leadership abilities.

In HKU, the package of recipients of HKPF will be automatically upgraded to an HKU-PS one.

## Stipend and support for the most talented research elites

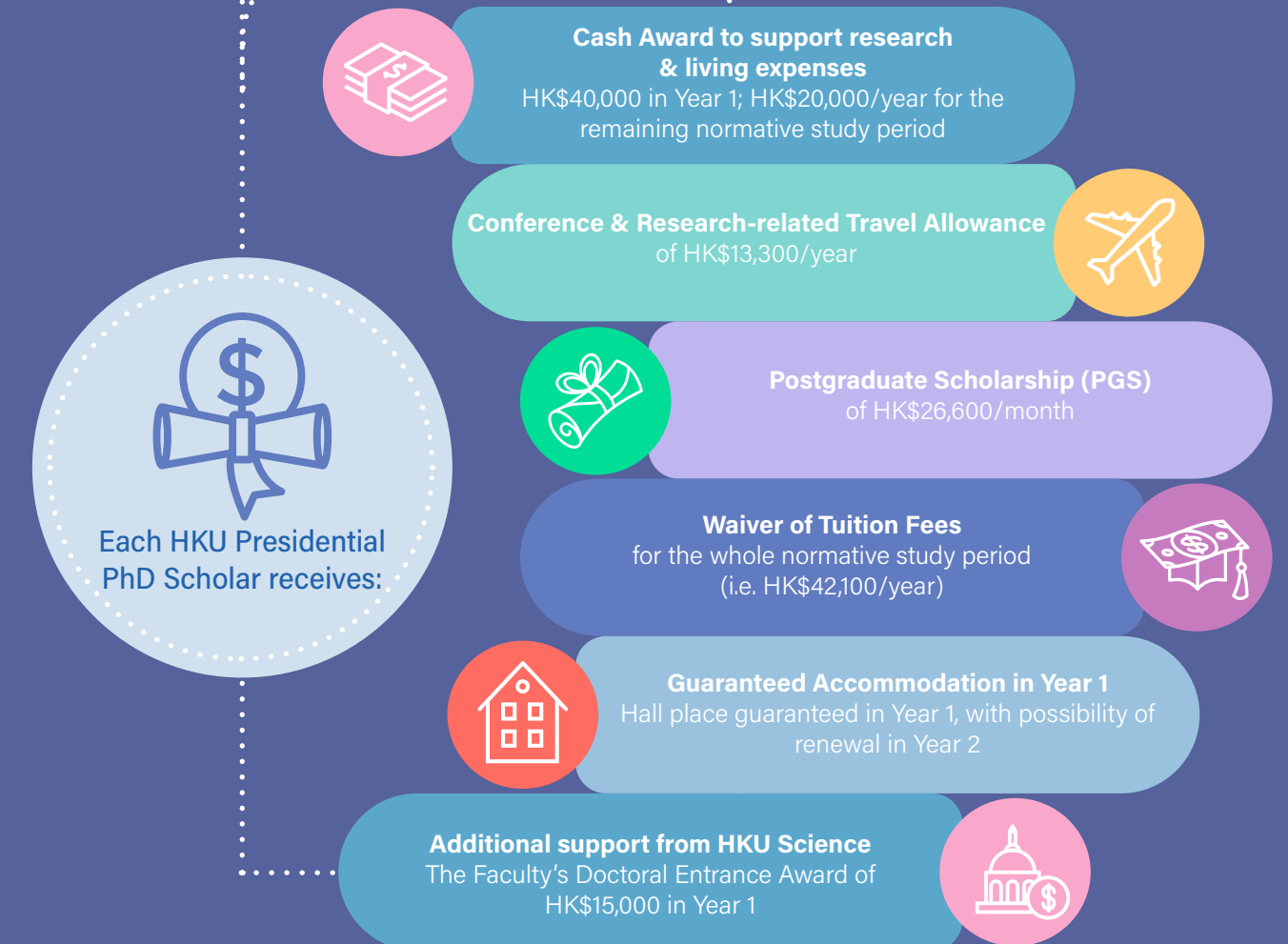
A generous package for recipients of:

HKU Presidential PhD Scholar Programme (HKU-PS)

Hong Kong PhD Fellowship Scheme (HKPF)\*

- Applicable to: selected full-time PhD entrants
- Funding value: up to **HK\$1.6M**

\*The package for recipients of HKPF will be automatically upgraded to an HKU-PS one.



