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Foreword by Dean of Science



Established in 1963, the Faculty of Science of The Chinese University of Hong Kong ("CUHK Science"), has upheld the mission, "To inspire the next generation of scientific innovators and leaders; and to expand the frontier of human knowledge" for 60 years. The Faculty is now one of the top multidisciplinary research hubs to deliver research impact locally, nationally and internationally. The Faculty comprises six departmental Units, (1) School of Life Sciences; (2) Department of Chemistry; (3) Department of Mathematics; (4) Department of

Physics, (5) Department of Statistics, and (6) Earth and Environmental Sciences Programme. The Faculty has approximately 2600 undergraduate students, 1000 postgraduate students and 540 staff with 18 BSc programmes and 20 PhD/MPhil/MSc programmes.

In 2021, CUHK Science has identified seven Strategic Research Areas, which have been included in the CUHK Strategic Plan 2021-2025. These areas build on the existing strength and facilitate future development of the Faculty to meet the new challenges and funding opportunities of Hong Kong, Greater Bay Area and beyond.

I would like to express my heartfelt thanks to all staff members at CUHK Science for their hard work and important contributions in pursuit of excellence in research and advancing the science and leadership of CUHK Science. The future development of the Faculty will bear witness to our collaborative efforts involving all staff members.

I am pleased to present this research directory and invite you to review, "Faces of Research @ CUHK Science", as an introduction to the research portfolio of CUHK Science. This directory provides a way to learn about our people and the broad range of their expertise at CUHK Science. We hope this directory will help our current and future partners in government, academic, and industrial sectors to better connect with our researchers for collaborative research and development.

Chunshan SONG

Dean of Science
Wei Lun Professor of Chemistry



Faculty Research Profile

As a founding Faculty of CUHK since 1963, the Faculty of Science ("CUHK Science") has upheld the mission, "To inspire the next generation of scientific innovators and leaders; and to expand the frontier of human knowledge". Academic staff members have been actively engaged in fundamental and applied research involving students and research staff members in various scientific disciplines and interdisciplinary areas. In 2017-2022, CUHK Science developed over HK\$762M in competitive research funding from external sources including government agencies, industrial organisations, and private funds including donations.

CUHK Science is the home to internationally recognised research laboratories including the Institute of Mathematical Sciences, Institute of Theoretical Physics, State Key Laboratory of Agrobiotechnology, State Key Laboratory of Synthetic Chemistry, Areas of Excellence (AoE) Centre for Probing the Fundamental Structure of Matter with High Energy Particle Collisions, AoE Centre for Genomic Studies on Plant-Environment Interaction for Sustainable Agriculture and Food Security, AoE Centre for Organelle Biogenesis and Function, Hong Kong Institute of Quantum Information Science and Technology, and many research centres such as the Centre for Mathematical Artificial Intelligence. Various units and research laboratories of CUHK Science are mainly located in the seven buildings on CUHK campus in Shatin, Hong Kong.

The achievements of our staff members have been internationally recognised by prestigious awards and fellowships. CUHK Science is currently hosting 7 Members of Chinese Academy of Sciences, 1 Member of Chinese Academy of Engineering and 14 Croucher Senior Research Fellows. Many of our researchers are elected fellows of major professional societies, such as American Chemical Society, American Mathematical Society, American Physical Society, American Statistical Association, American Geophysical Union, Royal Society of Biology and Society for Industrial and Applied Mathematics. As but one example of research impact, 49 Scholars of CUHK Science have been named on the Stanford University's List of the Top 2% Most-Cited Scientists 2022 (39: Careerlong list, 36: Single-year list).

School of Life Sciences

Overview

The School of Life Sciences was established in August 2010 by merging the Biochemistry and Biology Departments under the Faculty of Science. The School has six divisions, Biochemistry, Biology, Cell and Molecular Biology, Environmental Science, Food and Nutritional Sciences and Molecular Biotechnology. Research excellence in plant and agricultural biotechnology has been well recognised by awarding three Area of Excellence Schemes of the Hong Kong University Grants Council since 2000 and the establishment of the State Key Laboratory of Agrobiotechnology (CUHK) in 2008.

Research Focus

The School has a broad range of world-leading research activities organised into eight areas: cell biology, food & nutritional science, environmental science, genomics & bioinformatics, marine science, plant & agricultural science, physiology & developmental biology, protein science. Some of the active research areas in the School include plant molecular biology and biotechnology, protein structure and function, chemical biology, omics and bioinformatics, stem cell biology, neuroscience, marine biology, environmental science, and food science and technology.

Highlights on Knowledge Transfer

- 7 spin-out companies and social enterprises founded/co-founded by Faculty members for applying innovative research to society, namely: Codex Genetics, HSK GeneTech, Mushroom-X, Soyvestors, OriGene, HerBChain, RarePower
- Industrial collaboration with local, national and world renowned companies, including: Lee Kum Kee, Vitasoy, Wyeth, Zigen, Coca-Cola China, AstraZeneca UK, etc.
- STEM education programmes for secondary school students, offered by Coral Academy, STEAM@soybean and Shiu-Ying Hu Herbarium

Department of Chemistry

Overview

The Department of Chemistry is one of the oldest academic units since the establishment of CUHK. The Department has strength and a long tradition in theoretical and experimental, pure and applied research. Five Academicians of Chinese Academy of Sciences have been awarded to faculty members for their research excellence. In 2010, the Ministry of Science and Technology of the Chinese Government has approved the establishment of the State Key Laboratory of Synthetic Chemistry (Partnership) at both CUHK and the University of Hong Kong.

Research Focus

The Department embraced a wide range of emerging research areas, most notably amplifying catalysis and materials chemistry, while also maintaining our strength in chemical synthesis and nanomaterials (including functional polymers and colloids). In terms of research structure, research areas can be distinguished into five major directions, namely: Analytical Chemistry and Environmental Science, Inorganic Chemistry, Organic Chemistry, Physical Chemistry and Structural Biology and Chemical Biology.

The Department has gained worldwide recognition in various research fields such as physical chemistry of macromolecules, organoboron chemistry, environmental catalytic detoxification, and synthesis of small organic molecules with medicinally implication.

Highlights on Knowledge Transfer

- ✓ 2 spin-out companies established to exploit research deliverables, namely: Titanology, O-Spheres
- Industrial collaboration with local, national and world renowned companies, such as BASF
- Outreach activities: Collaborating with BASF for "Experimental Challenge" and "Kids' Lab"; In partnership with Hong Kong Science Museum for "HK SciFest" to arouse teenagers' and children's interest in chemistry



Department of Mathematics

Overview

Established in 1963, the Department of Mathematics is a world-class department of the highest standard of excellence in education, research and knowledge transfer. It ranks consistently among the very best Mathematics Departments in Asia and ranks the 37th and 41st globally in the QS World University Rankings by Subject in 2021 and 2022 respectively. The Department has Fellows of the American Mathematical Society and Fellows of the Society for Industrial and Applied Mathematics.

Research Focus

The significant research accomplishments of the Department cover a wide range of areas in pure mathematics as well as computational and applied mathematics.

In particular, the Department is strong in continuum and fluid mechanics, geometry, applied and computational mathematics (inverse problems, imaging, optimisation, modelling, numerical partial differential equations), topology, algebra and number theory, mathematical physics, mathematical finance. To meet the immense demand for the flourishment of forefront artificial intelligence technologies, the Department has established "Centre for Mathematical Artificial Intelligence", providing a platform on which various research scientists from different fields and areas can carry out research with rigorous mathematics.

Highlights on Knowledge Transfer

- Industrial collaboration with local, national and world renowned companies, including Geometric Informatics, BrainNow Medical technology Ltd., CASH Algo Ltd. and LuoShu Investment Management Corporation, etc.
- Outreach activities: Provision of Services for the Development and Delivery of 24-hour Enrichment Courses on Learning and Teaching of the Extended Part (Module 1/Module 2) of Senior Secondary Mathematics under sponsorship by HKSAR Education Bureau to provide professional development for secondary mathematics teachers; Organising "Enrichment Programme for Young Mathematics Talents" (EPYMT) since 2002, providing enrichment mathematics courses for talented secondary school students

Department of Physics

Overview

The Department of Physics has undergone rapid growth in size and made significant reforms in teaching and research since 1963 when CUHK was established. The Department has strength and a long tradition in theoretical and experimental, pure and applied research. In 2019, the Department was awarded the Area of Excellence Schemes of the Hong Kong University Grants Council for its world-leading forefront particle physics research.

Research Focus

Research in the Department is broadly grouped into four clusters: Biophysics/Soft Matter/Complex Systems, Fundamental Physics (Astrophysics and Particle Physics), Materials Science, and Quantum Coherence and Quantum Matter, ranging from Astronomy and Astrophysics, Atomic, Molecular and Optical Physics, Biophysics, Condensed Matter Physics, Cosmology, Materials Science, Particle Physics, Quantum Science and Technology, Soft Matter Physics, Surface Science, to Turbulence and Complex Systems.

The cutting-edge research in the Department is recognised worldwide. The Department has been an active member of international scientific collaborations such as the ATLAS experiment at CERN (particle physics), LIGO (gravitational wave), and the Daya Bay Neutrino Experiment.

Highlights on Knowledge Transfer

- ✓ 4 spin-out companies founded/co-founded by Faculty members to commercialise research outcomes, namely: NanoSeedz, Advanced Plasmon Technologies, Shinetech New Energy Co. Ltd., Evansense Ltd.
- STEM education programmes offered by the Department Outreach Team in collaboration with Hong Kong Observatory, Hong Kong Science Museum, and Hong Kong Space Museum
- Regular appearances of faculty members in a popular TV show, "Sidewalk Scientist" to explain science, reaching millions in audience.



