

Excel x Impact

Reaching for the stars POLYU'S POLYU'S CONTRIBUTIONS to NATIONAL SPACE EXPLORATION

PolyU team wins at QS Reimagine Education Awards Substantial research funding granted by the Research Grants Council Five alumni receive the Outstanding PolyU Alumni Award

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President's Message

The year 2024 holds special meaning for The Hong Kong Polytechnic University (PolyU) as it marks our 30th anniversary as a university. I joined the then Hong Kong Polytechnic about one month before the institution gained full university status in November 1994. I take pride in having had the privilege of witnessing and participating in the remarkable transformation of this institution. Over the past three decades, we have transformed from a primarily teaching institution into a world-class university that places great emphasis on societal impact.

Today, PolyU is a world-class research powerhouse. The total amount of research funding we received from the Research Grants Council in 2022/23 (1/7/2022 - 30/6/2023) was only slightly behind that of the second ranked sister university and over 20% above that ranked in fourth place. Recently, we ranked first and second among all local institutions respectively in Research Impact Fund and Collaborative Research Fund grants in terms of the total number of projects. These achievements demonstrate our scholars' dedication to pursuing groundbreaking discoveries.

Our excellence extends beyond research. PolyU has been recognised for its innovative approach to education, as evidenced by a PolyU team recently winning a prestigious Silver Award in the Asia region at the QS Reimagine Education Awards 2023 for promoting immersive learning experiences for students.

In the coming year, I look forward to the continued support of the PolyU community to propel us to even greater heights.

Jin-Guang Teng President



THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學

Reaching for the stars: POLYU'S CONTRIBUTIONS to NATIONAL SPACE **EXPLORATION**

pace has always captivated the human imagination. Over the years, PolyU has been proud to explore the frontiers of space and unravel its mysteries by supporting the Nation's space exploration missions, by leveraging the University's cutting-edge research and engineering capabilities. As the only tertiary institution in Hong Kong to participate in various national space missions, PolyU has played a pivotal role in our country's milestone space initiatives, including the first lunar sample return mission Chang'e-5 and the first Mars exploration project Tianwen-1. This commitment to space exploration was acknowledged when PolyU had the honour of hosting the China Manned Space delegation.

During its four-day visit to Hong Kong in late November 2023, the delegation paid a visit to the PolyU campus and participated in a memorable event titled "A Dialogue between the China Manned Space and PolyU Students and Faculty Members" held at the Jockey Club Auditorium. This was the second time for PolyU to host the delegation in space exploration, following the visit of a delegation of esteemed Chinese astronautical scientists to PolyU in 2021.

Honourable guests, including Dr Choi Yuk-lin, Secretary for Education of the Hong Kong Special Administrative Region (HKSAR) Government; Dr Wang Weiming, Director-General of the Department of Educational, Scientific and Technological Affairs, Liaison Office of the Central People's Government in the HKSAR; Mr Tim Lui, Chairman of the University Grants Committee; PolyU Council Chairman Dr Lam Tai-fai; and PolyU President Professor Jin-Guang Teng, were present to extend a warm welcome to the delegation, expressing their

pride and admiration for the successful manned space missions accomplished by the Nation in recent years.

- Led by Mr Lin Xigiang, Deputy Director General of the China Manned Space Agency, the delegation consisted of the following key members:
- Mr Yang Hong, Academician of the Chinese
- Academy of Engineering, Chief Designer of the Space Station System of the China Manned Space Programme, and Researcher of the China Academy of Space Technology
- Mr Yan Pu, Deputy Director of the Information Office, China Manned Space Agency
- Mr Liu Boming, Astronaut at the Astronaut Centre of China and Shenzhou-12 Astronaut
- Mr Chen Dong, Astronaut Team Leader at the Astronaut Centre of China and Shenzhou-14 Astronaut
- Mr Dong Guangliang, Researcher of the Beijing Institute of Tracking and Telecommunications Technology, and Chief Designer of the Tracking, Telemetry and Command System
- Mr Chen Jie, Head of the Scientific Programme and Quality Control Division, China Manned Space Agency
- Ms Yang Xin, Head of the Information Office, China Manned Space Agency

With an audience of approximately 700 PolyU students and faculty members in attendance, the delegation engaged in meaningful discussions and exchanged invaluable insights about the Nation's manned space missions. The visit not only granted the PolyU community a precious opportunity to witness the latest space developments of the Nation at close quarters, but also ignited a sense of pride for the Nation's achievements in space exploration.





THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學

The China Manned Space delegation to PolyU was led by Mr Lin Xiqiang, Deputy Director General of the China Manned Space Agency.



* Photos by Information Services Department

Establishment of Research Centre for Deep Space Explorations by PolyU Academy for Interdisciplinary Research (PAIR) **Research Centre for De** With a vision to become a leading research centre of collaborative Space Explorations interdisciplinary research in space resources and the associated 深空探测研究中心 RCDSE technologies related to space exploration, PolyU established the Research Centre for Deep Space Explorations in May 2021, aiming to gather experts in the fields of geology, remote sensing, civil engineering, mechanical engineering and physics to translate research and engineering capabilities for the earthly benefits of Hong Kong, the Nation and the world.

With over 30 years of experience in deep space research, PolyU is the only university in Hong Kong that has participated in various national space projects. We express our heartfelt gratitude to the Nation for its trust and support.

> Dr Lam Tai-fai PolvU Council Chairman



Shenzhou-12 Astronaut, delivered a presentation to share his experiences in manned space missions.

The delegation exchanged views with PolyU staff and students at the discussion session. Participants of the session include. Mr Yang Hong (third from left); Mr Liu Boming (fourth from left); Mr Dong Guangliang (fourth from right); Prof. Yung Kai-leung, Sir Sze-yuen Chung Professor in Precision Engineering, Chair Professor of Precision Engineering and Associate Head of the Department of Industrial and Systems Engineering, and Director of the Research Centre for Deep Space Explorations of PolyU (third from right), Prof. Wu Bo, Fiona Cheung Professor in Spatial Science, Associate Head (Research) of the Department of Land Surveying and Geo-Informatics, and Associate Director of Research Centre for Deep Space Explorations of PolyU (second from right); Ms Lui Ho Ching, Year-four student, Department of Chinese and Bilingual Studies (second from left); as well as Mr Chen Long, PhD student, Department of Land Surveying and Geo-Informatics (first from right), at the discussion and exchange session. Prof. Geoffrey Q.P. Shen, Associate Vice President (Global Partnerships) (first from left) was the moderator.



Cover Story

PolyU's 30-year journey in deep space research

Dedicating to serving the Nation through research and innovation, PolyU possesses a wealth of international space exploration experience and has played a pivotal role in various strategic national space projects.



In the Tianwen-1 mission, PolyU developed the "Mars Landing Surveillance Camera" for monitoring the deployment of the Mars rover "Zhurong" and identified possible landing sites using advanced topographic mapping and geomorphological analysis technologies.



In collaboration with CAST, PolyU developed and manufactured the "Surface Sampling and Packing System" for the Nation's Chang'e-5 mission, the world's first fully automated multi-point lunar surface sampling and packaging. The system automatically collected and packed approximately 1.5 kilograms of surface lunar soil samples and returned back to Earth.



platform and deployment system" with Aerospace Dongfanghong Development Ltd, Shenzhen, for 2015 Long March-6's "20 satellites in one rocket" mission. The instrument was installed in the "Kaituo-1B" microsatellite

PolyU developed the "microsatellite

PolyU research teams were invited by the China Academy of Space Technology (CAST) to take part in the Chang'e-3 mission. Professor Yung Kai-leung's team jointly developed the "Camera Pointing System" with CAST, while Professor Wu Bo's team worked on the topographic 3D mapping model and analysis of the landing site.





Developed by PolyU in 1997, the "Mars Rock Corer" was used for the Mars Express Mission in 2003. Three years later in 2006, PolyU signed a collaborative agreement with the Lunar Exploration Programme Centre of the China National Space Administration to nurture talent and foster academic exchange and research collaboration.

Professor Yung Kai-leung, from the Department of Industrial and Systems Engineering, together with researchers from the Industrial Centre, adopted the concept of dental forceps to develop the "Space Holinser Forceps System", which was used by astronauts for precision soldering at the former Russia Mir space station.



2000s



2020

2021

The Nation made history with the first soft landing on the far side of the Moon with the success of the Chang'e-4 mission. PolyU helped select the landing site through topographic and geomorphological characterisation and analysis; and captured and monitored the operation of the lunar rover "Yutu-2" and taking images of the moon by moving vertically and horizontally using the "Camera Pointing System"



PolyU developed the "Soil Preparation System" for the Sino-Russian Phobos-Grunt Mission, to collect soil samples from the Martian moon Phobos



PolyU and the Academy of Aerospace Propulsion Technology, the only research centre in the Nation dedicated to this field, formed a partnership to set up the Joint Research Centre of Advanced Aerospace Propulsion Technology in July 2022.

From the cosmos to the cockpit: nurturing aviation talents

PolyU is not only a cradle for space exploration scientists, but is also a breeding ground for aviation talents. With an aim to develop Hong Kong as a hub for aviation training, PolyU is collaborating with Cathay Pacific Airways on a new integrated course for Cathay Pacific's Cadet Pilot training programme to cultivate young aviation professionals. The first group of 21 Cathay Pacific Airways cadet pilots graduated from this training programme in December 2023. The new integrated course offers an alternative mode of training for prospective pilots which includes theoretical ground training at PolyU, followed by flight training in the United States or Australia, and lastly multi-crew simulator training at Cathay City in Hong Kong.



PolyU is honoured to have played a role in the Nation's triumphs in space missions, with a notable history of participation. The University will remain at the forefront of research excellence, technological advancement and talent development, propelling Hong Kong and the Nation towards a better future.

Excel x Impact



The research and innovations of PolyU researchers in deep space exploration clinched numerous international recognitions in 2023, including:

- The China Academy of Space Technology Chang'e-5 team, in which PolyU played a significant role, was awarded the Laurels for Team Achievement Award by the International Academy of Astronautics.
- The "Mars Landing Surveillance Camera for Tianwen-1 Mars Soft Landing Mission" won the Prize of the Technical University of Cluj-Napoca Romania and a Gold Medal with Congratulations of the Jury at the 48th International Exhibition of Inventions Geneva.
- Professor Yung Kai-leung and Professor Wu Bo were honoured with the Outstanding Award (Individual) for China's Lunar Exploration Mission Chang'e-5 and the Outstanding Award (Individual) for China's First Mars Exploration Mission respectively in recognition of their remarkable contributions to the Nation's space exploration achievements.
- PolyU achieved a significant milestone by securing its membership in the International Astronautical Federation, as the first higher education institution in Hong Kong to do so.

Civil Aviation Department Chief, Flight Standards Captain, Capt. Lawrence Wong (standing, eighth from right), PolyU's Dean of Faculty of Engineering, Ir Professor H.C. Man (standing, seventh from left), Cathay Group Chief Executive Officer, Mr Ronald Lam (standing, eighth from left), senior executives from AeroGuard, and Cathay Pacific's senior management celebrate with guests and the 21 cadet pilot graduates.



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PolyU is poised to further excel. I hope I can contribute to the University's continued advancement.