## For non HKU-PS / non-HKPF Research Postgraduate (RPg) students

**Postgraduate Scholarship (PGS)**

-Applicable to: full-time MPhil and PhD applicants  
-Funding value: HK\$18,030/month or HK\$18,520/month\*

**Tuition Waiver Scheme (for local RPg students)**

\*for PhD students whose candidatures have been confirmed

# 6 Science Departments/School



**Department of  
CHEMISTRY**



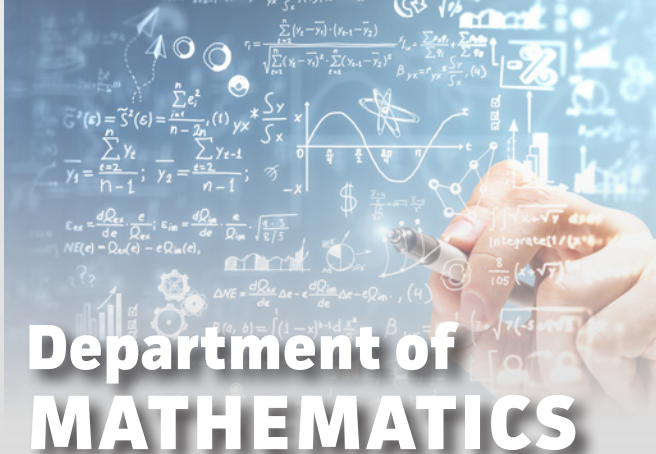
**Department of  
EARTH SCIENCES**



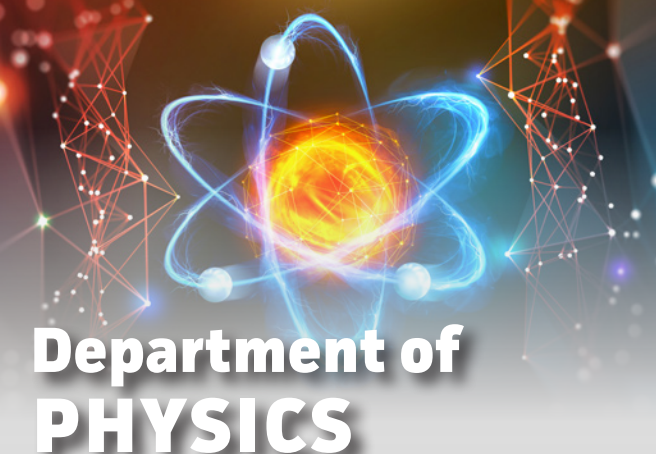
**Department of  
STATISTICS & ACTUARIAL SCIENCE**



**School of  
BIOLOGICAL SCIENCES**



**Department of  
MATHEMATICS**



**Department of  
PHYSICS**

## 5 Interdisciplinary research units



HKU-TCL Joint  
Research Centre for  
Artificial Intelligence

Institute of Mathematical  
Research (IMR)