Department of Statistics

Overview

The Department of Statistics was founded in 1982. In today's information age, statistics has become an indispensable tool in many diverse branches of natural sciences, medical sciences, social sciences, biomedical sciences, finance, economics, engineering, etc. The Department is ready to meet these new challenges through the highest quality leading-edge research.

Research Focus

The Department has accommodated world-class faculty members with diverse research areas including statistical finance and risk management science, statistical theory and methodology, big data, biostatistics and bioinformatics, and other areas of cross-disciplinary research for the advancement of statistics and delivering practical solutions to real-life problems.

Highlights on Knowledge Transfer

- Industrial collaboration with local, national and world renowned companies
- Research projects with the financial sector, engineering companies from the Hong Kong Science Park, and with the education, social sciences and medical faculties
- The Statistical Consulting Services Unit (established in 1984): offering professional consultation service to general public and industrial partners by applying statistics to real-life problems

Earth and Environmental Sciences Programme

Overview

Earth and Environmental Sciences Programme (EESC) is a programme established in 2022, that integrates the Earth System Science Programme and Environmental Science Programme which had existed as separate entities. The EESC programme aims to attain interdisciplinary research excellence and make world-leading contributions in strategic areas of Earth and Environmental Sciences that meet societal needs and address natural and anthropogenic global challenges.

Research Focus

Whereas the EESC curriculum is categorised into the three broad areas of Atmospheric Science, Geology & Geophysics, and Environmental Science & Technology, the research of EESC is highly interdisciplinary with focus on these themes: Atmospheric Science, Biogeochemistry & Geobiology, Environmental Chemistry & Toxicology, Geology & Geophysics, and Marine Science. An approach that integrates field observations, laboratory measurements and numerical computation is adopted to tackle scientific questions of critical importance in the fundamental understanding of Global Environmental Change, Food-Energy-Water Nexus and Sustainability. Emphasis is also placed on formulating potential solutions and striving to establish synergistic links with a diversity of stakeholders.

Highlights on Knowledge Transfer

Industrial collaboration with local, national and world renowned companies, including: Arup, ClusterTech Ltd., NVIDIA, PetroChina and Zike Environment, etc.



Faculty Strategic Research Areas

To achieve the Faculty's mission for expanding the knowledge and developing impactful research towards Research Excellence and Innovation, CUHK Science strives to develop and nurture the research environment to encourage collaborative interdisciplinary research. In 2021, the Faculty has identified Strategic Research Areas which are well in line with the CUHK Strategic Plans 2020 and 2025. These areas build on the existing strength and future development of the Faculty to meet the new challenges and funding opportunities of Hong Kong and beyond.



Artificial Intelligence, Machine Learning, Big Data, Risk Analytics

Information pervades all aspects of human life. Whether or not data is the new gold, information is the dominant currency in the era of 'Industry 4.0'. The key to harnessing the power of information lies in artificial intelligence (AI). Applications of AI and machine learning are already creating a significant impact on multiple fields, in both STEM (Science, Technology, Engineering and Mathematics) and non-STEM disciplines. Machine learning-based analysis and big data analytics research at CUHK Science have been put to good use in advancing engineering and medicine, from climate modelling to diagnostic sequencing technologies.

School of Life Sciences

Prof. CHAN Michael Kenneth Prof. CHAN Ting Fung Prof. HUI Ho Lam Jerome Prof. LUO Haiwei

Department of Chemistry

Prof. TSE Ying Lung Steve

Department of Mathematics

Prof. CHUNG Tsz Shun Eric Prof. JIN Bangti Prof. LIU Liu Prof. LUI Lok Ming Ronald Prof. TAN Xiaolu

Prof. XIN Zhouping

Prof. ZENG Tieyong

Department of Physics

Prof. CHENG Hok Chuen
Prof. FLORES-CASTILLO Luis
Roberto
Prof. HANNUKSELA Otto Akseli
Prof. NG Chun Yu Kenny
Prof. XU Lei
Prof. YAN Renbin
Prof. ZHU Junyi

Department of Statistics

Prof. CHAN Kin Wai
Prof. CHAN Man Nin
Prof. CHAN Ping Shing Ben
Prof. LIU Lin
Prof. DAI Ben
Prof. TAI Pui Kuen Amos
Prof. FAN Xiaodan
Prof. TAM Chi Yung Francis
Prof. FANG Xiao
Prof. TAN Yen Joe
Prof. LIN Yuanyuan
Prof. LIN Zhixiang
Prof. POON Wai Yin Isabella

Prof. SIT Tony

Prof. SONG Xinyuan

Prof. WANG Junhui

Prof. WEI Yingying

Prof. YAU Chun Yip

Prof. ZHU Huichen

Prof. WONG Hoi Ying

Prof. YAM Sheung Chi Phillip

Earth and Environmental

Sciences Programme



Chemical and Synthetic Biology for Emerging Diseases

With an ageing population in many parts of the world and with the global emerging disease threats, research in chemical and synthetic biology is essential to defending, upkeeping and enhancing public health. Innovations in this area will create opportunities for commercialisation and have the potential to become a key engine in the economic development of Hong Kong. CUHK Science will leverage its existing strengths and expand interdisciplinary collaborations to provide novel opportunities to understand, diagnose, prevent and treat emerging diseases and public health hazards.

School of Life Sciences

Prof. AU Wing Ngor Shannon Prof. CHAN Michael Kenneth Prof. LAU Chun Yu Wilson Prof. NGO Chi Ki Jacky Prof. SHAW Pang Chui Prof. WONG Kam Bo

Department of Chemistry

Prof. LI Hung Wing
Prof. NG Kee Pui Dennis
Prof. TAM Dick Yan
Prof. TSUI Chit Gavin
Prof. XIA Jiang
Prof. YEUNG Ying Yeung
Prof. ZHANG Jie

Department of Physics

Prof. WANG Yi Prof. WU Yilin



Clean and Sustainable Energy, Environment, and Food

Environment and sustainability, as an integral research area, was identified as a key focus in the CUHK Strategic Plans 2016–2020 and 2021-2025. Practically all the top universities in the world focus on research and innovation in the area of environment and sustainability. These themes align with many sustainable development goals (SDGs) of the United Nations. CUHK Science has developed specific strengths in research related but not limited to the SDGs of "Zero Hunger", "Climate Action" and "Affordable and Clean Energy".

School of Life Sciences

Prof. CHAN Michael Kenneth
Prof. CHEUNG Chi Keung Peter
Prof. CHUI Pui Yi Apple
Prof. CHUNG Hau Yin
Prof. FALKENBERG Laura Jane
Prof. HUI Ho Lam Jerome
Prof. LAM Hon Ming
Prof. LAU Chun Yu Wilson
Prof. LUO Haiwei

Prof. LAO Chun Yu Wilson
Prof. LUO Haiwei
Prof. THIBODEAU Benoit
Prof. TSANG Ling Ming
Prof. TSANG Suk Ying Faye

Prof. TSUI Tsz Ki Martin

Prof. WONG Kam Bo
Prof. WONG Wing Tak Jack
Prof. ZHUANG Xiaohong

Department of Chemistry

Prof. HUANG Zhifeng Prof. MIAO Qian Prof. NG Kee Pui Dennis Prof. SONG Chunshan Prof. WANG Ying

Prof. CHEN Ye

Department of Physics

Prof. LU Xinhui Prof. ONG Hock Chun Daniel

Prof. WANG Jianfang

Prof. ZHU Junyi

Prof. LI Quan

Earth and Environmental Sciences Programme

Prof. CHAN Man Nin Prof. TAI Pui Kuen Amos Prof. TAN Yen Joe Prof. YANG Hongfeng Prof. ZHAN Yan

10 11



Green and Sustainable Technology for Low-Carbon Society

Climate change is one of the defining issues of our time across the globe. Rapid urbanisation and the growth of megacities pose complex challenges for development. Low-carbon society to research carbon neutrality is humankind's active action and common goal in the face of the climate change crisis. Researchers at CUHK Science are dedicated to probing into its theoretical and technological connotation, scientific and technological innovation in green and sustainable technology research to pursue far-reaching significance and broad prospects.

School of Life Sciences

Prof. CHAN Michael Kenneth

Prof. KANG Byung Ho

Prof. LAM Hon Mina

Prof. TSUI Tsz Ki Martin

Prof. ZHUANG Xiaohong

Department of Chemistry

Prof. CHEN Ye

Prof. HUANG Zhifeng Prof. KWONG Fuk Yee

Prof. NG Kee Pui Dennis

Prof. NGAI To

Prof. SONG Chunshan

Prof. TSUI Chit Gavin

Prof. WANG Ying

Prof. XIE Zuowei

Prof. YEUNG Ying Yeung

Department of Mathematics

Prof. TAN Xiaolu

Department of Physics

Prof. LU Xinhui

Prof. ONG Hock Chun Daniel

Prof. WANG Jianfang



Integrated Capability Building for Biological Science and Applications

Integrative biological science emphasises transdisciplinary research that incorporates the biological, physical, mathematical and many other components appropriate for addressing complex questions and problems via forefront research and their applications. This new approach becomes essential to resolve and deal with the complex societal issues facing the 21st century. With the promotion of interdisciplinary research across the Faculty, CUHK Science attests to its leading role in both basic biological research and applied research with applications such as smart agriculture for crop production and innovations in diagnosis.