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CONSOLIDATING and EXPANDING COLLABORATIONS

A conversation with Dr Laura Lo, Associate Vice President (Institutional Advancement)

With over 30 years of experience in higher education, Dr Laura Lo is a visionary leader who has made remarkable contributions to education and youth development in Hong Kong and Mainland China. She was appointed Associate Vice President (Institutional Advancement) and Director of Institutional Advancement of PolyU in September 2023. Before rejoining PolyU, she worked as a member of management at a tertiary institution, focusing on mainland affairs and entrepreneurship. Prior to that, Dr Lo held a 26-year-long career at PolyU. With her wealth of experience and deep familiarity with PolyU, Dr Lo is uniquely equipped to drive institutional advancement at PolyU to the next level.

You have deep roots at PolyU, having previously served as Director of Chinese Mainland Affairs for many years. What inspired you to return to PolyU, and how has the University changed since you were last here?

"PolyU is vibrant and ready to grow even further" - this is the feeling I got from PolyU and what attracted me to come back. In the few years since I left PolyU in 2019, the University has, encouragingly, made new strides. For example, the opening of the Main Entrance and the University Square has made the campus a beautiful and vibrant place. In addition, PolyU's management team has a strong sense of unity and cohesion; although we are in different positions, we share common goals and work together with consensus and effectiveness. At the same time, I am glad to see many of my old colleagues and friends again, as well as many outstanding scholars joining PolyU, injecting new energy into the University. PolyU has undergone a period of change, steady development and is poised to further excel; I hope I can contribute to the University's continued advancement.

As the Associate Vice President (Institutional Advancement) and Director of Institutional Advancement of PolyU, how do you plan to enhance institutional advancement and solicit donations for the University? What are the main goals you hope to fulfill during your tenure?

With a long history and solid foundation, PolyU has established strong ties with the business community. I hope that we can further consolidate our friendly ties with various sectors, so that they will continue to understand and care about the University's development, and thus provide more support for PolyU. As I had worked at PolyU for a long time, I am well aware of its development, which will help me greatly in explaining to supporters in various sectors the University's achievements in teaching and research.

We also need to expand our network of supporters, not only local but also Mainland benefactors; not only individuals but also organisations, and I hope that they will become a new force of support for PolyU. I also hope to work with my colleagues to promote a culture of philanthropy among alumni and encourage them to support the long-term development of their alma mater.

In addition, I have noticed that the new generation of philanthropists and supporting organisations not only donate to the University's endowed schemes, but also place more emphasis on "collaborate", "co-develop", "co-nurture" – joining hands with PolyU for projects and activities that have an impact and significance to the community. PolyU has many education and research projects that benefit the community, I hope to foster more win-win collaborations.

Given your extensive connections and in-depth knowledge of Mainland affairs, how would you further strengthen industrial partnerships and promote innovation and entrepreneurship?

I have been in close contact with the business sector and also led large-scale innovation and entrepreneurship projects, having nurtured more than 600 startups, and often matched Hong Kong startups with Mainland enterprises and venture capital experts. In addition, over the years, I have been involved in Mainland development work, such as assisting PolyU in setting up six bases in different parts of the Mainland, serving as a member of the Shenzhen Municipal Committee of the Chinese People's Political Consultative Conference (CPPCC) since 2021, and being the Vice President of the Hong Kong Association for the Advancement of Science and Technology. I have put forward a number of proposals to promote technological collaboration between Hong Kong and Shenzhen. All these will help promote innovation and entrepreneurship.

Outside of work, you have been actively involved in community service and have been volunteering with the Scout Association of Hong Kong since 1992, serving now as its Assistant Chief Commissioner (Mainland Affairs). What motivates you to serve the community?

Young people are the future of our society. I am passionate about nurturing young people and have learnt a lot from my work in scouting, for example, I have learnt how to communicate with young people, and being in contact with the younger generation makes me younger and more energetic! I have also learnt about organising large-scale activities, built up the spirit of perseverance and enhanced my leadership skills. For example, we helped volunteers derive a sense of achievement from their service, and when they were not doing a good job, we found ways to coach them rather than blaming them. These experiences can be applied to my daily work.

Based on your own life experience, what words of encouragement do you have for young people?

Do your best and have no regrets. Start off with a positive mindset, then move towards your goal step by step; there is no limit to what lies ahead. As long as you have tried your best, there is no need for any regrets; just accept whatever results you get with peace of mind.

How do you achieve work-life balance, and are there any hobbies that you particularly enjoy?

I love all my work and community service, and I enjoy being in nature, hiking, running marathons. Be it going to work, being a Scout or organising events, I take pleasure in doing them.



Dr Lo serves as the Vice President of the Hong Kong Association for the Advancement of Science and Technology and a member of the Shenzhen Municipal Committee of CPPCC, making dedicated efforts to education and youth development.

Education

Excellent Teachers on Teaching Excellence Symposium 2024 Universities discuss adopting genAl in education



The Excellent Teachers on Teaching Excellence (ETTE) Symposium is one of the most significant universitywide teaching and learning events organised by PolyU. Themed "GenAI in Higher Education", the ETTE Symposium 2024 attracted over 400 local and nonlocal registrants, and featured presentations and panel discussions by educators, teachers, and students on the opportunities and challenges of adopting generative artificial intelligence (genAI) in higher education.

Professor Jin-Guang Teng, President of PolyU, and Professor Kwok-yin Wong, Vice President (Education) of PolyU, gave opening remarks to kick off the event. This was followed by a sharing session by the Internationalisation at Home team from PolyU's School of Nursing, who won the University Grants Committee (UGC) Teaching Award 2023 in the Collaborative Teams category for 2023.

he ETTE Symposium

2024 was a full-day event

conducted in hybrid mode,

held on 12 January 2024.

The event featured two keynote presentations by distinguished professors and two panel discussions by vice presidents of universities, students and IT industrial experts. Teacher representatives from PolyU's faculties and schools also shared their views on this timely and crucial topic.

The Symposium provided an excellent opportunity for insightful exchange, contributing to the overall progress of the higher education sector.

Scan the QR code to revisit the Symposium:



Featured sessions

Keynote presentation

Exploring genAl for personal and collaborative learning



Professor John Mitchell

Mary And Gordon Crary Family Professor of the School of Engineering, and Professor, by Courtesy, of Electrical Engineering and of Education, Stanford University, USA

Professor Mitchell introduced promising directions and current questions about using genAl based on recent research projects and explored how genAl could support collaborative learning.

Vice Presidents' panel discussion

Paradigm shift in higher education



Attendees gained insights on the policies and management of genAl in higher education through the discussion by vice presidents of universities in Hong Kong, Singapore, and Australia.

Keynote presentation

Steering human-centred use of generative AI in education



Professor Fengchun Miao Chief, Unit for Technology and Al in Education, UNESCO, Paris

Professor Miao examined the functions and limits of genAl, discussed related controversies, proposed key steps for regulating genAl tools, and shared the progress of the Al competency frame works UNESCO has been developing.

Students' panel discussion

University learning in the age of genAl



Students from six local universities shared their views in a discussion facilitated by Professor James Tang Tuck-hong, Secretary-General of UGC.

PolyU team's immersive learning project wins silver at QS Reimagine Education Awards



A cross-departmental PolyU team has won the Silver Award in the Asia Region at the QS Reimagine Education Awards 2023 – the Oscars in the education sector – for their project "Immersive Learning on the Run: Student-Staff Partnership for Technology-Facilitated Ubiquitous Learning". This project demonstrates innovative teaching by leveraging technology, multimedia, and immersive virtual environments. PolyU is the only institution in Hong Kong to have won the Regional Award for Asia across all categories out of 1,200 applications worldwide.

The PolyU team was led by Dr Rodney Chu, Senior Lecturer of the Department of Applied Social Sciences, with members coming from the same department and the Educational Development Centre.

The team adopted an innovative Cave-cum-Studio Device for the PolyU General University Requirements subject "From Gloom to Bloom: Global New Urbanism". With the provision of an immersive virtual environment and digital production studio, and the embedding of a student-staff partnership approach, students and teachers are empowered to co-design teaching and learning content and method tailored to students' needs and interests.



Team members of the PolyU Cave-cum-Studio Device team: (from left) Mr Edmund Lau, Mr Ivan Lee, Ms Kathy Lam, Dr Rodney Chu (team leader), Mr Charles Woo, and Dr Mark Kai-pan.

For example, the team has co-created videos on topics related to intangible cultural heritage, urban landmarks, suburbs, and markets, and then showcased them in the Hybrid Immersive Virtual Environment (HiVE) at the University's Industrial Centre, the first large-scale X-Reality hybrid classroom in Hong Kong. This approach allows students to assess sustainable development goals and enhances their learning experience.

Team leader

Dr Rodney Chu Wai-chi Chairperson of Departmental Learning and Teaching Committee and Senior Lecturer Department of Applied Social Sciences

Team members

Dr Mark Kai-pan Educational Development Officer

Mr Charles Woo Project Fellow Educational Development Centre

Department of Applied Social Sciences

Mr Edmund Lau Project Associate

Ms Kathy Lam Project Assistant

Mr Ivan Lee Project Assistant

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Our award-winning project encourages students to understand local district development socially, economically and environmentally by leveraging the power of technology.

PolyU unveils pioneering Research Centre for Assistive Technology



PolyU has recently revealed its groundbreaking Research Centre for Assistive Technology (RCATech), representing a significant leap forward in assistive device design, technology advancement, and rehabilitation research and development. With the overarching goal of fostering an inclusive and accessible society, RCATech aims to empower individuals with disabilities and the elderly through the implementation of cutting-edge technology and innovative solutions.

As the first research centre of its kind among Hong Kong's esteemed educational institutions, RCATech has forged strategic partnerships with local nongovernmental organisations (NGOs) and international educational institutions. This collaborative approach seeks to foster multidisciplinary research and drive technology transformation for the betterment of both industry and society at large. Professor Frank Chan Fan, the former Secretary for Transport and Housing of the HKSAR Government and the current Hong Kong Deputy to the National People's Congress, is RCATech's Honorary Advisor.

RCATech has formed partnerships with two prominent international research centres: the AGE-WELL Network of Centres of Excellence at University of Toronto in Canada, and the Rehabilitation Research Institute of Singapore (RRIS) at Nanyang Technological University (NTU) in Singapore. RCATech and RRIS at NTU have signed an agreement for master research collaboration and project cooperation aimed at advancing rehabilitation research. One noteworthy example is a feasibility study aimed at developing a normative ability database for individuals of Asian ethnicity with movement disorders, as well as their healthy counterparts.

Leaders of five local NGO partners witnessed the inauguration of PolyU's Research Centre for Assistive Technology.

RCATech collaborates with five local NGOs and two international educational institutions:

NGOs

- 1. The Hong Kong Society for the Aged
- 2. Innovation Hub, Elderly Resources Centre of Hong Kong Housing Society
- 3. Hong Kong PHAB Association serving persons with disabilities
- 4. SAHK-serving persons with disabilities
- 5. Association for Engineering and Medical Volunteer Services

International educational institutions

- 1. AGE-WELL Network of Centres of Excellence at University of Toronto
- 2. Rehabilitation Research Institute of Singapore at Nanyang Technological University

In addition to these collaborations, the Faculty of Health and Social Sciences (FHSS) at PolyU also formed a partnership with HKT, aiming to provide support to research projects conducted by FHSS academics, researchers, and students on the PolyU campus. This collaboration capitalises on HKT's extensive 5G network coverage and services, offering a unique opportunity to enhance research capabilities. The cooperative efforts also encompass collaborative research activities with the goal of benefitting the healthcare industry.

RCATech leverages PolyU's research excellence and academic heritage in the rehabilitation, health sciences, design, environmental and engineering disciplines to develop fundamental technologies and intelligent applications. RCATech comprises researchers from the FHSS, School of Design, Faculty of Engineering, Faculty of Construction and Environment, Industrial Centre and Jockey Club Design Institute for Social Innovation.