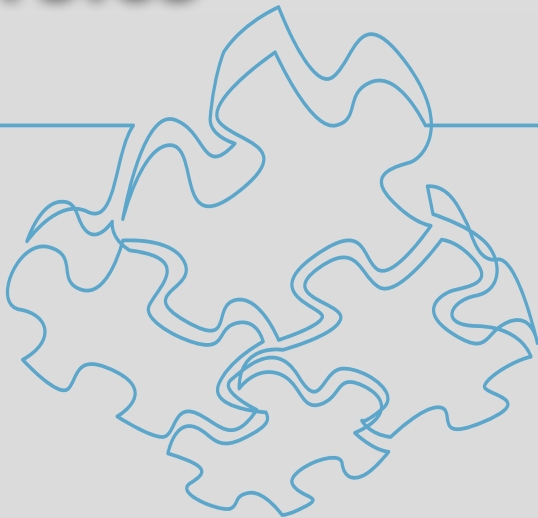


HKU-UCAS Joint Institute Theoretical and  
Computational Physics at Hong Kong



Laboratory for Space  
Research (LSR)

The Swire Institute of  
Marine Science (SWIMS)



# Programmes @HKU



## MPhil

### Master of Philosophy (MPhil)

Degree	Study period	
MPhil	Full-time	2 years

Candidates for MPhil degree will be required to follow an approved course of study and research, including coursework on discipline-specific knowledge, language and research skills. The coursework component is well designed to equip students for their research work and thesis writing.

### Doctor of Philosophy (PhD)

Degree	Study period	
3-year PhD*	Full-time	3 years
4-year PhD#	Full-time	4 years

\* Those who already hold a research Master's degree (e.g. MPhil) will only be considered for admission to a 3-year PhD programme.  
# Applicants who have a good Bachelor's degree with honours and/or a taught Master's degree will be considered for admission to a 4-year PhD programme.

Candidates for 4-year PhD programme will be required to follow an approved course of study and research, including coursework on discipline-specific knowledge, language and research skills. The coursework component is well designed to equip students for their research work and thesis writing.

Candidates for 3-year PhD programme may also be required to take courses and satisfy coursework requirements.

# Joint PhD Programme

King's College London



### Programme features

Students admitted to the joint PhD programme will:

- be registered as full-time students at both universities and be able to enjoy their full range of academic and various facilities;
- be guided in their work by faculty members from both universities, and be examined to the standards of both;
- normally split their time of study equally between the two universities and spend the last six months of study in the home university; and
- be conferred a PhD degree jointly awarded by HKU & KCL.

## Joint Educational Placement for PhD

In order to foster stronger collaboration with international institutions and allow PhD students to learn and work with renowned international scholars, the Faculty of Science has offered Joint Educational Placement programmes for our PhD students with the following institutions:

- University of Toronto
- Sapienza Università di Roma and McMaster University
- Northeastern University

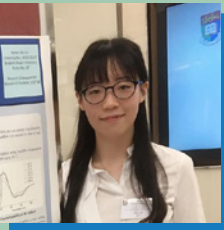


### Programme features

Students admitted under the joint educational placement programme will:

- have to choose a home/lead institution and a host institution and have to meet the admissions requirements of both institutions;
- have to pay tuition fees to the home/lead institution only and are entitled to apply for scholarships at the home/lead institution;
- be co-supervised by Faculty members from both institutions, and be examined to the standards of both;
- have the same access to facilities at both institutions;
- spend 6 – 24 months at the host institution upon mutual agreement of the two supervisors; and
- be conferred a degree awarded by the home/lead institution.

# Hear from our students



## Christina NG

Fellow of Hong Kong PhD Fellowship Scheme  
PhD student and BSc graduate  
Research foci: The development of new catalysts for the efficient labeling of a variety of biomolecules  
Supervisor: Professor Chi-Ming CHE, Department of Chemistry

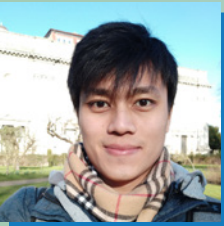


“During my PhD studies, my supervisor and the Faculty of Science have provided me with lots of support and guidance. The facilities and instruments in the laboratories are new and well-maintained. Besides, the courses provided by the Graduate School also help to prepare me for my PhD training. They help to build confidence in both my presentation and writing skills. Overall, I would say that studying PhD in Science at HKU is indeed an invaluable experience to me.”