School of Life Sciences

Prof. AU Wing Ngor Shannon

Prof. CHAN Ho Yin Edwin

Prof. CHAN Ting Fung

Prof. CHEN Zhenyu

Prof. CHOW Hei Man Kim

Prof. CHUI Pui Yi Apple

Prof. HE Junxian

Prof. HUI Ho Lam Jerome

Prof. JIANG Liwen

Prof. KANG Byung Ho

Prof. KWAN Kin Ming

Prof. LAU Chun Yu Wilson

Prof. LUO Haiwei

Prof. NGO Chi Ki Jacky

Prof. PITTMAN Michael David

Prof. SHAW Pang Chui

Prof. TSANG Ling Ming

Prof. TSANG Suk Ying Faye

Prof. WONG Kam Bo

Prof. WONG Wing Tak Jack

Department of Chemistry

Prof. CHAN Tak Wah Dominic

Prof. LEE Hung Kay

Prof. NGAI To Prof. XIA Jiang

Department of Mathematics

Prof. LUI Lok Ming Ronald

Department of Physics

Prof. LI Quan

Prof. WU Yilin

Department of Statistics

Prof. FAN Xiaodan Prof. LIN Zhixiang

F

Intelligent Computing for Earth, Energy, Climate, Atmosphere, Materials, and Space

Scientific computing, including modelling, simulation and artificial intelligence, coupled with traditional theoretical and experimental approaches, enables breakthrough scientific discoveries and pushes innovation forward. State-of-the-art intelligent computing at CUHK Science provides the invaluable ability to perform these complex calculations at high speeds for research advancement on earth, energy, climate, atmosphere, materials, and space and bolsters our research leadership in the region to contribute to a better future.

School of Life Sciences

Prof. CHAN Ting Fung

Department of Chemistry

Prof. TSE Ying Lung Steve

Department of Mathematics

Prof. CHUNG Tsz Shun Eric

Prof. LI Hongjie

Prof. LUO Chenyun

Department of Physics

Prof. CHU Ming Chung

Prof. LI Guang Feng Tjonnie

Prof. NG Chun Yu Kenny

Prof. WANG Yi

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Prof. ZHU Junyi

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Prof. YAU Chun Yip

Earth and Environmental Sciences Programme

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Prof. LIU Lin

Prof. TAI Pui Kuen Amos

Prof. TAM Chi Yung Francis

Prof. TAN Yen Joe

Prof. YANG Hongfeng

Prof. ZHAN Yan



Quantum Science and Technology

Quantum science and technologies have the potential for developing a new paradigm for computers based on quantum information processing, capable of performing complex quantum simulations beyond the capacity of present-day classical computers. Cutting-edge quantum research at CUHK has advanced our current understanding to fundamental quantum science, which may bring about revolutionary advances in many different fields, as diverse as large-scale weather forecasting, predicting climate change or simulating molecular interactions of drugs in treating diseases on nanoscale.

Department of Chemistry

Prof. ZHANG Jie

Department of Mathematics

Prof. MCBREEN Michael

Department of Physics

Prof. GOH Swee Kuan

Prof. LAN Tian

Prof. LAW Chi Kwong

Prof. LI Quan

Prof. LI Yufan

Prof. LIU Renbao

Prof. WANG Dajun
Prof. WANG Jianfang

Prof. YAN Yangqian

Prof. ZHU Junyi



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Fundamental Science

Science is fundamentally about discovery to understand better and explain natural phenomena. It fuels the pipeline of innovation abound. Practical advances – in medicine, technology, and industry – would be impossible were it not for the applications of what we learned from fundamental science in the past. Apart from the cutting-edge research in the seven Faculty Strategic Research Areas, our researchers also devote to the fundamental forefront research to advance human knowledge and unearth the mysteries of the universe around us.

School of Life Sciences

Prof. AU Wing Ngor Shannon Prof. CHAN Ho Yin Edwin Prof. CHAN Ting Fung Prof. CHEN Zhenyu

Prof. CHOW Hei Man Kim Prof. CHUI Pui Yi Apple

Prof. GUO Dianjing
Prof. HE Junxian

Prof. HUI Ho Lam Jerome

Prof. JIANG Liwen
Prof. KWAN Kin Ming

Prof. LAM Hon Ming
Prof. LAU Chun Yu Wilson

Prof. LAU Kwok Fai

Prof. LUO Haiwei Prof. NGAI Sai Ming

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Prof. LEE Hung Kay

Prof. LIU Zhifeng
Prof. LYU Hairong

Prof. MIAO Qian

Prof. NGAI To

Prof. TSE Ying Lung Steve

Prof. XIE Zuowei

Department of Mathematics

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Prof. DUAN Renjun

Prof. FENG Dejun

Prof. HE Xuhua

Prof. JIN Bangti

Prof. LEE Man Chun

Prof. LEE Yi Jen

Prof. LEUNG Nai Chung Conan

Prof. LI Man Chun Martin

Prof. LUI Lok Ming Ronald

Prof. MCBREEN Michael

Prof. WU Zhongtao

Prof. XIN Zhouping

Prof. YU Jiu Kang

Prof. YU Yong

Prof. YUAN Xu

Prof. ZENG Tieyong

Prof. ZOU Jun

Department of Physics

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Prof. FLORES-CASTILLO Luis

Roberto

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Prof. HANNUKSELA Otto Akseli

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Prof. YAM Sheung Chi Phillip

Earth and Environmental Sciences Programme

Prof. CHAN Man Nin

Prof. TAI Pui Kuen Amos

Prof. TAM Chi Yung Francis

Prof. ZHAN Yan



World-renowned Scientific Leaders

The Faculty consists of outstanding faculty members, many of whom are leaders in their research fields and have attained international stature in recognition of their scientific contributions, such as Academicians of Chinese Academy of Sciences and Academician of Chinese Academy of Engineering. These leaders have been supporting the Faculty to accomplish world-class research and bringing diverse, interdisciplinary perspectives to the Faculty development.

Distinguished Professor-at-Large



Prof. YAU Shing Tung 丘成桐 Fields Medal Winner Wolf Prize Laureate Distinguished Professor-at-Large of Mathematics Member of Chinese Academy of



Prof. YANG Chen Ning 楊振寧 Nobel Laureate in Physics Distinguished Professor-at-Large of Physics Member of Chinese Academy of Sciences

Member of Chinese Academy of Engineering



Prof. SUN Sai Ming Samuel 辛世民 Emeritus Professor of Life Sciences

Member of Chinese Academy of Sciences



Prof. MAK Chung Wai Thomas 麥松威 Emeritus Professor of Chemistry Wei Lun Research Professor



Prof. WONG Nai Ching Henry 黃乃正 Research Professor Emeritus Professor of Chemistry



Prof. WU Chi 吳奇 Emeritus Wei Lun Professor of Chemistry



Prof. XIA Keqing 夏克青 Emeritus Professor of Physics



Prof. XIE Zuowei 謝作偉 Choh-Ming Li Professor of Chemistry

Research Achievements

- 9 State Natural Science Awards
- **12** Ministry of Education Higher Education Outstanding Scientific Research Output Awards
- 7 China's Excellent Young Scientists Fund (Hong Kong and Macau)
- 2 National Natural Science Foundation Young Scientists Fund
- 14 Courcher Senior Research Fellowships
- 2 Croucher Tak Wah Mak Innovation Awards (Formerly known as "Croucher Innovation Awards")
- 9 RGC Early Career Awards
- 3 RGC Senior Research Fellows

- 1 RGC Research Fellow
- 5 Highly Cited Researchers by Clarivate Analytics
- 49 Scholars named on the Stanford University's List of the Top 2% Most-Cited Scientists 2022 (39: Career-long list, 36: Single-year list)
- 43+ Professional Society Fellows including American Chemical Society, American Mathematical Society, Royal Society of Biology, Royal Society of Chemistry, Institute of Physics, Society for Industrial and Applied Mathematics, etc.
- 130+ International and National Professional Awards, including Willis E. Lam Award for Laser Science and Quantum Optics, Chevalley Prize in the Lie Theory, MIT Technology Review Innovators Under 35 Asia Pacific, New Cornerstone Investigator, Morningside Medal of Mathematics, etc.





School of Life Sciences

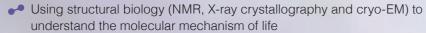
Prof. WONG Kam Bo 黃錦波





Director. School of Life Sciences

Research Interests / Expertise



- The maturation pathway of urease
- ✓ Vacuolar sorting in plant cells
- Protein engineering, design, simulation and modelling
- (852) 3943 8024
- kbwong@cuhk.edu.hk
- 0000-0002-6984-5373

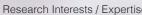


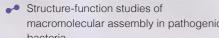


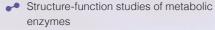


Prof. AU Wing Ngor Shannon 區詠娥

Professor







- (852) 3943 4170
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Assistant Dean (Student Affairs)

Research Interests / Expertise

- macromolecular assembly in pathogenic

- © 0000-0002-3573-9273

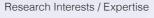


Prof. CHAN Ho Yin Edwin 陳浩然

Professor



Associate College Head of Chuna Chi College **Founding Member of the Hong Kong** Young Academy of Sciences



- Human disease modelling
 - Cellular, genetic and biochemical analyses of RNA and protein toxicity in neurological diseases
 - Therapeutic intervention of neurological diseases
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Prof. CHAN Michael Kenneth 陳文博



Fellow of the American Association for the Advancement of Science

Research Interests / Expertise

- Protein delivery
- Chemical biology
- Biocatalysis
- Protein therapeutics
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Prof. CHAN Ting Fung 陳廷峰

Research Interests / Expertise

RNomics and bioinformatics in biological processes and diseases

Associate Professor

- Technology and algorithm development for genomics and transcriptomics
- (852) 3943 6876
- tf chan@cuhk edu hk
- @ 0000-0002-0489-3884



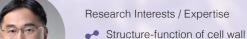


Prof. CHEN Zhenyu 陳振宇



- Food chemistry and nutrition
- Fat and cholesterol metabolism and heart
- (852) 3943 6382
- zhenyuchen@cuhk.edu.hk
- 0 0000-0001-5615-1682

Prof. CHEUNG Chi Keung Peter 張志強



- polysaccharides Bioactive substances from mushroom and edible fungi
- Chemical properties and biological functions of dietary fiber
- Prebiotics, probiotics and gut microbiome
- Functional food development
- (852) 3943 6144
 - petercheung@cuhk.edu.hk
 - 0 0000-0001-5155-7173