PolyU and HKSI team up for a sports and technology research centre

PolyU and the Hong Kong Sports Institute (HKSI) have signed a Memorandum of Understanding (MoU) to establish the "PolyU-HKSI Research Centre" (the Centre), with the aim of driving research in the field of elite sports, promoting the development of sports science and technology, and assisting Hong Kong athletes in reaching their full potential and achieve greater success.

This strategic partnership will facilitate closer collaboration between the PolyU and HKSI, enabling the two institutions to share resources and advance research in sports science and technology development. The Centre will serve as a platform for connecting PolyU researchers with sports organisations, forming an expert team comprising academics, technologists, sports professionals and technical analysts. This team will engage in cuttingedge interdisciplinary research and develop joint proposals for large-scale projects.

Professor Jin-Guang Teng, PolyU President, emphasised PolyU's unwavering support sports development, citing initiatives such as the Outstanding Sportsmen Recommendation Scheme launched in 1998, and the partnership with the HKSI on the Elite Athletes Study Programme since 2017, which encourages elite athletes to pursue undergraduate programmes at PolyU. The establishment of the Centre signifies the commitment of both parties to making greater contributions to the promotion of sport development. The Centre will be



PolyU and HKSI representatives together with PolyU student athletes.



■ The MoU was signed by Prof. Christopher Chao, Vice President (Research and Innovation) of PolyU (front row, left), and Dr Trisha Leahy, Chief Executive of the HKSI (front row, right), officially establishing the "PolyU-HKSI Research Centre". The signing ceremony was attended by Dr Lam Tai-fai, Council Chairman of PolyU (back row, second from left); Prof. Jin-Guang Teng, President (back row, first from left); as well as HKSI representatives, including Mr Tony Choi, Chief Executive Designate (back row, second from right), and Dr Raymond So, Director of Elite Training Science & Technology (back row, first from right).

jointly operated by PolyU's Research Institute for Sports Science and Technology (RISports) and the HKSI. It will function as a platform for research innovation, knowledge exchange and technology transfer in the realm of elite sports.

RISports was established in June 2022 to address emerging societal needs in sports research and technology. It brings together multidisciplinary experts from PolyU and around the world to deliver advanced scientific solutions for the field of sports.

Researchers develop NOVEL SELENIUM NANOPARTICLES for POSTMENOPAUSAL OSTEOPOROSIS management

ith an ageing global population, osteoporosis has emerged as a significant public health issue, with concerns such as bonerelated health problems, increased mortality, and rising healthcare expenses. A PolyU research team has developed novel selenium nanoparticles (Cs4-SeNPs) for the management of postmenopausal osteoporosis. Its latest research findings were recently published in the Journal of Functional Foods.

What is osteoporosis?

Osteoporosis is a bone disease that silently weakens the bones, even resulting in fractures. According to International Osteoporosis Foundation, more than 200 million people worldwide are suffering from osteoporosis. It was also found that one in every three women and one in every five men over the age of 50 suffered from the condition.

 The research team, led by Professor Wong Ka-hing, has developed selenium nanoparticles to manage post-menopausal osteoporosis more effectively. While the disease can affect people anywhere, the most commonly affected areas include the hips, wrists, or spine. It can affect anybody but is more common in women and older men. Women going through menopause are at a higher risk of developing osteoporosis. The key factors behind this are hormonal changes, genetic factors, and lifestyle choices. Other factors like reduced estrogen levels in postmenopausal women can also contribute to bone loss. Early detection and treatment is crucial because osteoporosis is often asymptomatic until fractures occur.

> Apart from developing a highquality, safe and evidencebased bone protective agent to improve the quality of life of postmenopausal osteoporosis patients, our team is now investigating the effects of Cs4-SeNPs on treating Parkinson's disease and more.



Professor Wong Ka-hing

- Director, Research Institute for Future Food
- Professor, Department of Food Science and Nutrition

Who made the breakthrough?

Addressing the challenge, a team of researchers led by Professor Wong Ka-hing, Director of the Research Institute for Future Food and Professor of the Department of Food Science and Nutrition, utilised polysaccharide-protein complexes (PSPs) extracted from the Cordyceps sinensis (Berk.) Sacc. mycelium (Cs4) and patented nanotechnology to create selenium nanoparticles with a uniform structure and high stability Cs4-SeNPs.

Selenium (Se) is a vital trace mineral for human health, playing a crucial role in numerous physiological functions. Over the past decades, extensive evidence has shown that Se deficiency can have detrimental effects on bone microarchitecture and is linked to osteoporosis, highlighting its importance in bone metabolism. Selenium nanoparticles (SeNPs) have recently garnered attention in research due to their remarkable bioactivity and lower toxicity compared to commonly found selenocompounds in foods. However, there is limited scientific research on their effects on bone health.



 Cordyceps sinensis (Berk.) Sacc. is a medicinal fungus which has been long used as a tonic and therapeutic agent.

直至器結體Cs4多驗蛋白功能化納米硒: 一種有助於管理更年期骨質疏鬆症的新型納米礦物質 Selenium nanoparticles functionalised by Cs4 polysaccharide-protein complex: A novel nano-mine for managing postmenopausal osteoporosis

How does Cs4-SeNPs work?

In experiments using pre-osteoblast murine MC3T3-E1 cells, the research team demonstrated that Cs4-SeNPs were taken up rapidly and efficiently by the cells. Treatment with Cs4-SeNPs (10μ M) increased the proliferation of the MC3T3-E1 cells and promoted their differentiation to mature osteoblasts. Enhancement of bone mineralisation of the MC3T3-E1 cells was also observed, indicating the promoting effect of Cs4-SeNPs on new bone formation.

Further investigation of their action mechanism revealed that Cs4-SeNPs induced the production of physiological levels of reactive oxygen species to trigger osteoblast differentiation. Interestingly, a comparison of these effects with those of common selenocompounds found that only Cs4-SeNPs showed significant osteogenic activity, and it was less toxic to the cells.

More importantly, Cs4-SeNPs (25-500µg/kg BW/ day) exhibited promising in vivo bone protective efficacy against OVX-induced osteoporosis by promoting bone formation, inhibiting bone resorption, and improving bone microarchitecture after oral gavage for six weeks.

What is next?

This patented nanotechnology has gained wide recognition, and won various national and international awards, including the Ministry of Education's Higher Education Outstanding Scientific Research Output Awards (Science and Technology) 2020: Second-Class Award in Technological Innovation.

The research team is now collaborating with industry partners to develop healthy food products based on Cs4-SeNPs. According to Professor Wong, the mineral has potential applications beyond osteoporosis management, including treating Parkinson's disease. The team aims to further explore its biomedical value through interdisciplinary collaboration, promoting research and applications in related fields.

PolyU receives SUBSTANTIAL FUNDING from the **RESEARCH GRANTS** COUNCIL

olyU continues to excel in its pursuit of scientific and technological advancement, as demonstrated by the significant funding awarded for its research projects. The University ranked third out of the eight UGC-funded universities in the total amount of research grants received in 2022/23 from the Research Grants Council (RGC), with the amount being just behind that of the second sister university and over 20% above that of the fourth sister university. Moving into the 2023/24 exercise, PolyU has received a total of HK\$101.1 million from four important RGC funding schemes. They are as follows:

RGC funding schemes	No. of funded projects	Funding awarded in 2023/24
Collaborative Research Fund (CRF)	11	HK\$64.9 million
Research Impact Fund (RIF)	5	HK\$20.9 million
National Science Foundation of China and the Research Grants Council (NSFC/RGC)'s Collaborative Research Scheme (CRS)	3	HK\$10.5 million
National Science Foundation of China and the Research Grants Council (NSFC/RGC)'s Joint Research Scheme (JRS)	4	HK\$4.8 million

11 PolyU-led projects awarded Collaborative Research Fund (CRF)

PolyU has secured HK\$64.9 million in funding from the CRF in 2023/24 with its 11 projects, placing it second among all local institutions in terms of the total number of projects funded by the CRF. Among the 11 awarded projects, nine were funded by the Collaborative Research Project Grant and two by the Young Collaborative Research Grant.

The projects embrace several frontier areas, including edge artificial intelligence, artificial auditory systems, nanomaterials, cancer diagnosis, age-related metabolic disease, construction and environment, neural networking in psychology and behaviour, and 6G-based sensing technologies. Here are the awarded projects, the respective project coordinators, and the funding received:

2023/24 Collaborative Research Project Grant projects



Dr Kenneth Cheng King-yip Associate Professor, Department of Health Technology and Informatics

Project:

White Adipose Tissue (Fat) Dysfunction in Ageing and Its Related Metabolic Diseases: New Insights and Therapeutic Potential (in collaboration with CUHK and HKU)

Funded amount: approx. HK\$8.2 million



Professor Cao Jiannong Dean of Graduate School Otto Poon Charitable Foundation Professor in Data Science, Chair Professor of Distributed and Mobile Computing of the Department of Computing

Project Heterogeneity-aware Collaborative Edge AI Acceleration (in collaboration with HKU and HKUST) Funded amount: approx. HK\$7.4 million



Towards Next-generation Artificial

Auditory System with Brain-inspired

(in collaboration with CUHK, HKU and HKUST)

Funded amount: approx. HK\$6.4 million

Project:

Technologies

Professor Tan Kay-chen Chair Professor of Computational Intelligence, Associate Head (Research & Development), Department of



Project: High-resolution Single-cell Multiomics: Joint Profiling of Multiple Types of Biomolecules in the Same Single Cell (in collaboration with CUHK and HKUST) Funded amount: approx. HK\$6.4 million



Professor Wang Yuhong Professor, Department of **Civil and Environmental** Engineering

Project:

Improving the Health and Stability of Roadside Trees in Compact Urban Development through Novel Road Systems and Tree Root "Training" (in collaboration with HKBU, HKU and HKUST) Funded amount: approx. HK\$5.4 million

Project: Towards Future Climate-resilient Seacrossing Bridges via Intelligent Learning of Long-term Real Monitoring Data (in collaboration with CityU, HKU and HKUST) Funded amount: approx. HK\$5.1 million



Dr Liu Liang Assistant Professor, Department of **Electrical and Electronic Engineering**

Project Sensing in 6G Cellular Networks (in collaboration with HKU) Funded amount: approx. HK\$4.8 million

Excel x Impact



Professor Chen Jianli Professor, Department of Land Surveying and Geo-Informatics

Project:

Multi-sensor Monitoring, Geophysical Interpretation and Prediction of Sea Level Rise in Hong Kong (in collaboration with CUHK and HKUST)

Funded amount: approx. HK\$6.6 million

Professor Yang Mo

Associate Head (Research) and Professor, Department of Biomedical Engineering

Ir Professor Xia Yong

Professor, Department of Civil and Environmental Engineering



HK\$64.9 million

CRF

11 projects

Dr Tan Youhua Associate Professor, Department of Biomedical Engineering

Project The Roles of Mechanically Heterogeneous Local Niches within Primary Tumours in Metastatic Organotropism (in collaboration with CUHK and HKU) Funded amount: approx. HK\$6.0 million



Dr Zhao Jiong Associate Professor, Department of Applied Physics

Project: Scalable Two-Dimensional Polymorphic Ferroelectrics Towards In-Memory Processing (in collaboration with CityU) Funded amount: approx. HK\$4.1 million

2023/24 Young Collaborative Research Grant projects



Dr Bolton Chau Associate Professor, Department of Rehabilitation Sciences

Project: The Role of the Human Frontopolar Cortex in Complex Decision Making: Neural Network Modelling, Aging, and Enhancement (in collaboration with CUHK and HKBU)

Funded amount: approx. HK\$4.6 million

PolyU has the most projects funded by the Research Impact Fund (RIF)

Five research projects led by PolyU scholars have been awarded a total of HK\$20.9 million in funding from the RIF 2023/24 by the RGC, placing PolyU top among local universities in terms of the total number of funded projects.