**Huaqing JIN**  
Fellow of Hong Kong PhD Fellowship Scheme and HKU Presidential PhD Scholarship  
PhD student  
Research foci: Biostatistics, focusing on analysing of the medical data and clinical trials  
Supervisor: Professor Guosheng YIN, Department of Statistics & Actuarial Science



“When I came to our Department as a freshman, I had no idea which area of research to focus on. Thanks to my supervisor, Professor Guosheng YIN, who introduced me to the beauty of Bayesian statistics, which provides many powerful tools to analyse the datasets in practice. There is an urgency to accelerate clinical trials while maintaining safety and efficacy for the development of new drugs and vaccine candidates during the pandemic. Under the guidance of Professor Yin, I am motivated to focus my research on medical data and clinical trials.”

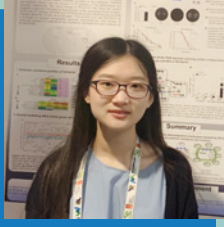


## Bovern Suchart ARROMRAK

PhD student  
Research foci: Marine environmental research – understanding eco-evolutionary dynamics of microbial organisms in changing environments  
Supervisor: Dr Juan Diego GAITÁN-ESPITIA, School of Biological Sciences



“The most attractive pull factor for me to do science at HKU is the abundant academic and personal development opportunities. You get to learn from the best minds here, who always encourage and motivate us to strive to the top. All these elevate my expertise to the next level and bring me to be a better scientist.”



## Yanran LI

Fellow of University Postgraduate Fellowship  
PhD student  
Research foci: Pathoadaptation mechanisms of nosocomial pathogen *Pseudomonas aeruginosa*  
Supervisor: Professor Aixin YAN, School of Biological Sciences



“With the dynamic and welcoming vibe at HKU Science, I have always aspired to make breakthroughs in cutting edge science and was privileged to be exposed to the state-of-the-art technology. The Faculty stresses on the well-being and overall development of fellow students and is making every effort to help us thrive and fulfil our ambitions.”



## Junlong LYU

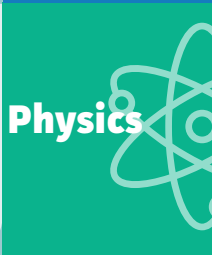
Fellow of Hong Kong PhD Fellowship Scheme  
PhD student  
Research foci: Numerical methods for Stochastic Differential Equations  
Supervisor: Dr Zhiwen ZHANG, Department of Mathematics



“As a research postgraduate in HKU, my life is fulfilling here as the environment and professors here greatly facilitate my research in computational mathematics. I frequently exchange ideas and discuss with senior colleagues, and my supervisor Dr Zhiwen Zhang gives me not only precious suggestions on research but also opportunities to expand my networks via external conferences.”

## Chengxin XIAO

Fellow of Hong Kong PhD Fellowship Scheme  
PhD student  
Research foci: Electronic and optical property of 2D materials  
Supervisor: Professor Wang YAO, Department of Physics



“My RPg life at HKU is substantial and meaningful. The Faculty provides ample support and seminar opportunities which are close to the frontier of my field. I can learn a lot of fundamental knowledge regarding my research from professors. My supervisor Professor Wang Yao gives me much useful advice on the direction and regarding the details of my research.”