Prof. CHOW Hei Man Kim 周熙文

Research Interests / Expertise

- Metabolic plasticity and neurodegenerative disorders
- Mitochondrial bioenergetics

Research Interests / Expertise

application

application

development

(852) 3943 6149

0 0000-0001-6776-8151

Food flavor chemistry, analysis and

Natural product, safety, health and

Food evaluation and food product

anthonychung@cuhk.edu.hk

Soy-based fermented food and seafood

- (852) 3943 1530

Prof. CHUNG Hau Yin 鍾厚賢

Ageing and cellular senescence heimanchow@cuhk.edu.hk (D) 0000-0003-1203-2096

Associate Professor

Assistant Professor

Prof. CHUI Pui Yi Apple 崔佩怡



Research Assistant Professor Research Interests / Expertise

- ✔ Impact of climate change on marginal coral communities
- Interventions that might increase coral resilience
- Coral restoration
 - Ecological monitoring
 - (852) 3943 8026

0 0000-0001-9373-4326

applepychui@cuhk.edu.hk





Prof. FALKENBERG Laura Jane

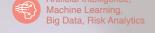
Research Interests / Expertise

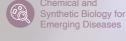
- Global change biology particularly ocean acidification and warming
- Marine ecosystem dynamics, shifts, and resistance/resilience

Assistant Professor

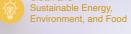
- Herbivore-autotroph ecophysiology, behaviour, and interactions
- Socio-economic consequences of environmental change
- (852) 3943 7254 laurafalkenberg@cuhk.edu.hk
- @ 0000-0002-5868-2310

Faculty Strategic Research Areas







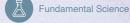














Prof. GUO Dianjing 郭殿京



Research Interests / Expertise

- Genomics and bioinformatics
- Systems biology
- Plant stress response
- Plant secondary metabolism and trichome function

Associate Professor

(852) 3943 6298

© 0000-0002-3480-3966

djguo@cuhk.edu.hk



Prof. HUI Ho Lam Jerome 許浩霖



Research Interests / Expertise

- Insect and arthropod biology, cnidarians, invertebrates, animal-plant interactions

- ieromehui@cuhk.edu.hk
- © 0000-0003-1355-8495







Marine biotechnology, molecular ecology and conservation of biodiversity

Associate Professor

- Evolutionary biology, genomics
- (852) 3943 6316

Prof. KANG Byung Ho 姜秉昊



- Research Interests / Expertise
- Plant cell biology
- 3D electron microscopy
- (852) 3943 6101

© 0000-0002-4299-2170

bkang@cuhk.edu.hk





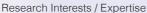
Associate Professor

Research Interests / Expertise

- biology
- Stem cell research
- kmkwan@cuhk.edu.hk
- (i) 0000-0002-1246-2398

Prof. HE Junxian 何軍賢

Associate Professor



- Hormone signal transduction in plants
- Nitrogen signalling and nitrogen use efficiency
- Functional genomics of plant stress resistance
- (852) 3943 6299
- ixhe@cuhk.edu.hk
- © 0000-0001-7951-9697

Prof. JIANG Liwen 姜里文

Choh-Ming Li Professor of Life Sciences Associate Dean (Research)

Professor

Research Interests / Expertise

- Plant cell and molecular biology
- Protein targeting and trafficking in plant cells
- Organelle biogenesis and function in plants
- Plant bioreactors for pharmaceutical proteins
- (852) 3943 6388
- ➢ ljiang@cuhk.edu.hk
- (D) 0000-0002-7829-1472

Prof. KWAN Kin Ming 關健明

Associate Dean (Education)

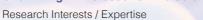
Genetic manipulation by transgenic and gene knockout technology

Associate Professor

- Study of organogenesis and tumorigensis using mouse as model organism
- Neural development and neuronal cell
- (852) 3943 1008

Prof. LAM Hon Ming 林漢明

Prof. LAU Kwok Fai 劉國輝



- Climate-smart and sustainable agriculture Plant and agricultural biotechnology
- Genomic studies on crop-environment
- (852) 3943 6336
- honming@cuhk.edu.hk

Choh-Ming Li Professor of Life Sciences

Associate Professor

- interaction

Research Interests / Expertise

disorders

0 0000-0002-0193-1152

(852) 3943 1106

kflau@cuhk.edu.hk

Amyloid precursor protein interacting

neurodegenerative disorders

Amyloid precursor protein and its

Protein kinases in neurodegenerative

proteins in Alzheimer's disease and

interacting proteins in neurodevelopment

0 0000-0002-6673-8740



(852) 3943 6253 wcylau@cuhk.edu.hk

rational design

(cryo-EM)

Research Interests / Expertise

Single-particle cryo-electron microscopy

Drug and herbicide discovery through

Structure-function relationship of

macromolecular machines

0 0000-0002-3069-8513

Prof. LAU Chun Yu Wilson 劉振宇

Assistant Professor

Associate Professor

Prof. LUO Haiwei 羅海偉



Research Interests / Expertise Geobiology

- Early life evolution
- Coral microbiology Crop microbiology
- Microbial ecology and evolution
- (852) 3943 6121
- haiweiluo@cuhk.edu.hk
- (D) 0000-0001-8452-6066

Prof. NGAI Sai Ming 倪世明

Associate Professor

- Research Interests / Expertise
- Bioinformatics and proteomics Protein/peptide structural and functional studies
- Research and development on modern Chinese Medicine
- (852) 3943 6025 smngai@cuhk.edu.hk
- 0 0000-0002-4484-2483

Prof. NGO Chi Ki Jacky 敖志祺

Associate Professor



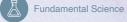
Research Interests / Expertise

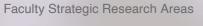
- Structure-based drug discovery for cancers and other emerging diseases
- Structure-function studies of pre-mRNA splicing factors
- Identification and engineering of novel peptides to improve agriculture
- (852) 3943 6346
- iackyngo@cuhk.edu.hk
- @ 0000-0002-6004-7041

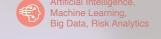


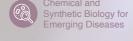




















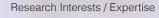
Prof. PITTMAN Michael David 文嘉棋



Fellow of the **Higher Education Academy, UK** Senior Fellow of the **Higher Education Academy, UK** Fellow of the Geological Society of **London and Willi Henning Society**

Assistant Professor





- Dinosaur-to-bird evolutionary transition, especially flight development and ecology
- Other vertebrate biology and evolution
- Fossilised soft tissues: imaging, geochemistry and biological implications
- (852) 3943 7533
- mpittman@cuhk.edu.hk

(0000-0002-6149-3078

Prof. THIBODEAU Benoit



Research Interests / Expertise

- Ocean biogeochemical dynamics
- Stable isotope geochemistry
- Anthropogenic impacts
- Paleoceanography & paleoclimate
- (852) 3943 6390
- benoit.thibodeau@cuhk.edu.hk

0 0000-0003-0422-2308

Prof. TSANG Suk Ying Faye 曾淑瑩





Prof. SHAW Pang Chui 邵鵬柱



Master of Postgraduate Halls

Research Interests / Expertise

Structure-function studies of proteins

Professor

- Authentication and quality control of Chinese Medicinal material
- (852) 3943 1363
- pcshaw@cuhk.edu.hk
- © 0000-0001-6848-5073

Assistant Professor

Prof. TSANG Ling Ming 曾令銘



Research Interests / Expertise

- Biogeography, biodiversity and conservation of aquatic ecosystems
- Evolution and adaptation of crustaceans

Assistant Professor

Associate Professo

- Molecular ecology of marine animals
- (852) 3943 3057 Imtsang@cuhk.edu.hk
- (i) 0000-0002-5029-5690





Professor



Research Interests / Expertise

- Mechanisms controlling the cardiac differentiation and maturation of pluripotent stem cells
- Mechanisms underlying the automaticity of pluripotent stem cell-derived cardiomyocytes
- Mechanisms for maintaining the selfrenewal and pluripotent characteristics of pluripotent stem cells
- Ion channels and cardiovascular physiology
- Cancer and cancer stem cells
- (852) 3943 1020
- fayetsang@cuhk.edu.hk
- (D) 0000-0002-9992-5454

Prof. TSUI Tsz Ki Martin 徐子祺

Research Interests / Expertise

- Environmental pollution
- Ecosystem biogeochemistry Stable isotope applications
- (852) 3943 6123
- mtktsui@cuhk.edu.hk
- 0 0000-0003-2002-1530





Prof. WONG Wing Tak Jack 黃永德 Associate Professor



Research Interests / Expertise

- Vascular and metabolic biology
- Stem cell biology
- Cardiovascular regeneration
- (852) 3943 5021
 - jack_wong@cuhk.edu.hk
 - 0 0000-0002-4514-3780

Prof. ZHONG Silin 鍾思林



Research Interests / Expertise

Associate Professor

- Epigenetics and genomics
- Hormone signalling network
- Fruit ripening
- Sequencing technology
- (852) 3943 6389
 - silin.zhong@cuhk.edu.hk

© 0000-0002-0198-7383



Prof. ZHUANG Xiaohong 庄小紅

Assistant Professor



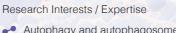
- Autophagy and autophagosome formation in plants and green algae
- Signalling mechanisms of selective autophagy in plant stress resistance
- Lipid metabolism and membrane dynamics
- (852) 3943 4066 Xhzhuang@cuhk.edu.hk





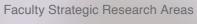


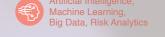




- 0 0000-0002-2480-8210









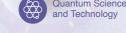
Synthetic Biology for

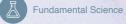












Department of Chemistry

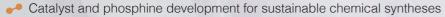
Prof. KWONG Fuk Yee 鄺福兒

Professor



Department Chairperson Member of the Hong Kong Young Academy of Sciences

Research Interests / Expertise



- Chiral ligand design towards asymmetric catalysis
- Methodology development for tackling challenging polyaromatic syntheses
- Selective aromatic carbon-oxygen bond cleavage and cross-coupling
- Carbon-hydrogen bond activation and functionalisation
- (852) 3943 6257
- fykwong@cuhk.edu.hk
- D ORCiD: 0000-0001-9105-1740