> The five funded projects cover a wide range of research areas, including microbiology, construction and environment, geoinformatics technology, and intelligent wearable textiles, demonstrating PolyU's commitment to research excellence. The funding will facilitate PolyU researchers in translating scientific findings into real-world applications and making influential contributions to society.





Description:

Budget to be funded by RGC*:

Professor Chen Sheng

Project:

Description:

Budget to be

funded by RGC*

(in collaboration with HKU) A flexible, economical and value-added physico-chemical

approach to recycling waste polyolefin plastics into low-carbon and durable asphalt pavement

approx. HK\$4.1 million

Professor Leng Zhen



Description:

Budget to be funded by RGC*:

Professor Joanne Yip Yiu-wan

Associate Dean (Industrial Partnership) and Professor of School of Fashion and Textiles

* The RGC funds 70% of the project cost while university/ organisational partner(s) will match the remaining 30% of the project cost

RIF

The RIF encourages academics to harness the potential of their research to deliver benefits to the wider community, spurring impactful and translational research projects. It also promotes collaboration between academia and government departments, the business sector, industry and research institutes. In total, 14

2023/24 Research Impact Fund awarded projects

turbines

approx. HK\$5.0 million

Project:

Budget to be

funded by RGC*:

Professor Zhu Songye



Project:	An Al-enabled Geospatial Platform for Smart Facility	
	(in collaboration with HKBU and HKUST)	
Description:	Introduction of a dedicated smart mobility solution to enhance the travel experience for people with disabilities and the elderly	
Budget to be funded by RGC*:	approx. HK\$4.3 million	

Dr Liu Xintao



Digital Twin-enabled Intelligent Assessment and Maintenance

of Offshore Wind Turbine Structures in a Life-cycle Context

A novel mobile sensing and digital twin technology for

monitoring the structural deterioration of offshore wind

(in collaboration with CityU and HKUST)

Excel x Impact

Development of Bacterial Pseudaminic Acid-based Vaccine to Combat Infections Caused by Multidrug Resistant Bacteria (in collaboration with HKU)

A new way to combat bacterial infections, which aims to slow down or halt the onset of the post-antibiotic era

approx. HK\$4.2 million

Durable Low-carbon Asphalt Pavement Built with Recycled Waste Polyolefin Plastics through Reactive Extrusion



Developing a New Generation of Pressure-controlled Wearable Soft Braces to Improve the Efficiency and Compliance in Treating Adolescent Idiopathic Scoliosis

(in collaboration with CUHK and HKU)

Providing effective and comfortable pressure-controlled wearable soft braces for adolescent idiopathic scoliosis patients approx. HK\$3.4 million

Significant funding awarded for impactful multidisciplinary research

NSFC/RGC CRS 3 projects IK\$10.5 million

With total funding of HK\$10.5 million granted for three PolyU-led projects under the National Science Foundation of China and the Research Grants Council (NSFC/RGC)'s Collaborative Research Scheme (CRS), PolyU ranked top among higher education institutions in Hong Kong in terms of the number of funded projects and amount of funding granted. These projects cover the fields of information technology, management science, and marine and environmental science.

2023/24 NSFC/RGC CRS awarded projects

Management Science

Information Technology Project Title: Efficient Scheduling of Integrated Cloud-edge-end Computing Power for AI-enabled Applications

Mainland Project Coordinator: Professor Kun Xie, Hunan University

Funded amount: HK\$3.6 million

Hong Kong Project Coordinator: **Professor Cao** Jiannong



Project Title: The Mechanism and Policy Optimisation of Multi-stakeholder Cross-regional Collaboration in the Construction Industry of the GBA

Mainland Project Coordinator: Professor Dongping Fang, Tsinghua University

Funded amount: HK\$3.6 million

Hong Kong Project Coordinator: **Professor Geoffrey** Q.P. Shen Chair Professor of Construction Management, Department of Building and Real Estate

Develop Next-generation Typhoonresistant Deep-sea Offshore Floating Hybrid Wind-wave Energy Converters: from Coupling Load Mechanism to Vibration Mitigation Technology

Project Title:

Mainland Project Coordinator: Professor Shitang Ke, Nanjing University of Aeronautics and Astronautics

Marine & Environmental Science

Funded amount: HK\$3.3 million



The University's commitment to innovation and impact is further highlighted by the HK\$4.8 million in funding awarded to four PolyU-led projects under the NSFC/RGC Joint Research Scheme (JRS), covering topics in the fields of life science, new materials science, and sustainable city development.

Projects funded under NSFC/RGC Joint Research Scheme 2023/24

Research field	Project title	Hong Kong principal investigator	Mainland principal investigator	Funded amount
Others	Recycling Construction Waste in Highway Embankments towards Sustainable Development of City Clusters: Geotechnical Assessment Considering Multi- physics Coupling Effects	Dr Zhou Chao Tsui Tack Kong Young Scholar in Civil Engineering Associate Professor, Department of Civil and Environmental Engineering	Professor Junhui Zhang Changsha University of Science and Technology	approx. HK\$1.2 million
Life Science	Novel SNARE Complexes for Autophagosome- lysosome Fusion: Mechanistic Study and Strategy for Modulation	Professor Zhao Yanxiang Associate Head and Professor, Department of Applied Biology and Chemical Technology	Professor Rong Liu China Agricultural University	approx. HK\$1.2 million



Research field Project title

New Materials Science

for Designing and Manufacturing of 4D Printed Reconfigurable Lattice Structures for Tunable **Broadband Vibration**

A New Paradigm



Suppression Mastering the Synergy Between High-voltage Cathode and Electrolyte to Build Robust Interfaces for Advanced Potassium-ion

Battery

Two PolyU intelligent technology projects awarded Smart Traffic Fund

PolyU has long been committed to driving smart cities and smart mobility through advanced technologies, with two pioneering projects secured a total funding of approximately HK\$17.36 million from the Smart Traffic Fund. These projects aim to enhance the health monitoring of long-span bridges and optimise urban parking management.

Details of the two projects are as follows:



Digital Twin-based Long-span Bridge Health Monitoring Ir Professor Xia Yong Principal investigator: Approved funding: Project summary:

Blockchain-enabled Cyber Physical System for City-wide Parking Management

Principal investigator:	Dr Tsang Yung-po
	Research Assistant Professor, Departme Engineering
Approved funding:	Around HK\$3.95 million for a duration of
Project summary:	The project utilises Web 3.0 and blockcha decentralised identity for drivers, enablir parks. Additionally, an AI-powered spatio will be developed to evaluate the supply

Excel x Impact

Hong Kong	Mainland	Funded
principal investigator	principal investigator	amount
Professor Cheng Li Associate Dean (Research), Faculty of Engineering Chair Professor of Mechanical Engineering, Department of Mechanical Engineering	Professor Han Meng Nanjing University of Aeronautics and Astronautics	approx. HK\$1.2 million
Dr Zhang Biao	Dr Dengyun Zhai	approx.
Associate Professor, Department of Applied Physics	Tsinghua Shenzhen International Graduate School,	HK\$1.1 million

Tsinghua University

NSFC/RGC **JRS** 4 projects IK\$4.8 million

- Professor, Department of Civil and Environmental Engineering
- Around HK\$13.4 million for a duration of 24 months

The project aims to develop a digital twin-based long-span bridge health monitoring platform. The Tsing Ma Bridge will serve as the testbed for this project, with a focus on the development of an automatic traffic monitoring system, a bridge fatigue damage assessment and prediction system, a vehiclebarrier collision monitoring system and a vehicle safety assessment system in high winds. By integrating sensors on the bridges, cutting-edge artificial intelligence (AI) techniques, finite element analysis and Bridge Information Modelling, the project seeks to enhance the efficiency of the road network and road space, as well as improve driving safety.

- ent of Industrial and Systems
- 24 months
- ain technology to establish ng intelligent access control to car otemporal clustering analysis system of and demand for parking spaces.



From beetles to innovation: nature's inspiration fuels materials advancement

Innovation often stems from nature's brilliance. Professor Wang Zuankai, Associate Vice President (Research and Innovation) and Chair Professor of Nature-Inspired Engineering, and his research team have tapped into this boundless source of inspiration to develop a groundbreaking cooling solution. His recently published research on a passive radiative cooling ceramic (cooling ceramic), titled "Hierarchically structured passive radiative cooling ceramic with high solar reflectivity" in the journal Science, showcases the successful translation of a novel discovery into a realworld application for sustainability.

Achieving 99.6% solar reflectivity

Co-authored with Professor Christopher Chao, Vice President (Research and Innovation) and Chair Professor of Thermal and Environmental Engineering, and in collaboration with researchers from the City University of Hong Kong, Professor Wang's team has successfully developed a cooling ceramic that achieves highly efficient light scattering and a near-perfect solar reflectivity of 99.6%. This

Our work on cooling ceramic exemplifies the power of learning from nature. It addresses a significant research gap in passive radiative cooling, specifically high solar reflectivity. Taking whiteness observed in the whitest beetle, the researchers optimised the design of the scattering system, leading to a significant increase in solar reflectivity.

innovative material demonstrates promising energysaving potential by reducing the cooling demand of indoor environments while maintaining weather resistance and high mechanical strength.

The inspiration for this breakthrough came from the intricate biological structure of Cyphochilus, the whitest known beetle. By investigating the scattering system found in the beetle's scales, the research team engineered a hierarchically porous structure for the cooling ceramic. This natureinspired system is easily fabricated and boosts excellent daytime cooling performance, thereby reducing energy consumption for indoor cooling.

First-time investigation into the Leidenfrost effect

It is the first time that the Leidenfrost effect has been investigated within the realm of passive radiative cooling materials. The cooling ceramic's ingenuity lies in its ability to achieve multiple functionalities through simple fabrication and manipulation. Its key features, including high weather resistance, mechanical robustness, the ability to depress the Leidenfrost effect, favourable recyclability, and its colour, contribute to its practical applications in diverse scenarios and building constructions. With its suitability for commercialisation and long-term outdoor applications, it also possesses advantages in terms of cost-effectiveness, durability, and versatility.

Professor Wang Zuankai

- Associate Vice President (Research and Innovation)
- Chair Professor of Nature-Inspired Engineering, Department of Mechanical Engineering



Multimodal robot leads the way in stroke rehabilitation

Stroke is a pressing issue in Hong Kong, with around 50,000 new cases reported annually and 85% of patients experiencing impaired physical mobility to varying degrees. Timely and routine rehabilitation exercises are crucial for restoring mobility and alleviating post-stroke symptoms. However, the overwhelming demand for outpatient rehabilitation services means stroke patients may not have access to necessary care.

To address this challenge, Dr Hu Xiaoling, Associate Professor of the Department of Biomedical Engineering, has led an interdisciplinary research team in developing the first-of-its-kind Mobile Ankle-foot Exoneuromusculoskeleton. This multimodal robot is designed to aid ankle-foot rehabilitation in stroke patients with hemiplegia. Powered by Internet of Things (IoT) technology, it enables telerehabilitation, allowing patients to exercise at home while therapists monitor their progress remotely. This innovation provides a solution for stroke patients in accessing timely rehabilitation services.