# General admissions requirements

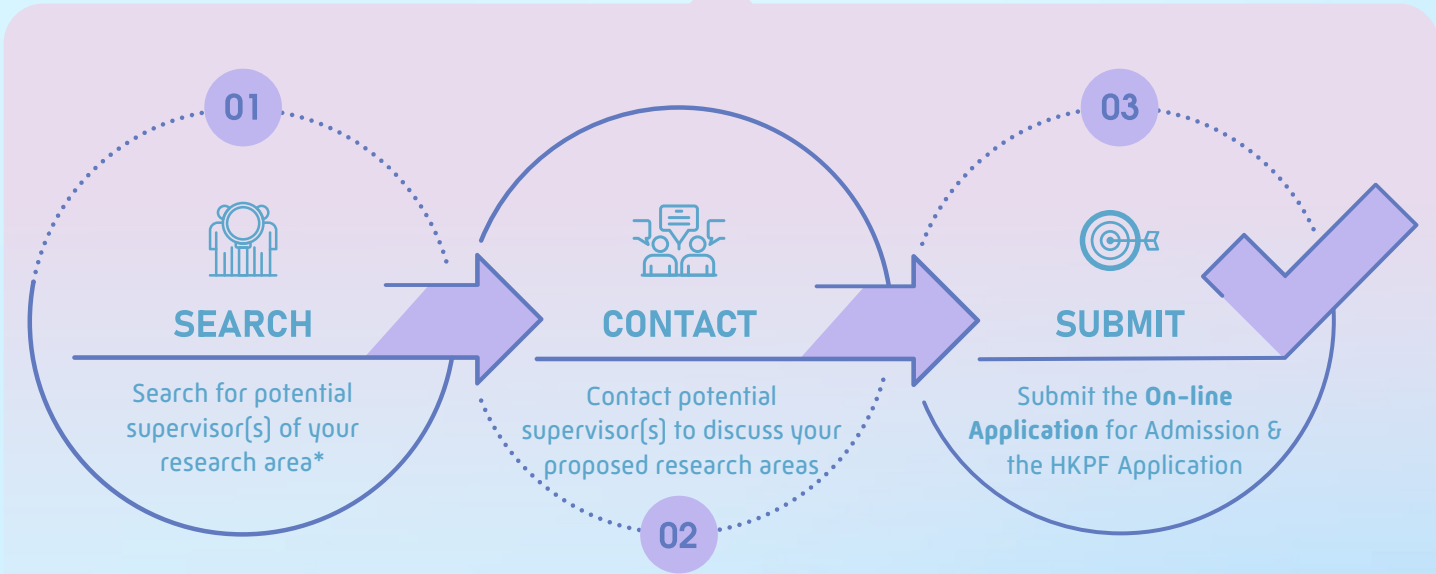
The basic qualification necessary for admission to research postgraduate studies:

- ✓ **MPhil:**
  - a Bachelor's degree with honours (or equivalent qualification) from a recognised university.
- ✓ **PhD:**
  - a Bachelor's degree with honours and a Master's degree (or equivalent qualification) from a recognised university; *or*
  - a Bachelor's degree with first class honours (or equivalent qualification) from a recognised university.

✓ applicants with qualifications other than an honours degree are considered on their individual merits.

✓ applicants who apply with a qualification from a university or a comparable institution whose teaching medium is not English are required to fulfill additional language requirements.

# How to apply?



\*For details of major research areas, contact persons and postgraduate admissions advisors in each department/school, please visit: <https://bit.ly/3d6uixi>



# Tuition fees

Study mode	Tuition fees (per annum)
Full-time (non-local)	HK\$42,100*

\*subject to revision

# Important Dates for Application



## Hong Kong

Located on the south-eastern tip of China's coast, Hong Kong is a unique place where East meets West and old meets new. As Asia's World City and a long established international business and finance hub, it draws talents from all corners of the globe, and offers the world's best and brightest students an ideal place to study, live and work. Come experience the vibrancy of exceptional culture, and immerse yourself in a city that never stops.

## HKU

The University of Hong Kong, Asia's Global University, delivers impact through internationalisation, innovation and interdisciplinarity. It attracts and nurtures global scholars through excellence in research, teaching and learning, and knowledge exchange. It makes a positive social contribution through global presence, regional significance and engagement with the rest of China.



Online application  
[bit.ly/3dnxyo8](https://bit.ly/3dnxyo8)



Programme website  
[bit.ly/3bDQktU](https://bit.ly/3bDQktU)



Graduate School website  
[bit.ly/3dtR82F](https://bit.ly/3dtR82F)



[bit.ly/2RjwVUy](https://bit.ly/2RjwVUy)

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