Prof. CHEN Ye 陳也

Prof. CHAN Tak Wah Dominic 陳德華

Research Interests / Expertise

- Mass spectrometry-based methodologies for characterisation of peptides/proteins, DNA fragments and carbohydrates
- Novel ionisation methods and mass spectrometry interfaces for biomolecule
- Mass spectrometry imaging of biological
- Differential ion mobility spectrometry
- (852) 3943 6260
- twdchan@cuhk.edu.hk
- (D ORCiD: 0000-0003-2825-7484

Research Interests / Expertise

- Design and synthesis of advanced nanocatalysts for clean energy conversion
- Design and synthesis of advanced nanohybrids for biosensing and optical
- Methodology for novel and robust nanomaterial synthesis and stablisation
- Understanding structure-property relationships in inorganic nanocrystals
- (852) 3943 0409
 - yechen@cuhk.edu.hk
 - ORCiD: 0000-0003-0821-7469

Prof. HUANG Zhifeng 黃陟峰

Associate Professor **Member of the Hong Kong Young Academy of Sciences**

Research Interests / Expertise

- Origin of life
- New-generation solar cells
- Asymmetric synthesis of chiral molecules
- Chiral optoelectronics
- Cell culture for cell therapy
- (852) 3943 6376
- zfhuang@cuhk.edu.hk
- (D) ORCiD: 0000-0002-9613-9423

Prof. LEE Hung Kay 李鴻基

Associate College Head of

Associate Professo

United College

Research Interests / Expertise

- Chemistry of low-coordination transitionmetal and lanthanide complexes
- Synthetic and reactivity studies of metal complexes of biological relevance
- Isolation and characterisation of active constituents in herbs
- (852) 3943 6331
- hklee@cuhk.edu.hk
- ORCiD: 0000-0002-2052-4069

Prof. LI Hung Wing 李紅榮

Prof. LYU Hairong 呂海榮



Research Interests / Expertise

- Ultra-sensitive detection assays for disease biomarkers
- Theranostic nanomaterials and nanodrugs
- Single molecules fluorescence imaging
- (852) 3943 0329

Professorship

(852) 3943 6371

hrlyu@cuhk.edu.hk

(D) ORCiD: 0000-0002-0476-0352

hungwingli@cuhk.edu.hk

Vice-Chancellor Early Career

Synthetic methods involving transition

metal catalysis and photo-/electro-

New organoboron functional materials

Application of organoboron in the

synthesis of drug molecules

Research Interests / Expertise

(D ORCiD: 0000-0003-4840-1965

Prof. LIU Zhifeng 劉志鋒



Research Interests / Expertise

- Applications of computational and theoretical chemistry to study chemical
- (852) 3943 6358
- zfliu@cuhk.edu.hk
- D ORCiD: 0000-0002-6898-075X



Prof. MIAO Qian 繆謙

Outstanding Fellow of the Faculty of Science

Research Interests / Expertise

- Precision synthesis of nanocarbon structures
- Design and synthesis of organic electronic materials
- High-performance organic electronic devices

Professor

- (852) 3943 8127 miaogian@cuhk.edu.hk
 - D ORCiD: 0000-0001-9933-6548

Prof. NG Kee Pui Dennis 吳基培

Professor

Assistant Professor

Chartered Scientist of the Science Council, UK **Chartered Chemist and Fellow of the Royal Society of Chemistry**

Research Interests / Expertise

- Chemistry of functional dyes
- Development of advanced photosensitizers for photodynamic
- Bioorthogonal and supramolecular chemistry for theranostics
- Development of efficient bioconjugation methods
- Phthalocyanine-based materials for energy applications
- (852) 3943 6375
- dkpn@cuhk.edu.hk
- (D) ORCiD: 0000-0001-9087-960X

Prof. NGAI To 魏濤

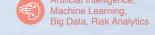


Assistant Dean (Research) Fellow of the Royal Society of Chemistry

Research Interests / Expertise

- Colloidal particles at interfaces from fundamentals to materials
- Development of orthopaedic implant Manufacturing of green packaging
- Measuring the interactions between
- particle-particle and particle-surface Studying microrheology with TIRM and
- magnetic tweezers
- (852) 3943 1222
- tongai@cuhk.edu.hk
- (D) ORCiD: 0000-0002-7207-6878

Faculty Strategic Research Areas

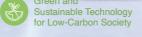




Synthetic Biology for **Emerging Diseases**



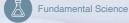














Prof. SONG Chunshan 宋春山



Dean of Science **Wei Lun Professor of Chemistry** Fellow of the **American Chemical Society**

Research Interests / Expertise

Chemistry and heterogeneous catalysts for energy and fuels

Professor

- Carbon neutrality for sustainability
- Adsorptive separation of CO₂, H₂S, NH₃, NO2 and SO2
- Catalysis for CO₂ conversion to fuels and chemicals
- Shape-selective catalysis for chemicals synthesis
- (852) 3943 1133
- chunshansong@cuhk.edu.hk
- 0 0000-0003-2344-9911

Prof. TSE Ying Lung Steve 謝應龍



Research Interests / Expertise

Physical chemistry of interfacial systems

Associate Professor

- Simulations of atomspheric chemical reactions
- Development of efficient reactive molecular simulation models
- Method development of molecular dynamics simulations
- Computational studies of asymmetric organic reactions
- 3943 6373
 - stevetse@cuhk.edu.hk
 - (D) 0000-0003-1187-2296

Prof. TAM Dick Yan 譚廸茵



Research Assistant Professo

Research Interests / Expertise

- DNA-based nanomaterials
- Photodynamic therapy
- Cancer treatment
- **** 3943 1326
- dickyantam@cuhk.edu.hk
- 0 0000- 0002-0490-4125

Prof. TSUI Chit Gavin 徐哲



Research Interests / Expertise

- Homogenious catalysis for bioactive compounds
- Organofluorine chemistry using sustainable and environmentally friendly reagents

Associate Professor

- Organometallic chemistry for the development of efficent and selective catalytic processes
- Converting industrial waste and greenhouse gas fluoroform into valuable products
- Synthesis of new pharmaceutical agents for treating emerging diseases
- 3943 6293
- gctsui@cuhk.edu.hk
- 0 0000-0003-4824-8745

Prof. WANG Ying 王瑩



Assistant Professor

Research Interests / Expertise

- Electrocatalysis
- Electrochemistry
- Energy storage and conversion
- Catalysis for CO₂ conversion to fuels and chemicals
- Carbon neutrality for sustainability
- 3943 3586
- ying.b.wang@cuhk.edu.hk
- © 0000-0002-6240-5535

Prof. XIA Jiang 夏江



Research Interests / Expertise

- Chemical biology
- Synthetic biology
- Protein reaction
- Phase separation
- Biomaterials
- 3943 6165
- iangxia@cuhk.edu.hk
- 0 0000-0001-8112-7625











Choh-Ming Li Professor of Chemistry Member of the Chinese Academy of Sciences

Member of the Hong Kong Academy of Sciences

Fellow of the Royal Society of Chemistry Research Interests / Expertise

- Homogenous catalysis
- Small molecules activation
- Carboranes
- Main group chemistry
- Organometallic chemistry
- 3943 6269
- zxie@cuhk.edu.hk
- @ 0000-0001-6206-004X

Prof. ZHANG Jie 張洁



Research Interests / Expertise

- Functionalisation of carboranes
- Nucleophilic reaction of carboranes
- Chemistry of o-carboryne
- Design and synthesis of carborane derivatives for Boron Neutron Capture Therapy (BNCT)

Research Assistant Professor

- Density functional theory (DFT) calculations for mechanistic study



- 3943 3581 iezhang@cuhk.edu.hk
- 0 0000-0001-5288-9444

Prof. YEUNG Ying Yeung 楊英洋



Outstanding Fellow of the Faculty of Science

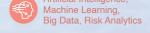
Research Interests / Expertise

Chemistry and heterogeneous catalysts for energy and fuels

Professor

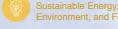
- Carbon neutrality for sustainability
- Organocatalysis
- Asymmetric halogenation
- Shape-selective catalysis for chemicals synthesis
- 3943 6377
- yyyeung@cuhk.edu.hk
- (D) 0000-0001-9881-5758

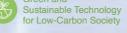
Faculty Strategic Research Areas





Synthetic Biology for **Emerging Diseases**

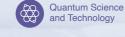




Professor









Department of Mathematics

Prof. ZOU Jun 鄒軍

f Professor of Mathematics f



Department Chairperson Choh-Ming Li Professor of Mathematics Fellow of the American Mathematical Society Fellow of the Society for Industrial and Applied Mathematics



Professor

Professor

Research Interests / Expertise

- Numerical solutions of electromagnetic Maxwell systems
- Numerical solutions of interface problems
- Ill-posed problems
- Inverse problems
- Preconditioned iterative methods and domain decomposition methods
- (852) 3943 7967
- zou@math.cuhk.edu.hk
- 0000-0002-4809-7724

Prof. CHAN Kwok Wai 陳國威



Research Interests / Expertise

- Complex geometry
- Gromov-Witten theory
- Mirror symmetry

- Deformation theory
- Theory of quantisation
- (852) 3943 7976

© 0000-0003-1113-6758

kwchan@math.cuhk.edu.hk



Prof. CHUNG Tsz Shun Eric 鍾子信

Outstanding Fellow of the Faculty of Science

Research Interests / Expertise

- heterogeneous porous media Data-driven computational methods Multiscale simulations for geosciences