The Mobile Ankle-foot Exoneuromusculoskeleton the device's effectiveness. It was found to be 40% integrates exoskeleton, soft pneumatic muscles, more effective in stroke rehabilitation than applying tactile sensory feedback, and neuromuscular electrical external mechanical forces alone. The 12 patients stimulation technology. It corrects foot drop and foot who completed a 1.5-month training programme inversion, improves gait and balance during walking comprising 20 one-and-a-half-hour sessions saw and contributes to rehabilitative neuroplasticity in the improvements in ankle dorsiflexion and foot inversion. long run. By automatically detecting a patient's gait event, such as standing state, heel strike, heel off, The Mobile Ankle-foot Exoneuromusculoskeleton and toe-off, the device provides mechanical support has set a new standard for stroke rehabilitation care from the exoskeleton and soft pneumatic muscles, in local and Mainland hospitals and rehabilitation vibration tactile feedback, and neuromuscular electrical clinics, and the research team intends to stimulation, assisting patients in standing firmly, commercialise the product soon. balancing plantar pressure, exerting propelling force while walking, and improving foot drop.

Dr Hu Xiaoling, Associate Professor of the Department of Biomedical Engineering introduces the Mobile Ankle-foot Exoneuromusculoskeleton



Advantages over existing solutions:

Clinical studies conducted by Dr Hu's research team in collaboration with several local and Mainland hospitals and rehabilitation clinics demonstrated



JOINT TECHNOLOGY AND INNOVATION RESEARCH INSTITUTES established in the Mainland

s part of its strategic objective to advance our Nation's economic and scientific landscape by leveraging its research prowess and knowledge transfer excellence, PolyU has embarked on a plan to establish technology and innovation research institutes in various Mainland cities. It aligns the University's research capabilities with the industrial and societal needs of these cities, fostering industry-academia-research collaborations and promoting innovation and technology (I&T) development.

In the past year, PolyU has successfully inaugurated research institutes in Hangzhou, Jinjiang, Wenzhou, and Wuxi, while also forging partnerships through the signing of Memoranda of Understanding (MoUs) with Shenzhen Guangming, Hefei Luyang, Nanjing, Ningbo, and Wuhan. Details can be found below on the latest progress and collaborations.

Inauguration of PolyU-Hangzhou Technology and Innovation Research Institute

PolyU and the Hangzhou Gongshu District People's Government held a signing cum unveiling ceremony on 7 November 2023 in Hangzhou, marking the official establishment of the Institute. Aspiring to promote advanced technology in the fields of Grand Canal culture and tourism, intelligent transportation and medical aesthetics, the Institute will initially establish three research centres, namely the Grand Canal Culture and Tourism Research Center, Intelligent Rail Transit Center, and Digital Medical Aesthetics Research Center. These centres will collaborate with Hangzhou's key industries and university research institutes, providing exchange platforms for researchers, technology innovation services for local enterprises, and application scenarios for cutting-edge PolyU technologies.

PolyU-Jinjiang Technology and Innovation **Research Institute officially inaugurated**

PolyU and the Jinjiang Municipal People's Government held a signing cum unveiling ceremony on 2 September 2023. As the first research institute established by PolyU beyond the Greater Bay Area, the Institute serves to integrate various forms of collaboration including collaborative research, academic exchange, joint training and technology transfer. It will leverage innovative local and international resources, mainly focusing on textile technology, future food, microelectronics, and innovation and technology policy and aims to nurture outstanding engineers and highquality innovative entrepreneurial talents who are technology application-oriented.



Inauguration ceremony of the PolyU-Hangzhou Technology and Innovation Research Institute



Inauguration ceremony of the PolyU-Jinjiang Technology and Innovation Research Institute

PolyU-Wenzhou Technology and Innovation Research Institute officially unveiled

People's Government. The Institute will engage in close collaborations with local industries in marine engineering equipment and technology, flexible electronics, and ultra-precision manufacturing, with the goal to foster technological innovation, talent cultivation, research and development, and to develop Wenzhou into an innovation and technology hub. PolyU has signed agreements with both the Wenzhou Municipal People's Government and the Administration Committee of the Wenzhou Bay New Area.

Establishment of PolyU-Wuxi Technology and Innovation Research Institute

PolyU and the Wuxi Municipal People's Government of Jiangsu Province have jointly established the Institute, making PolyU the first Hong Kong tertiary institution to participate in the Yangtze River Delta's I&T initiative. The Inauguration Ceremony cum Industry-University-Research Collaboration Agreement Signing Ceremony was held on 2 November 2023. The Institute will focus on building an international high-end research and innovation platform in the areas of aviation and aeronautical engineering, advanced manufacturing, biomedical engineering, artificial intelligence, new materials and telecommunications networks; establishing an incubation base to translate research outcomes into real-world solutions; and cultivating engineers and technopreneurs through PolyU's engineering doctorate and postdoctoral fellowship programmes. Additionally, the Institute has signed agreements with ten domestic high-tech enterprises in Wuxi.



Partnerships to set up Technology and Innovation Research Institutes In addition, PolyU has also signed separate MoUs with Shenzhen Guangming District People's Government in August 2023, as well as Heifei Luyang People's Government and Wuhan Municipal People's Government in October 2023 to set up the following Institutes:

- PolyU-Shenzhen Industrial Technology and Innovation Research Institute
- PolyU-Heifei Technology and Innovation Research Institute
- PolyU-Wuhan Technology and Innovation Research Institute



PolyU and the Hefei Luyang People's Government have reached an agreement to jointly establish the PolyU-Hefei Technology and Innovation Research Institute.

The Institute was officially unveiled at a ceremony held at the Wenzhou People's Congress Hall on 9 November 2023, marking the first time a university in Hong Kong, i.e. PolyU, has collaborated with the Wenzhou Municipal



Inauguration ceremony of the PolyU-Wenzhou Technology and Innovation Research Institute

Inauguration Ceremony of the PolyU-Wuxi Technology and Innovation Research Institute



A delegation led by Prof. Jin-Guang Teng, President of PolyU, visited the Wuhan Municipal People's Government.

PolyU-nurtured startups win MAJOR INNOVATION AWARDS

olyU is a breeding ground for aspiring entrepreneurs, fuelling entrepreneurship through comprehensive support. As showcased by our signature PolyVentures initiative, the University has developed a robust entrepreneurial ecosystem that helps deliver the aspirations of PolyU students, alumni, academics, and researchers, assisting them to translate the University's research excellence into real-world solutions for the benefit of society.

With their pioneering inventions, PolyU-nurtured startups achieved remarkable results in major innovation awards, recent ones including the 3rd Asia Exhibition of Innovations and Inventions Hong Kong, Hong Kong ICT Awards, and Guangdong-Hong Kong-Macao Greater Bay Area High-value Patent Portfolio Layout Competition.

Let's meet the awarding teams and learn about their projects.

3rd Asia Exhibition of Innovations and Inventions Hong Kong

PolyU teams won eight awards in this event, including a Special Prize from Technopol Group, a Gold Medal with Congratulations of the Jury, a Gold Medal, four Silver Medals, and a Bronze Medal.

Special Prize from Technopol Group & Gold Medal with Congratulations of the Jury

Libpet Tech Limited a PolyU startup

Mr Xu Huafeng (left), Mr Lam Yuen-yik (right) Co-founder & CEO,

Libpet Tech Limited

Team members: Ms Bian Muzhi Mr Cheung Kwok-hei Mr Yau Pang-yeung



Invention: AIoT Empowered All-Terrain Personal Vehicle for People with Disabilities

The invention incorporates artificial intelligence (AI) technology and cutting-edge features to overcome the challenge of gaps, stairs, sand, and grass. An anti-collision system and precise remote control make it convenient and safe for users to operate.

Gold Medal

Asiabots Limited a PolyU startup Mr Lam Hoi-ho Co-founder & CTO, Asiabots Limited

Team members: Mr Shum Chiu-fai Co-founder & CEO, Asiabots Limited Mr Wong Man-piu Co-founder & CIO, Asiabots Limited



Invention: AI Ambassador (Digital Human Version)

Invented in Hong Kong by Asiabots, the Al Ambassador is an innovative approach to Al-driven customer service, offering super-realistic digital human avatars to suit different scenarios, especially in automating tasks such as handling inquiries, navigating users to their destinations, and promoting sale. The technology is currently deployed in numerous industries.

Hong Kong ICT Awards 2023

Smart Living (Smart Home) Gold Award

MEGA Automation Ltd a PolyU startup Dr Abraham Lam Hang-yat Director, MEGA Automation Limited



Invention: Smart Home & Facility Management System It is a system which integrates smart living and property technology, creating an exceptional, green, and low-carbon healthy lifestyle for residents. It utilises IoT technology and integrates smart hardware, enabling fully touchless access control for the estate, bringing a brand-new experience to residents' daily

mobility.

Dr Lam, a PolyU alumnus, received his first funding support from the PolyU Micro Fund in 2012, which led him to establish MEGA Automation Ltd in 2013.

Student Innovation Award – Grand Award and Gold Award (Postgraduate or above stream)

Mr Nick Zeng

Advisors:

PhD student in Applied Social Science



Professor Eric Chui Wing-hong, Professor & Head of the Department of Applied Social Sciences

Dr Joni Zhong, Research Assistant Professor of the Department of **Rehabilitation Sciences**

Invention: Meditech - Smart integrated solution for medicine management Meditech utilises autonomous algorithms and big data to drive medicine management and health services, assisting the elderly in organising and managing their medications. Ir Tony Wong, Chairman of the Steering Committee of the Awards, considered this invention an

Guangdong-Hong Kong-Macao Greater Bay Area High-value Patent Portfolio Layout Competition 2023

medical services.

Gold Award

Telefield Medical Imaging Limited a PolyU academic-led startup

Ir Professor Zheng Yongping

Co-founder and technical consultant, Telefield Medical Imaging Limited



three-dimensional ultrasonic imaging

Ir Professor Zheng Yongping, Chair Professor of Biomedical Engineering of PolyU, and his research team developed Scolioscan[®], the world's first and only ultrasound scoliosis assessment system by applying 3D ultrasound imaging technology to generate a radiography-like image of the spine to assess spinal deformity, especially in adolescents. Scolioscan® is commercialised by Telefield Medical Imaging Limited, co-founded by Professor Zheng in 2012. The technology has more than 120 patents filed or granted.

Excel x **Impact**

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effective solution to address the challenges of increasing elderly population and the demand for

Driving translation of advanced eye and vision research into real-world solutions with DEFTA Partners



 (Front row, from left) Prof. Wing-tak Wong, Chairman of the CEVR Board of Directors cum Deputy President and Provost of PolyU, and Dr Abby Gao, Director of Investment Research, Deputy Head of DEFTA, signed a formal collaboration agreement to promote technology transfer and commercialisation of advanced eye and vision health research. The signing was witnessed by: (back row, from left) Prof. Jin-Guang Teng, PolyU President; Ambassador Okada Kenichi, Consul-General of Japan in Hong Kong; and Ambassador George Hara, Group Chairman and CEO of DEFTA.

About CEVR

PolyU's Centre for Eye and Vision Research (CEVR) and DEFTA Partners (DEFTA) signed a formal collaboration agreement to promote technology transfer and commercialisation of advanced eye and vision health research. By leveraging DEFTA's extensive business network and expertise in nurturing innovative, technology-based startups, along with CEVR's outstanding research achievements, the collaboration allows CEVR to facilitate the commercialisation of research through strategic business alliance with Japanese companies. This collaboration will empower the translation and commercialisation of new research outcomes into products, and help CEVR promote research solutions worldwide.

CEVR is a research collaboration between PolyU and the University of Waterloo in Canada under the InnoHK initiative of the HKSAR Government. It is the first global hub performing groundbreaking research in five key areas - myopia and eye growth, ocular drug discovery and delivery, vision enhancement, tear film and ocular surface and advanced optometric technology - with the mission to generate technologies to prevent vision loss in the ageing population and preserve healthy vision.

HK\$3.8 million glasses and instrument from HOYA Vision Care for optometry research

According to the six-year follow-up clinical study published in 2022 on MiYOSMART, the myopia control spectacle lens co-developed by HOYA Vision Care and PolyU, it has shown that the patented Defocus Incorporated Multiple Segments (DIMS) technology is a simple, safe, effective, and non-invasive way to slow the progression of short-sightedness in children.

HOYA Vision Care announced to provide HK\$3.8 million of in-kind support to the School of Optometry at PolyU to fund a new two-year research project entitled "Effectiveness of the Defocus Incorporated Spectacle Lenses on Fast Progressing Myope: A Randomised Control Trial", with an aim of enhancing the myopia management solution and helping children with rapid myopia progression.

In the new clinical study, participating children will be offered about 700 pairs of glasses from HOYA Vision Care and will need to obtain a new pair of glasses

approximately every six months during the two-year assessment. This in-kind donation is intended to encourage participation and strengthen the validity of the study, while also helping more children in need.

Mr George Kwan, Managing Director of HOYA Lens Hong Kong Limited and HOYA Lens Taiwan Limited (second from left); Prof. Kee Chea-su, Head and Professor of School of Optometry at PolyU and Associate Director of Research Centre of SHARP Vision (second from right); Mr Tang Chi-shing, Optometrist (first from left); and Dr Dennis Tse Yan-yin, Associate Professor of School of Optometry at PolyU (first from right).



PolyU-supported startup visited by government officials



PolyU-supported start-up Eieling Technology Limited. Eieling Technology, a startup established by Ir Professor was honoured to receive a visit from a delegation Zheng Yongping, PolyU's Chair Professor of Biomedical led by Mr John Lee Ka-chiu, the Chief Executive of Engineering and Henry G. Leong Professor in Biomedical the HKSAR, at their exhibition booth at the 6th China Engineering, specialises in medical ultrasound imaging International Import Expo. Additionally, Mr Paul Chan and tissue elasticity measurement. Currently, the Mo-po, Financial Secretary of the HKSAR, also visited company is focused on the research and development their booth to gain an understanding of the technology. of Liverscan, a novel wireless palm-sized ultrasound Both officials highly commended the products and device based on PolyU's patented ultrasound imaging services of Eieling Technology. technology, designed for assessing liver fibrosis and fatty liver.

Forum to promote age-inclusive communities in the Greater Bay Area

Under the "PolyU Jockey Club Operation Solnno" Under the theme of "Social and Technology Innovation Project funded by the Hong Kong Jockey Club to Shape Community Integration for All Ages", the Charities Trust, the Jockey Club Design Institute SIRF 2023 brought together cross-disciplinary for Social Innovation (J.C.DISI) hosted the "Social stakeholders from cities in the Greater Bay Area to Innovation Regional Forum (SIRF) 2023 - Main Forum" explore the intersection of social and technological (the Forum) in December 2023 with huge success. innovation in order to create inclusive and agefriendly communities. In addition to the Main Forum, Experts from various sectors shared their strategic four thematic events were held in Hong Kong and insights into promoting age inclusivity in the community Shenzhen from September to December 2023, and improving public well-being more broadly. including of the creation of age-inclusive communities Topics included enhancing user experience through through the "participatory design" approach at the smart mobility, the social impact of age-inclusive China Charity Fair; a tour for non-governmental transportation service, fostering intergenerational organisations' representatives and urban planning and community cohesion through diverse community design professionals from Hong Kong of child-friendly programmes, as well as creating inclusive community facilities in Shenzhen; as well as two roundtable spaces for citizens of different ages in shopping malls. discussions.



Excel x Impact



■ Mr John Lee Ka-chiu, the Chief Executive of the HKSAR, and Mr Paul Chan Mo-po, Financial Secretary of the HKSAR, visited PolyU-supported startup Eieling Technology Ltd at the China International Import Expo. They were received by Mr Jia Xiaojia, CEO of the startup, also an PolyU alumnus.

> Ms Winnie Ho Wing-yin, Secretary for Housing of the HKSAR (second from right) and Mr Sima Xiao, Chairman and Chief Planner of the Urban Planning and Design Institute of Shenzhen Company Limited (first from left) as keynote speakers, the Forum was also attended by Prof. Wing-tak Wong, PolyU Deputy President and Provost (second from left), and Prof. Ling Kar-kan, Director of J.C.DISI (first from right).

208 POLYU ACADEMICS among WORLD'S TOP 2% scientists

olyU's has 208 scholars ranked among the world's top 2% most-cited scientists, exceeding last year's record of 201 scholars, according to Stanford University's latest "Updated science-wide author databases of standardised citation indicators". The significant representation of PolyU academics on this list underscores the University's ambition to become a world-class innovative institution and its commitment to translating research excellence into positive societal impact across various sectors.

This list, compiled by Stanford University, includes over 100,000 top scientists from all around the world. PolyU boasts the highest number of top scholars in Building and Construction (19 scholars) and Civil Engineering (13), globally. It also has the most distinguished scholars in six specific fields that leading the research performance in Hong Kong, including Energy (14), Operations Research (9), Optoelectronics and Photonics (9), and Nursing (7).

Remarkably, four PolyU academics rank among the top 10 scholars worldwide in their respective fields, while six scholars are among the top 20. These are the highest numbers among universities in Hong Kong. The following PolyU scholars are ranked among the world's top 50 in their fields.



Building & Construction 13 (38,433) **Professor Chen Qingvan**

Chair Professor of Building Thermal Science, Department of Building Environment and Energy Engineering



Information Systems 15 (17,784) **Professor Eric Ngai Wai-ting** Distinguished Research Professor, Department of Management and Marketing

Civil Engineering 22(54,049) Professor Zhao Xiaolin Chair Professor of Civil Infrastructure, Department of Civil and Environmental Engineering



23 (38,433) Ir Professor Albert Chan Chair Professor of Construction Engineering and Management.



Department of Building and Real Estate

Building & Construction



Building & Construction 30 (38,433) **Professor Li Heng**

Chair Professor of Construction Informatics, Department of Building and Real Estate

Strategic, Defence & Security Studies **30**(21.624) Ir Professor Chow Wan-ki

Emeritus Professor of Architectural Science and Fire Engineering, Department of Building Environment and Energy Engineering

Subject field Rank in field (field size)



Building & Construction 3 (38,433) Ir Professor Poon Chi-sun Chair Professor of Sustainable Construction Materials, Department of

Civil and Environmental Engineering



Geological & Geomatics Engineering 7 (63,191) Professor Weng Qihao Chair Professor of Geomatics and Artificial Intelligence, Department of Land Surveying and Geo-Informatics



Operations Research 6 (27,923) Ir Professor Edwin Cheng Chair Professor of Management, Department of Logistics and Maritime Studies



Civil Engineering 8 (54,049) Professor Jin-Guang Teng Chair Professor of Structural Engineering, Department of Civil and Environmental Engineering



Excel x Impact



Mechanical Engineering & Transports 34 (133,525) Professor Chau Kwok-wing* Professor, Department of Civil and Environmental Engineering



Civil Engineering 43 (54,049) Ir Professor Ben Young

Chair Professor of Steel Structures, Department of Civil and Environmental Engineering



Sport, Leisure & Tourism 44 (8,752) Professor Cathy Hsu

Chair Professor of Hospitality and Tourism Marketing, School of Hotel and Tourism Management



Operations Research 48 (27,923)

Professor Mike Lai Kee-hung Chair Professor of Shipping and Logistics, Department of Logistics and Maritime Studies



Sport, Leisure & Tourism 48 (8,752) Professor Song Haiyan Chair Professor of Tourism, School of Hotel and Tourism Management



Languages & Linguistics 50 (19,042) **Professor Hu Guangwei** Professor, Department of English and Communication

* Former PolyU scholar

15 POLYU SCHOLARS

named Highly Cited Researchers 2023

n the latest edition of the "Highly Cited Researchers" list by Clarivate Analytics, PolyU has secured a notable position, with 15 of its academics, being recognised for their significant research impact. This places PolyU as the institution with the third highest number of highly cited researchers in Hong Kong for the year 2023.

The list, which comprises 6,849 researchers from 67 countries and regions across various fields of study, identifies scholars who have produced multiple papers that have been widely cited by their peers, ranking in the top 1% by citations for their respective field and year in the Web of Science citation index over the past 11 years.

The inclusion of 15 PolyU academics in this prestigious list underscores the University's dedication to research excellence and its commitment to making a positive societal impact. This achievement is a testament to the institution's ongoing efforts to contribute to the advancement of knowledge and innovation.

Chemistry

Computer Science

The PolyU researchers featured in the list are as follows:



Dr Huang Bolong Associate Professor, Department of Applied Biology and Chemical Technology



Professor Guo Song * Professor, Department of Computing

Cross-Field



Professor Daniel Lau Shu-ping Chair Professor of Nanomaterials, Department of Applied Physics



Professor Li Gang Chair Professor of Energy Conversion Technology, Department of Electrical and Electronic Engineering



Professor Rob Law Honorary Professor, School of Hotel and Tourism Management



Professor Loh Kian-ping

Chair Professor of Materials Physics and Chemistry, Department of Applied Physics



Dr Ma Ruijie

Postdoctoral Fellow, Department of Electrical and Electronic Engineering



Professor Geoffrey Q. P. Shen

Chair Professor of Construction Management, Department of Building and Real Estate



Professor Wang Zuankai

Chair Professor of Nature-Inspired Engineering, Department of Mechanical Engineering



Professor Jerry Yan Jinyue Chair Professor of Energy and

Buildings, Department of Building Environment and Energy Engineering

Excel x Impact

Professor Tom Wu Tao Chair Professor of Frontier Materials, Department of Applied Physics

Professor Yan Feng Chair Professor of Organic Electronics,

Department of Applied Physics

Dr Iris Yu Ka-ming* Research Assistant Professor, Department of Applied Biology and Chemical Technology

Dr Zhang Xiao Assistant Professor, Department of Mechanical Engineering

Engineering

Professor John Zhang Lei

Chair Professor of Computer Vision and Image Analysis, Department of Computing

Social Sciences











PolyU hosts JHMUA Annual Meeting and Presidents' Forum on university development in Jiangsu, Hong Kong, and Macao



The event was attended by various delegates and guests including Ms Liu Jin, Director of the Department of International Cooperation and Exchanges (Office of Hong Kong, Macao, and Taiwan Affairs) of the Ministry of Education (front row, third from left); Dr Choi Yuk-lin, Secretary for Education of the HKSAR (front row, third from right); Ms Wu Cheng, Deputy Director-General of the Department of Educational, Scientific, and Technological Affairs of the LOCPG in the HKSAR (front row, second from left); Mr Li Yongxian, Director of the University Office under the Education and Youth Affairs Department of the LOCPG in the Macao SAR (front row, second from right); Mr Teng Sio-hong, Deputy Director of the Education and Youth Development Bureau of the Macao SAR (front row, first from left); and Prof. James Tang Tuck-hong, Secretary-General of the University Grants Committee (front row, first from right).



Speaking at the forum, Ms Liu Jin emphasised that JHMUA should focus on the big picture and provide support for national and regional development.