Multiscale methods for problems in

- Multiscale modelling for mechanics
- Novel discretisation for applications
- (852) 3943 7972
- tschung@math.cuhk.edu.hk
- 0 0000-0002-3096-3399

Prof. DUAN Renjun 段仁軍



Professor

Research Interests / Expertise

- Partial differential equations
- Kinetic theory
- Fluid dynamics
- Viscous conservation laws
- Mathematical physics
- (852) 3943 7977
- rjduan@math.cuhk.edu.hk
- (D) 0000-0001-8821-8829

Prof. FENG Dejun 豐德軍



Research Interests / Expertise

- Fractal geometry
- Ergodic theory
- Dynamical systems Geometric measure theory
- (852) 3943 7965
- difeng@math.cuhk.edu.hk (D) 0000-0003-4375-4139

Prof. HE Xuhua 何旭華



Professor of Mathematics

Choh-Ming Li Professor of Mathematics

- Research Interests / Expertise
- Algebra
- Number theory
- Representation theory
- Arithmetic geometry
- Combinatorics
- (852) 3943 7970
- xuhuahe@math.cuhk.edu.hk
- © 0000-0002-1810-4700

Prof. JIN Bangti 金邦梯

Professor of Mathematics

HKSAR Global STEM Scholar

Research Interests / Expertise

- Computational methods for inverse problems
- Numerical analysis of differential
- Mathematics of deep learning
- Scientific computing, including machine learning assisted techniques
- (852) 3943 6777
- btjin@math.cuhk.edu.hk
- (D) 0000-0002-3775-9155

Prof. LEE Man Chun 李文俊



Assistant Professor

- Research Interests / Expertise
- Differential geometry
- Complex geometry
- Geometric partial differential equations
- Compactness of geometric objects
- - (852) 3943 5137 mclee@math.cuhk.edu.hk
 - 0000-0002-4663-6149



Prof. LEE Yi Jen 李宜珍

Si Yuan Professor of Mathematics

Research Interests / Expertise

- Symplectic topology
- Symplectic geometry ✓ Low-dimensional topology
- Gauge theory
- Geometric analysis
- (852) 3943 3715
- yilee@ims.cuhk.edu.hk
 - © 0000-0002-6356-6023

Prof. LEUNG Nai Chung Conan 梁廼聰



Professor of Mathematics Fellow of the **American Mathematical Society**

Research Interests / Expertise

- Algebraic geometry
- Symplectic geometry
- Quantisation
- Mirror symmetry
- Geometry of special holonomy
- (852) 3943 8065 leung@math.cuhk.edu.hk
- 0 0000-0002-7278-5295

Prof. LI Hongjie 李宏杰



Research Assistant Professor

- Research Interests / Expertise Mathematical analysis of metamaterials Cloaking invisibility caused by plasmonic
 - material Scientific computing for metamaterials
- - (852) 3943 5139 ili@math.cuhk.edu.hk
 - 00000-0002-9556-8584



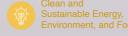


Faculty Strategic Research Areas



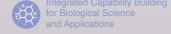


Synthetic Biology for



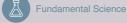


Sustainable Technology for Low-Carbon Society









Prof. LI Man Chun Martin 李文俊

Research Interests / Expertise

- Differential geometry and geometric analysis
- Geometric problems in mathematical general relativity
- Partial differential equations arising in geometry and analysis
- (852) 3943 1851
- martinli@math.cuhk.edu.hk



© 0000-0002-1877-9409

Prof. LIU Liu 劉鎏



Research Interests / Expertise

- Numerical analysis and scientific computation
- Kinetic problems with multiple scales
- Uncertainty quantification
- Deep learning for partial differential equations
- Tumour growth models and numerical methods
- (852) 3943 7957
- Iliu@math.cuhk.edu.hk

0 0000-0002-6255-2818

Prof. LUI Lok Ming Ronald 雷樂銘



Professor

Council Member of the Hong Kong Society for Industrial and Applied

Research Interests / Expertise

- Computational quasiconformal geometry
- Scientific computing
- Medical imaging
- Geometry processing
- Mathematical artificial intelligence
- (852) 3943 7975



- Imlui@math.cuhk.edu.hk



Prof. LUO Chenyun 羅辰昀



Research Interests / Expertise

Short and long time behaviour for water waves

Assistant Professor

- Partial differential equations modelling magnetohydrodynamics and elastodynamics with a free surface
- Partial differential equations modelling liquid crystals with a free surface
- Partial differential equations modelling relativistic fluids with a free surface boundary
- Formation of magnetic fluid stars
- (852) 3943 7981
- cluo@math.cuhk.edu.hk
- (i) 0000-0002-8808-2121

Prof. TAN Xiaolu 譚小路 Prof. MCBREEN Michael



Assistant Professor

- Research Interests / Expertise
- Symmetry groups and their representations
- Mathematical aspects of gauge theory
- Quantum integrable systems
- Mathematical aspects of string theory
- Symplectic and algebraic geometry
- (852) 3943 5297
- mcb@math.cuhk.edu.hk
- 0 0000-0002-9455-5175

Associate Professor

Research Interests / Expertise

- Financial risk analytics
- Principal-agent problem
- Stochastic optimisation
- Dynamic programming
- Optimal transport
- (852) 3943 5296
- xltan@math.cuhk.edu.hk
- (D) 0000-0002-9707-5265

Prof. WU Zhongtao 吳忠濤



Research Interests / Expertise

- Low dimensional topology
- Theory of knots, links and spatial graphs

Associate Professor

- Contact and symplectic geometry
- Floer homology and Gauge theory
- DNA topology
- (852) 3943 8578
- ztwu@math.cuhk.edu.hk

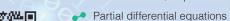
0 0000-0002-8521-4221

Prof. XIN Zhouping 辛周平



Professor of Mathematics

William M.W. Mong Professor of Mathematics **Council Member of the Hong Kong Mathematical Society** Research Interests / Expertise



- Fluid dynamics
 - Shocks and nonlinear waves
 - Numerical analysis
 - Applied mathematics
 - (852) 3943 4100
 - zpxin@math.cuhk.edu.hk
 - (D) 0000-0002-7434-2404

Prof. YU Jiu Kang 于如岡

Professor of Mathematics **Lee Hysan Professor of Mathematics**

Fellow of the **American Mathematical Society**

Research Interests / Expertise

- Number theory Representation theory
- Algebraic and arithmetic geometry
- Ramanujan graphs and higher dimensional analogues
- Spectral geometry
- (852) 3943 3716
- ikyu@ims.cuhk.edu.hk

Prof. YU Yong 于勇



Research Interests / Expertise

Partial differential equation, focusing on the equations/systems of elliptic and parabolic types

Associate Professor

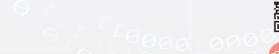
- Liquid crystal materials, focusing on the patterns of liquid crystal materials and droplets
- lon channel, focusing on boundary layer phenomenon and dynamical properties of ion channel
- → Bio-math, mass concentration phenomenon in terms of Keller-Segel equation and its variants
- Harmonic map flow, mean curvature flow, Navier-Stokes equations, and their free boundary type problems
- (852) 3943 8900
- yongyu@math.cuhk.edu.hk
- © 0000-0003-2649-6991

Prof. YUAN Xu 袁旭



Research Interests / Expertise

- Nonlinear dispersive and wave equations
- (852) 3943 5139
- xuyuan@math.cuhk.edu.hk
- 0000-0003-4648-4269



Research Assistant Professor

Prof. ZENG Tieyong 曾鐵勇

Research Interests / Expertise Data science

- Optimisation Imaging science
- Computer vision Machine learning
 - (852) 3943 7966 zeng@math.cuhk.edu.hk





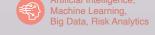




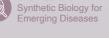




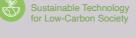
Faculty Strategic Research Areas

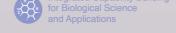


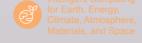




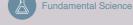




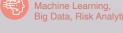








Professor



Department of Physics

Prof. WANG Jianfang 王建方



Department Chairperson Outstanding Fellow of the Faculty of Science Fellow of the Royal Society of Chemistry

Nanophotonics

Photocatalysis

ifwang@phy.cuhk.edu.hk

Research Interests / Expertise

- Nanoplasmonics
- Nanoparticles
- (852) 3943 4167
- D ORCiD: 0000-0002-2467-8751

Professor







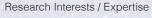
Professor



Prof. CHENG Hok Chuen 鄭學全



Research Assistant Professor



- Precision measurement of the properties of the Higgs boson
- Search for new physics beyond the Standard Model of particle physics
- Hyperon and spin physics
- Applications of machine learning in highenergy physics and other areas
- (852) 3943 3397

Prof. CHU Ming Chung 朱明中

- hccheng@phy.cuhk.edu.hk
- (D) ORCiD: 0000-0002-8912-4389

Prof. CHING Shuk Chi Emily 程淑姿



Fellow of the American Physical Society Fellow of the Institute of Physics

Research Interests / Expertise

- Thermally-driven turbulence
- Boundary layer theories for thermal turbulence
- Network reconstruction from dynamics
- Structure-dynamics and structurefunction of neuronal networks
- (852) 3943 6305
- ching@phy.cuhk.edu.hk
- ORCiD: 0000-0001-5114-5072

Prof. FLORES-CASTILLO Luis Roberto



Choh-Ming Li Professor of Physics Fellow of the American Physical Society

Professor

Research Interests / Expertise

- Dark matter cosmology
- Particle physics
- Computational physics
- Neutrino oscillations
- Compact star astrophysics
- (852) 3943 6364
- mcchu@phy.cuhk.edu.hk
- (D) ORCiD: 0000-0002-1971-0403