The Jiangsu-Hong Kong-Macao University Alliance (JHMUA) Annual Meeting and Presidents' Forum took place on the PolyU campus in mid-December 2023, bringing together around 130 education officials and senior management members from 38 member universities in Jiangsu, Hong Kong, and Macao to discuss the development of the Alliance and collaboration in areas including talent development and research on innovative technologies.

During the event, Professor Jin-Guang Teng, PolyU President, highlighted the JHMUA's success in facilitating various exchanges and cooperation activities, as well as establishing professional alliances that have enabled member institutions to engage in initiatives across different professional fields. He further emphasised PolyU's enhanced collaboration with municipal governments in Jiangsu Province, resulting in the establishment of the PolyU-Wuxi Technology and Innovation Research Institute

and the PolyU-Nanjing Technology and Innovation Research Institute. These initiatives have not only driven innovation and technology development in the Yangtze River Delta but also fostered industryacademia-research collaborations between universities and local governments.

The JHMUA was jointly established by Nanjing University, PolyU, and the University of Macau in December 2021. Upholding its mission of "Openness, Sharing, and Diversity", the Alliance aspires to leverage the advantages of tertiary institutions in Jiangsu Province, Hong Kong, and Macao to strengthen exchange and collaboration in areas including talent cultivation and research in innovation and technology. With the full support of the governments of the three regions, the JHMUA now consists of 38 member institutions, including 26 from Jiangsu Province, nine from Hong Kong, and three from Macao.

Dr Lam Tai-fai, PolyU Council Chairman (centre), and Prof. Jin-Guang Teng, PolyU President (fifth from left), along with other members of the PolyU senior management team, hosted a dinner welcoming over 200 esteemed guests, including Mrs Carrie Lam Cheng Yuetngor, former Chief Executive of the HKSAR (seventh from left); Prof. Tan Zhemin, President of Nanjing University (eighth from the right); Mr Li Weihua, Vice Chairman of the Jiangsu Overseas Friendship Association (sixth from left); Mr Song Lai, Deputy Director-General of the Department of Youth Affairs of the LOCPG in the HKSAR (fourth from left), as well as representatives from member institutions.



PolyU co-organises a lecture on the inheritance of Dunhuang

PolyU and the Hong Kong Palace Museum (HKPM) jointly organised the lecture "Dunhuang and the Palace Museum: The Fruits of Exchange and Mutual Learning among Cultures" at the Jockey Club Auditorium in December 2023. The lecture was under the Stories of China Lecture series.



Dr Wang Xudong, Director of the Palace Museum and a Party Member of the Ministry of Culture and Tourism, was invited to speak at the lecture and shed light on the protection and inheritance of Dunhuang and the Forbidden City. Around 600 guests, including PolyU staff, students, alumni, and members of the public, joined the event to gain a deeper understanding of Chinese culture.

The lecture was attended by Ms Winnie Tam Wan-chi, Chairman of the HKPM Board; Professor Lee Chack-fan, Vice Chairman of the HKPM Board; Dr Louis Ng, Museum Director of the HKPM; Dr Lam Tai-fai, Council Chairman of PolyU; and Professor Jin-Guang Teng, President of PolyU.

Dr Wang has presided over 60 conservation projects at nationally protected key cultural heritage sites and has been granted numerous titles and awards.



 Members from PolyU pictured with Dr Wang Xudong (fourth from right) and quests from the HKPM, including Ms Winnie Tam Wan-chi, Chairman of the HKPM Board (third from left); Prof. Lee Chack-fan, Vice Chairman of the HKPM Board (second from right), and Dr Louis Ng, Museum Director of the HKPM (second from left).

Encourage the audience to embrace cultural heritage with confidence

In the lecture, Dr Wang discussed the formation, development, and preservation of Dunhuang and the Palace Museum and inspired the audience to embrace their cultural heritage with confidence. By fostering a more open-minded and inclusive appreciation of the outstanding achievements of human civilisation, it is hoped to cultivate a nation with strong cultural influence, safeguard humanity's precious cultural heritage and strive towards building a community with a shared future for mankind.

A discussion was held during the lecture. Dr Wang discussed with two PolyU postgraduate students on the continuity and dissemination of Chinese culture. Professor Han Xiaorong, Head of the Department of Chinese History and Culture at PolyU, moderated the discussion.

Spotlights

Naming of Seal of Love Foundation Building to thank donor's support in advancing health-related research

The Seal of Love Charitable Foundation Limited (the Foundation) has generously donated to advance PolyU's research and impact on health-related disciplines. In appreciation of the donor's generosity, the Block BC building on the PolyU campus was named the Seal of Love Foundation Building.



The naming ceremony of the Seal of Love Foundation Building was held in December 2023, to honour the generous support of the Seal of Love Charitable Foundation Limited for PolyU's education and research development.

A naming ceremony for the Seal of Love Foundation Building was held, during which Dr Lam Tai-fai, PolyU Council Chairman, accompanied by Professor Jin-Guang Teng, PolyU President, presented mementos to Mr Lawrence Chan, Chairman of the Foundation, and Ms Dee Dee Chan, Director of the Foundation, and members of the Chan family. Together with PolyU's senior management, the Chan family officiated at the plaque unveiling ceremony for the Seal of Love Foundation Building. Friends of the Chan family also attended the ceremony. Professor Teng thanked the Foundation for their generosity and longstanding support for PolyU.

Establishment of a fund to promote mental health

Mr Lawrence Chan, the founder of the Foundation, has shown his support to PolyU by donating HK\$45 million to establish the Seal of Love Charitable Foundation Health and Service Impact Fund, aiming to advance PolyU's research impact in health-related disciplines. The first project beneficiary will be a five-year mental health initiative called The Resilience Students Training Hub (ReST Hub), which aims to transform university campuses across Hong Kong and Asia into mental health promotive ecosystems through services, training, and community engagement events.

Four decades of support from the Chan family

The Chan family's long-standing ties with PolyU date back to the 1980s. Pioneering Hong Kong hotelier Mr Chan Chak-fu, father of Mr Lawrence Chan, was an early champion of the proposal to set up the School of Hotel and Tourism Management (SHTM) and donated to the then Hong Kong Polytechnic for a hospitality

vocational training programme. In 2017, the family donated to SHTM to further develop the School's hospitality industry excellence. In recognition of the contribution, the building that houses the School was named the Mr and Mrs Chan Chak Fu Building.

The Chan family supports PolyU in various ways. Mr Lawrence Chan's daughter Ms Dee Dee Chan is currently a member of the University Council, a Director of Hotel Icon Limited and a governing committee member of the PolyU Foundation, contributing significantly to the University's development.

The Seal of Love Foundation Building is adjacent to the University's main entrance and the iconic long staircase. It embodies the memories of generations of staff and students and symbolises the close partnership between the Foundation and PolyU.



The donor Chan family pictured in front of the Seal of Love Foundation Building. (From left) Mrs Judy Chan, Mr Charles Chan, Mr Lawrence Chan, Mrs Lillian Chan, Ms Dee Dee Chan and Mr Harry Wind.

PolyU Celebration Dinner in recognition of members' contributions to Hong Kong



A total of 170 PolyU members and friends were honoured by the HKSAR Government from 2019 to 2023. In January 2024, the University hosted the "Celebration Dinner for PolyU Members and Friends Honoured by the HKSAR Government" to recognise their outstanding professional achievements and significant contributions to the community.

One of the highlights during the dinner was the sharing by two distinguished members who have made significant contributions to the University, including Professor the Honourable Poon Chung-kwong, GBM, GBS, OBE, PhD, DSc, JP, President Emeritus of PolyU, and Professor Sophia Chan Siu-chee, GBS, JP, about their memories of PolyU.

Professor Poon dedicated 40 years to university education, including 18 years as the Director of the Hong Kong Polytechnic and the President of PolyU; Professor Chan, recipient of the Outstanding PolyU Alumni Award 2023, best known for her decade-long stints as the Under Secretary for Food and Health and the Secretary for Food and Health, was a founding faculty member of the School of Nursing, contributing to PolyU's offering of the first bachelor degree nursing programme in Hong Kong.



Prof. the Hon. Poon Chung-kwong and Prof. Sophia Chan Siu-chee shared their memories of PolyU.

PolyU's senior management including Council Chairman Dr Lam Tai-fai, President Prof. Jin-Guang Teng, Deputy President and Provost Prof. Wing-tak Wong, and Executive Vice President Dr Miranda Lou shared the joy with PolyU's current and former Council and Court members, fellows and committee members, members of the PolyU Foundation, donors, alumni, former and current staff members who were honoured with awards or appointed Justices of the Peace by the HKSAR Government.







Dr Kathy Leng — Well-driven **YOUNG RESEARCHER** achieves acclaimed status

rising star in the world of scientific research Dr Kathy Leng Kai, Assistant Professor of the Department of Applied Physics, has made significant strides particularly in the field of materials physics. Her recent string of prestigious awards, including the Croucher Innovation Award and the TR35 Award for Asia Pacific from MIT Technology Review, has solidified her position as a key figure in the scientific community.

Awards	Awarding Institutions
Excellent Young Scientist Fund (Hong Kong and Macau) 2023	National Natural Science Foundation of China
Young Innovative Researcher Award 2023	PolyU
"Innovators Under 35" (TR35) for Asia Pacific	Massachusetts Institute of Technology Review
Croucher Innovation Award	Croucher Foundation

Dr Leng earned several prestigious research awards in the year 2023.

Dr Leng graduated from Nankai University in 2014 with a Master of Science in Materials Science and obtained her PhD degree in physical chemistry from the National University of Singapore in 2018. In the same year, she won a Chinese Government Award for Outstanding Self-Financed Student Abroad, followed by a Prof Lee Soo Ying Early Career Gold Award from the Singapore National Institute of Chemistry in 2020.

She pursued her postdoctoral studies at the University of Cambridge before joining PolyU in 2020. She was the recipient of an Early Career Award from the University Grants Committee of Hong Kong in 2022.

The inclusive and stimulating environment here at PolyU is conducive to young researchers like me realising our research ambitions and making a positive impact from the laboratory to the world.

Four research accolades in 2023

Dr Leng's journey to success has been marked by strong determination and motivation, gualities nurtured in the inclusive and stimulating environment at PolyU. She credits the University for providing her with the resources and support to follow her scientific curiosity and make a positive impact in the world.

"PolyU has been the breeding ground for much of my research," Dr Leng expressed her gratitude to the University and her peers, "I have been empowered to pursue curiosity-driven projects with the advanced facilities, the close peer network within the Department and the University's dynamism that allows young scholars to grow," she said.

The importance of interdisciplinary approach

As a materials scientist, Dr Leng achieved precise fabrication of hybrid perovskite monolayers and discovered unique physics in these monolayers. She succeeded in fabricating the first perovskite monolayer photodetector that achieved superior photoelectric conversion efficiency compared to its bulk counterpart. Additionally, she realised the noninvasive atomic-level resolution imaging of 2D hybrid perovskites and established an accurate structure-property correlation. These groundbreaking achievements pave the way forward for 2D hybrid perovskites microelectronics and optoelectronics in the future.

Dr Leng explained that she had a habit of perusing academic papers during her time at the University of Cambridge, and recounted how a chance encounter with a relevant article sparked her interest in a new topic. She also drew inspiration from interactions with and the experiences of her peers.

获奖原因

她首次成功制备了单层二维杂化钙钛矿光电器件。 规模微纳器件应用和科研成果转化提供了重要的技 ressfully fabrianted the first monolayer 2D ique physical properties, v veid their and devices in this field.