Associate Professor



- Research Interests / Expertise
- Experimental high-energy physics
- Precision measurements and search for evidence of new physics at the Large Hadron Collider
- Reconstruction and identification of highenergy particles in proton-proton collision
- Possibilities and challenges of future particle colliders and detectors
- Use of machine learning in the analysis of large datasets for physics research
- (852) 3943 9573
- castillo@phy.cuhk.edu.hk
- ORCiD: 0000-0003-1551-5974

Prof. GOH Swee Kuan 吳瑞權

Research Interests / Expertise

Associate Professor

- Superconductivity
- High pressure phenomena
- Fermi surface mapping
- (852) 3943 6155
- skgoh@cuhk.edu.hk ORCiD: 0000-0002-6265-5446



Prof. GU Zhengcheng 顧正澄



Research Interests / Expertise

- Topological phases of quantum matter
- Topological phase transitions
- Tensor network simulation for strongly correlated systems
- Quantum gravity
- (852) 3943 6100
- zcgu@phy.cuhk.edu.hk
- (D) ORCiD: 0000-0002-7269-6401

Prof. HANNUKSELA Otto Akseli

Research Interests / Expertise

Gravity and general relativity

Research Assistant Professor

- Gravitational waves
- Dark matter
- Cosmology
- Beyond standard model physics
- (852) 3943 6124
- hannuksela@phy.cuhk.edu.hk (D) ORCiD: 0000-0002-3887-7137

Prof. LAN Tian 蘭天



Research Interests / Expertise

Mathematical framework for topological phases of matter

Assistant Professor

Associate Professor

- Higher categorical structures of symmetry, quantum phases and phase
- Exactly solvable models for topological phases and quantum computation
- (852) 3943 6368
- tlan@cuhk.edu.hk
 - (D) ORCiD: 0000-0002-0961-969X

Prof. LAW Chi Kwong 羅志光 Prof. LI Guang Feng Tjonnie 黎冠峰

Associate Professor



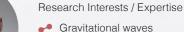
Research Interests / Expertise

Quantum optomechanics

- Quantum optics
- Waveguide QED
- (852) 3943 4334



- cklaw@phy.cuhk.edu.hk
- (D) ORCiD: 0000-0002-8158-3759



neutron stars) General relativity



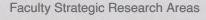
- (852) 3943 6103 tgfli@cuhk.edu.hk
- (D) ORCiD: 0000-0003-4297-7365

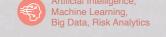
Compact objects (black holes,







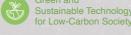


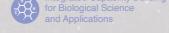




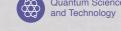
Synthetic Biology for

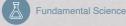














Prof. LI Huabai 李華白



Founding Member of the Hong Kong Young Academy of Sciences

Associate Professor

Assistant Professor

Associate Professor

Research Interests / Expertise

- Star formation
- Interstellar magnetic fields

Research Interests / Expertise

Pure spin current phenomena

Quantum materials

Quantum devices

Superconductivity

(852) 3943 1122

(D) 0000-0003-3595-9089

yufanli@cuhk.edu.hk

Research Interests / Expertise

Advanced characterisation

Optoelectronic device fabrication

Renewable energy

Scattering techniques

xinhui.lu@cuhk.edu.hk

(852) 3943 6350

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Solar cells

Topological materials

- Interstellar turbulence
- Astronomical instrumentation
- (852) 3943 1118
- hbli@cuhk.edu.hk

Prof. LI Yufan 李禹帆

Prof. LU Xinhui 路新慧

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Prof. LI Quan 李泉

Professor

Fellow of the Royal Society of Chemistry Research Interests / Expertise

- Electrochemical energy storage
- Nano-bio interface Quantum sensing
- (852) 3943 6323 liquan@cuhk.edu.hk
- 0 0000-0001-8563-1802



Prof. LIU Renbao 劉仁保

Fellow of the Institute of Physics

Outstanding Fellow of the

Research Interests / Expertise

Faculty of Science

Fellow of the Optica

Quantum sensing

Quantum computing

Open quantum systems

Condensed matter physics

Research Interests / Expertise

Astrophysical data analysis

Particle interaction simulations

Dark matter and new physics in space

Cosmic rays, neutrinos, gamma rays

Particle astrophysics

(852) 3943 3396

0 0000-0001-8016-2170

kcyng@phy.cuhk.edu.hk

Quantum optics

(852) 3943 6312 rbliu@cuhk.edu.hk (n) 0000-0002-0620-2370

Prof. NG Chun Yu Kenny 吳震宇

Prof. ONG Hock Chun Daniel 王福俊

Research Interests / Expertise

environment monitoring

hcong@phy.cuhk.edu.hk

(852) 3943 6324

0 0000-0002-2248-5956

Optical sensing for trace element detection

Chemical detection for food, water, and

- Computer modelling of macromolecules
- (nano)material-cell interface





0 0000-0002-4174-8790

Prof. WANG Dajun 王大軍



Research Interests / Expertise

Ultracold atoms and molecules

Professor

Professor

- Quantum simulation
- Precision spectroscopy
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- (D) 0000-0001-7396-6736



Prof. WU Yilin 吳藝林

Prof. WANG Yi 王一

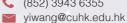
Research Interests / Expertise

- Molecular dynamics simulations

Associate Professor

Energetics and kinetics at the







Research Interests / Expertise

- Collective motion and self-organisation of living active matter
- Growth dynamics of general living matter
- Bacterial motility in complex environments
- Population dynamics, pattern formation and cell-environment interactions in natural and synthetic multicellular systems

Associate Professor

- (852) 3943 6354
- ylwu@cuhk.edu.hk
 - © 0000-0002-0392-2137



Prof. XU Lei 徐磊

Research Interests / Expertise

- Fluid mechanics and complex fluids
- Mechanical metamaterial
- Hydrodynamic metamaterial
- Nano-amorphous drug manufacture



(852) 3943 6307 xuleixu@cuhk.edu.hk

0000-0001-9229-586X

Prof. YAN Renbin 嚴人斌

Professor

Professor

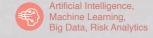
HKSAR Global STEM Scholar Council Member of the Chinese Astronomical Society

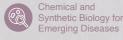
Research Interests / Expertise



- Astronomical instrumentation
- Spectroscopy surveys
- Processing and analysis of big data in astronomy
- Interstellar medium of galaxies
- (852) 3943 6362
 - rbyan@cuhk.edu.hk
 - © 0000-0003-1025-1711

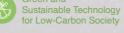
Faculty Strategic Research Areas



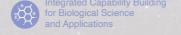






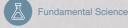


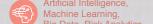
Assistant Professor











Department of Statistics

Prof. YAN Yangqian 嚴楊千

Research Interests / Expertise

- Ultracold quantum gas
- Topological states of matters

Assistant Professor

- Few body physics
- Quantum simulation
- (852) 3943 6396
- yqyan@cuhk.edu.hk 0 0000-0002-3237-5945



Prof. ZHU Junyi 朱駿宜

Associate Professor



- Research Interests / Expertise
- Defect and doping of semiconductors Density functional theory calculations
- Magnetism and spintronics
- Artificial intelligence in physics
- Energy materials
- (852) 3943 6365
- jyzhu@phy.cuhk.edu.hk
- 0 0000-0001-5112-5493

Prof. SONG Xinyuan 宋心遠



Department Chairperson

Research Interests / Expertise

- Bayesian method
- Latent variable models
- Nonparametric and semiparametric methods
- Statistical computing
- Survival analysis
- **(**852) 3943 7929 (D) 0000-0002-4877-3200

xysong@cuhk.edu.hk

Professor







Prof. CHAN Kin Wai 陳健威

Research Interests / Expertise

- Nonparametric time series ✔ Incomplete-data inference
- ✓ Long-run variance estimation
- Recursive methods for online problems
- High-frequency data analysis
- - (852) 3943 7923
 - kinwaichan@cuhk.edu.hk © 0000-0003-2022-547X

Reliability in engineering Optimal experiment design

Research Interests / Expertise

- Inference for censoring data
- (852) 3943 7920





(D) 0000-0002-6983-5845

Prof. CHAN Ping Shing Ben 陳炳城



Prof. DAI Ben 戴奔

Research Interests / Expertise

- ✓ Learning frameworks with sound empirical and theoretical validation
- ◆ Theoretical and/or experimental studies yielding new insight into machine/deep

Assistant Professor

- Optimisation and software development
- Statistical inference, interpretability, causal inference for data science



- (852) 3943 7928
- bendai@cuhk.edu.hk
- 0 0000-0002-1620-1021

Prof. FAN Xiaodan 樊曉丹



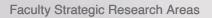
Research Interests / Expertise

- Statistical modelling and computing
- Pattern recognition and classification

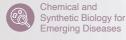
Professor

- Computational biology
- Astrophysics data analysis
- (852) 3943 7930
- xfan@cuhk.edu.hk
- (D) 0000-0002-2744-9030











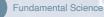












Prof. FANG Xiao 方笑



Associate Professor

Research Interests / Expertise

- Asymptotic theory in probability and statistics
- Stein's method for distributional approximations
- Multivariate and high-dimensional central limit theorems
- Change-point analysis
- (852) 3943 5254
- xfang@cuhk.edu.hk
- (D) 0000-0002-4853-7419

Prof. LIN Zhixiang 林志翔



Research Interests / Expertise

- Machine learning for big data in biomedicine
- Computational biology and bioinformatics



- (852) 3943 7921 zhixianglin@cuhk.edu.hk
- © 0000-0001-9301-947X



Assistant Professor

- Bayesian statistics





Pro-Vice-Chancellor / Vice - President (Education)

Faculty of Science



- application
- analysing ordinal categorical data
- innovation
- Quality assurance of teaching and learning
- (852) 3943 7925
- © 0000-0002-1940-8925

Prof. WANG Junhui 王軍輝



Professor

Research Interests / Expertise

- Statistical machine learning and data science
- Network modelling and analysis
- Recommender system and individualised prediction
- Causal inference
- (852) 3943 3167
- iunhuiwang@cuhk.edu.hk



0 0000-0002-9165-5664

- Survival analysis and semiparametric inference
- Network modelling and analysis
- - 0 0000-0001-5006-1838

Prof. LIN Yuanyuan 林媛媛 Associate Professor



Research Interests / Expertise

- Statistical machine learning
- High-dimensional statistics
- Nonparametric and semiparametric inference
- (852) 3943 7924
- ylin@cuhk.edu.hk
- 0 0000-0003-1293-1040



Prof. POON Wai Yin Isabella 潘偉賢

Professor



Outstanding Fellow of the

Research Interests / Expertise

- Structural equation modelling and its
- Statistical methods for modeling and
- Data with misclassification
- Teaching and learning enhancement and

- wypoon@cuhk.edu.hk

Prof. SIT Tony 薛賢鴻

Associate Professor

- - tony.sit@cuhk.edu.hk





Research Interests / Expertise

- Quantile modelling
- Risk management and analytics
- (852) 3943 7054







Prof. WEI Yingying 魏穎穎

Associate Professor



- Experimental design of high-throughput biological experiments
- Integrative analysis of genomic datasets
- Fine-scale inference from aggregate-level genomic data
- Inference of network structures
- Development of scalable statistical inference algorithms for big data



- **(**852) 3943 7922
- ywei@cuhk.edu.hk
- 0 0000-0003-3826-336X

Prof. YAM Sheung Chi Phillip 任尚智

Professor



Assistant Dean (Education) Research Interests / Expertise

- Actuarial science and mathematical finance
- Applied mathematics
- Probability theory and stochastic analysis

Research Assistant Professor

- Statistical theory and data analytics Control theory and optimisation
- - (852) 3943 7941 scpyam@cuhk.edu.hk
 - 0 0000-0002-4380-0919

Prof. ZHU Huichen 朱慧晨



Research Interests / Expertise

- Quantile regression
- Machine learning Spatial data analysis Functional data analysis

huichenzhu@cuhk.edu.hk

- (852) 3943 0390
- 0 0000-0002-3530-1490

Prof. WONG Hoi Ying 王海嬰



Associate Dean (Student Affairs) Outstanding Fellow of the Faculty of Science

Research Interests / Expertise

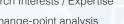
- Risk management
 - Stochastic control Machine learning finance
 - Deep learning
 - Quantitative finance (852) 3943 8520
 - hywong@cuhk.edu.hk (D) 0000-0001-9743-1832

Prof. YAU Chun Yip 邱俊業



Research Interests / Expertise

- Change-point analysis
- Time-series analysis



- Spatial statistics Extreme value theory
- (852) 3943 7942 cy.yau@cuhk.edu.hk
- 0 0000-0002-4628-8324









Synthetic Biology for Emerging Diseases

Chemical and







ntegrated Capability Building









Earth and Environmental Sciences Programme

(Previously known as Earth System Science Programme)

Prof. SONG Chunshan 宋春山



Programme Director Dean of Science Wei Lun Professor of Chemistry Fellow of the American Chemical Society



Professor





Associate Professor

Research Interests / Expertise

- Chemistry and heterogeneous catalysts for energy and fuels
- Carbon Neutrality for Sustainability
- Adsorptive separation of CO₂, H₂S, NH₃, NO₂ and SO₂
- Catalysis for CO₂ conversion to fuels and chemicals
- Shape-selective catalysis for chemicals synthesis

Associate Professor

(852) 3943 1133

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© 0000-0003-2344-9911

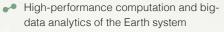
Prof. TAI Pui Kuen Amos 戴沛權

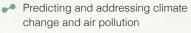


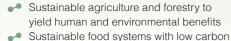
Programme Coordinator Founding Member of Hong Kong Founding Academy of Sciences

Research Interests / Expertise









- and nitrogen footprints Modelling biosphere-atmosphere
- interactions
- (852) 3943 9687
- amostai@cuhk.edu.hk
- 0 0000-0002-2384-2695

Prof. TSUI Tsz Ki Martin 徐子祺



Programme Coordinator

Research Interests / Expertise

- Environmental pollution
- Ecosystem biogeochemistry
- Stable isotope applications



mtktsui@cuhk.edu.hk (i) 0000-0003-2002-1530

(852) 3943 6123

Prof. CHAN Man Nin 陳文年



Research Interests / Expertise

- Atmospheric aerosol science
- Air pollution and climate change

Associate Professor

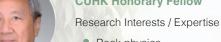
Assistant Professor

Associate Professor

- (852) 3943 9863
- mnchan@cuhk.edu.hk
- 0 0000-0002-2384-2695

Prof. CHENG Chuen Hon Arthur 鄭傳漢

Adjunct Professor **CUHK Honorary Fellow**



- Rock physics Quantitative reservoir characterisation
- Acoustic logging
 - Geomechanics
 - Urban and near surface geophysics
 - Arthurcheng@cuhk.edu.hk
 - (D) 0000-0002-0219-9856

Prof. FALKENBERG Laura Jane



Research Interests / Expertise

- Global change biology particularly ocean acidification and warming
- Marine ecosystem dynamics, shifts, and resistance/resilience
- Herbivore-autotroph ecophysiology, behaviour, and interactions
- Socio-economic consequences of environmental change



- (852) 3943 7254
- laurafalkenberg@cuhk.edu.hk
- 0 0000-0002-5868-2310

Prof. LIU Lin 劉琳



Research Interests / Expertise

Artificial intelligence for earth and climate

Associate Professor

- Earth observation big data
- Geophysics and remote sensing for sustainability



- liulin@cuhk.edu.hk
- 0 0000-0002-9581-1337

Prof. TAM Chi Yung Francis 譚志勇



Prof. LUO Haiwei 羅海偉



Research Interests / Expertise

- Geobiology
- Early life evolution
- Coral microbiology
- Crop microbiology
- Microbial ecology and evolution
- (852) 3943 6121 haiweiluo@cuhk.edu.hk
- 0 0000-0001-8452-6066



Fellow and Executive Committee Member of Hong Kong Meteorological Society

Research Interests / Expertise

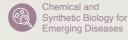
- Numerical weather prediction and climate simualtions using machine learning Extreme weather and climate impacts on
 - (852) 3943 9828

 - Francis.Tam@cuhk.edu.hk (D) 0000-0002-5462-6880

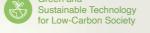


Faculty Strategic Research Areas





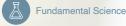


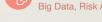












Prof. TAN Yen Joe 陳衍佐



Research Interests / Expertise

- Artificial intelligence and big data for Earth observation
- Geophysics for hazard management and sustainable development

Assistant Professor

- (852) 3943 0463
- yjtan@cuhk.edu.hk
- (i) 0000-0001-6377-7886







Prof. WONG Teng Fong 黃庭芳



Founding Director of Earth System

Research Professor

Science Programme Fellow of American Geophysical Union

Research Interests / Expertise

- Experimental rock deformation
- Rock physics applied to energy resources
- Earthquake mechanics
- Environmental hydrogeology
- (852) 3943 3793
- tfwong@cuhk.edu.hk
- © 0000-0003-0106-9635

Prof. THIBODEAU Benoit



Research Interests / Expertise

- Ocean biogeochemical dynamics
- Stable isotope geochemistry
- Anthropogenic impacts
- Paleoceanography & paleoclimate
- (852) 3943 6390
- benoit.thibodeau@cuhk.edu.hk
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Prof. YANG Hongfeng 楊宏峰



Research Interests / Expertise

- Natural hazard (earthquake and tsunami) and sustainable environment
- Artifical intelligence for earth sciences











Associate Professor

Assistant Professor



- Clean energy and CO₂ sequestration



- 0 0000-0002-5925-6487

Prof. ZHAN Yan 詹彥



Assistant Professor

Ng Yin Ying Assistant Professor of Geophysics

Research Interests / Expertise

- Artificial intelligence for forecasting natural hazards (e.g. volcanic eruptions)
- Clean energy and sustainable environment (e.g. geothermal energy)
- (852) 3943 9327
- yanzhan@cuhk.edu.hk

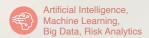


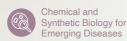


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Faculty Strategic Research Areas











Emeritus Professors and Research Professors

The Faculty is grateful for the contributions in striving for research excellence by our faculty members over the decades.

School of Life Sciences

Control of End Continuous	
Prof. CHANG Shu Ting	張樹庭
Prof. CHU Ka Hou	朱嘉濠
Prof. FONG Wing Ping*	方永平*
Prof. HO Kwok Keung Walter	何國強
Prof. KONG Siu Kai	江紹佳
Prof. KWAN Hoi Shan	關海山
Prof. LEUNG Kwok Nam	梁國南
Prof. SUN Sai Ming Samuel	辛世文
Prof. WONG Po Keung	王保強
Prof. WOO Ying Shiu Norman	胡應劭

Department of Chemistry

Prof. CHAN Kin Shing	陳建成
Prof. CHOW Hak Fun	周克勳
Prof. MAK Chung Wai Thomas	麥松威
Prof. WU Chi	吳 奇
Prof. WONG Nai Ching Henry	黃乃正
Prof. YU Chai Mei Jimmy	余濟美

Department of Physics

Prof. HUI Pak Ming*	許伯銘
Prof. XIA Keqing	夏克青
Prof. XIAO Xudong	肖旭東
Prof. YOUNG Kenneth	楊綱凱

Department of Mathematics

Prof. CHAN Hon Fu Raymond	陳漢夫
Prof. NG Kung Fu	吳恭孚
Prof. WAN Yau Heng Tom	溫有恒
Prof. TAM Luen Fai	譚聯輝

Department of Statistics

Prof. CHAN Ngai Hang 陳毅恆

Earth and Environmental Sciences Programme

Prof. WONG Teng Fong

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