Review (left)

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Dr Leng and her research team

"As scientists, we should not only focus on our own discipline, but should also communicate with and learn from other disciplines," she said, also highlighting the significance of determination and the ability to push forward in the journey of scientific research.

PolyU's commitment to nurturing young scientists and achieving substantial breakthroughs for the benefit of future generations has been exemplified by Dr Leng's remarkable achievements. Her story is both an inspiration for aspiring researchers and a reminder of the importance of determination and dedicated efforts in the pursuit of scientific discovery.



Dr Leng received the Croucher Innovation Award from Croucher Foundation (right) and the TR35 Award for Asia Pacific from MIT Technology

PolyU researchers win award for innovative music therapy system for the elderly

By integrating classic songs and several technologies, the music-with-movement intervention stimulates seniors' cognitive abilities and develops their social skills, which, in turn, helps tackle problems caused by social isolation.

Researchers at PolyU have developed a therapeutic music-with-movement system that has won a global consumer product award in the Accessibility & Aging Tech category at the Consumer Electronics Show (CES) 2024 Innovation Awards. Notably, PolyU is the only educational institution in Hong Kong given the honour, in recognition of the exceptional impact of the system targeting older adults and their caregivers.

The CES[®] Innovation Award, an integral part of the CES, evaluates products based on engineering quality, aesthetics and design, practical value, uniqueness, and their impact on quality of life.

Dr Daphne Cheung, Associate Professor of the School of Nursing, led the project "Music-with-Movement System for Older Adults." She described the increasingly ageing population as a key focus of their work."The music-with-movement programme reinforces sustainable adoption among older adults for consistent cognitive and socially stimulation," she said.

Initially developed for people with dementia in Hong Kong, the music-with-movement system

merges therapeutic music intervention with advances in medical

 Dr Daphne Cheung, Associate Professor of the School of Nursing, led the project that developed the "Music-with-Movement System for Older Adults."

research and engineering technology, helping caregivers and staff working in the elderly care sector to effectively engage older adults. The elements in the system include oldies music, motion sensors, Augmented Reality (AR) interactive games, a game engineer and a cloud-based management platform. Through interactive, stimulating musical games, the cognitive and social stimulation levels of older adults can be raised, and issues caused by social isolation alleviated.

Integrating current information and communication technology as implementation strategies for music intervention also builds effective communication and collaboration and more effective bonding among older adults, caregivers, staff working in elderly centres and health professionals.

Dr Daphne Cheung has also received the 2023 Claudia J. Beverly Innovation Award, presented by the National Hartford Center of Gerontological Nursing Excellence, for her project on the nursing care for older adults.

Senior staff appointments and promotions (between 1 October and 31 December 2023)

Congratulations to the following PolyU members who have recently taken up a new capacity at the University (Listed in alphabetical order):

Appointments



Ir Professor Keith Chan Kangcheung

as Associate Dean (Teaching and Learning) Faculty of Engineering on 12 Oct 2023

Professor Hu Xiangen



as Director of Institute for Higher Education Research and Development, Director of Educational Research Centre, Chair Professor of Learning Sciences and Technologies Department of Applied Social Sciences on 20 Dec 2023

Major external appointments and awards of PolyU members (between 1 October and 31 December 2023)

The following PolyU members were either appointed significant duties to share their scholarly expertise to benefit the wider community or had their academic efforts duly recognised. (Listed in alphabetical order)

Professor Kaye Chon



Walter & Wendy Kwok Family Foundation Professor in International Hospitality Management, Dean and Chair Professor, School of Hotel and Tourism Management

Appointment

- Member, Business Studies Panel of the Research Grants Council
- Member, Tourism Strategy Committee, HKSAR Government

Professor Chung Chi-yung



Head and Chair Professor of Power Systems Engineering, Department of Electrical and Electronic Engineering

Appointment

 President-Elect, Governing Board of the 2024-2025 Institute of Electrical and Electronics Engineers Power & Energy Society

Professor Achim Ingo Czerny

Professor, Department of Logistics and Maritime Studies

Appointment

Chairman, German Aviation Research Society



Ms Diana Liu Maewoon

as Director of Alumni Affairs Alumni Affairs Office on 13 Nov 2023



Professor Mai Yiu-wing

as Distinguished Chair Professor of Composites Science and Engineering Department of Mechanical Engineering on 1 Nov 2023



Professor Fan Jintu

Lee Family Professor in Textiles Technology Chair Professor of Fiber Science and Apparel Engineering School of Fashion and Textiles

Appointment

• Visiting Chief Scientist, Shanghai International Fashion Innovation Center, Donghua University



Dr Vivian Hui Chi-ching

Assistant Professor, School of Nursing

Appointment

• Member, Advisory Council on Food and Environmental Hygiene, HKSAR Government



Professor Kan Chi-wai

Associate Dean and Professor, School of Fashion and Textiles

Appointment

- Executive Director, China Textile Engineering Society
- * Please refer to the stories on p.10, 15, 25, 29, 31, 37 and 39 for further information on the accolades received by other PolyU staff members.

PolyU Community



Ms Rennie Kan

Senior Marketing Manager, School of Design Award

 Intrapreneurial Lifetime Achievement Award, 2023 Outstanding Intrapreneur Awards, Global Intrapreneurs Institute



Professor, Department of Computing

• World's AI Top Scientist, International Artificial Intelligence Industry Alliance



Professor, Department of Electrical and Electronic Engineering

Appointment • 2024 Fellow, Optica



Sin Wai Kin Foundation Professor in Humanities and Technology Dean and Chair Professor of Neurolinguistics and Bilingual Studies, Faculty of Humanities

Appointment

• Member, Board of Hong Kong Palace Museum



Dr Liu Xintao

Associate Professor, Department of Land Surveying and Geo-Informatics

Appointment

• Conference Chair, The First Asian Cartographic Conference (AsiaCarto 2024)



Dr Justina Liu Yat-wa

Associate Professor, School of Nursing Award

• Fellow, American Academy of Nursing

Professor Daniel T. L. Shek

Associate Vice President (Undergraduate Programme) Chair Professor, Department of Applied Social

Sciences Li & Fung Endowed Professorship in Service Leadership Education

Appointment

- Member, Board of Governors of Caritas Institute of Higher Education (renamed as Saint Francis University) and Bianchi College of Careers
- Member, Board of Directors of The International Positive Psychology Association



Dr Shou Dahua

Limin Endowed Young Scholar in Advanced Textiles Technologies Assistant Professor, School of Fashion and Textiles

Award

 2023 Distinguished Achievement Award. The Fiber Society

Professor Haiyan Song



Mr and Mrs Chan Chak Fu Professor in International Tourism Director, Research Centre for Digital Transformation of Tourism Associate Dean and Chair Professor. School of Hotel and Tourism Management

Appointment

 Member, Business Studies Panel of the Research Grants Council

Professor William S. Y. Wang

Chair Professor of Language and Cognitive Sciences, Department of Chinese and **Bilingual Studies**

Award

• Honorary Doctorate, University of Macau

Professor Raymond Wong Wai-yeung

Dean and Chair Professor of Chemical Technology, Faculty of Science Clarea Au Professor in Energy Associate Director, Research Institute for Smart Energy

Appointment

 Foreign Member, European Academy of Sciences

Professor George Woo Emeritus Professor & Senior Advisor, School of Optometry

Appointment

 Honorary Professor, Tianjin Medical University

Professor Xiao Bin

Professor, Department of Computing Appointment



• Fellow, Institute of Electrical and Electronics Engineers

Dr Zhang Xiao



Mechanical Engineering Award

 Outstanding Impact Award, 2023 China Rising Stars in Science and Technology

Ir Dr Zheng Pai

Assistant Professor, Department of Industrial and Systems Engineering

Award

SME Outstanding Young Manufacturing Engineer Award (Class of 2024), The Society of Manufacturing Engineers

Five alumni receive the **OUTSTANDING POLYU ALUMNIAWARD**

he University has conferred the Outstanding PolyU Alumni Award 2023 on five alumni in recognition of their significant achievements in their respective fields, as well as their contributions to their alma mater and society. Four received the Outstanding PolyU Alumni Award, and one received the Outstanding PolyU Young Alumni Award. They are a fitting testament to PolyU's accomplishments in nurturing leaders for Hong Kong, the Nation, and the world.





The Outstanding PolyU Alumni Award 2023 Award Presentation Ceremony was held in December 2023.

An award presentation ceremony was held in December management, and staff members of PolyU, and dozens 2023 at Hotel ICON. Dr Lam Tai-fai, Council Chairman of PolyU and Chairman of the Award Selection Committee, and Professor Jin-Guang Teng, President of PolyU, presented the awards to the five notable alumni. Over 220 guests attended the ceremony and dinner, including families and friends of the awardees, proposers, senior











Excel x **Impact**

of past award recipients.

The award recipients conveyed their heartfelt appreciation to their proposers, the Award Selection Committee and PolyU while also expressing gratitude for the support of their families and friends over the years.

PolyU Community



About the Outstanding PolyU Alumni Award

Launched in 1996, the Outstanding PolyU Alumni Award aims to offer recognition to distinguished graduates of the University and its forerunners, namely the Government Trade School, Hong Kong Technical College, and the Hong Kong Polytechnic, for their achievements in their respective fields, active support to their alma mater, and impactful contributions to the wider community.

The Outstanding PolyU Alumni Award is a university-level award. Since 2022, achievement categories have been established to celebrate considerable accomplishments of our alumni in specific areas, namely Professional Achievement, Entrepreneurial Achievement, Scholarly Achievement, and Community Service Achievement. Recognition is now also given to outstanding young alumni. To date, 105 recipients have been honoured.

Recipients of the Outstanding PolyU Alumni Award 2023

(in alphabetical order of last name)

Outstanding PolyU Alumni Award in Professional Achievement

Professor Sophia Chan Siu-chee, GBS, JP

Professor of Nursing, The University of Hong Kong

Senior Advisor to the President's Office, The University of Hong Kong Director, HKU Primary Health Care Academy

Post-registration Diploma in Health Care Education (Nursing) (1991), Hong Kong Polytechnic

Renowned for her decade-long stints as the Under Secretary for Food and Health and the Secretary for Food and Health, Professor Chan was the first PolyU alumna and nurse in Hong Kong to assure these ministerial positions.

She has made remarkable contributions to formulating and implementing policies on health, food safety and environmental hygiene services. Moreover, Professor Chan has been widely recognised for her pioneering academic achievements, including her research in public health, tobacco control, primary health care, children's health, health promotion and disease prevention.

Despite her numerous accomplishments, she remains rooted to her nursing background and continues to support her alma mater. As a founding faculty member of the School of Nursing, she played a pivotal role in PolyU's introduction of the first bachelor's degree nursing programme in Hong Kong. Over the years, she has also served the School of Nursing in various capacities, including as a consultant and external examiner.



Outstanding PolyU Alumni Award in Professional Achievement Sr Dr Cheung Tin-cheung, SBS

Chairman, Hong Kong Green Building Council Higher Diploma in Surveying (1982), Hong Kong Polytechnic

A building surveyor by profession, Sr Dr Cheung Tin-cheung has dedicated nearly four decades of services to the Hong Kong government, with tenures spanning various departments. As Director of Buildings, he led the Buildings Department to review and develop policies and strategies that greatly enhanced building safety. He has proven to be a visionary open to new ideas and innovation through his endeavours to improve the quality of building development and promote a sustainable built environment. By removing barriers to technological adoption, he has fostered the culture of change within the building industry.

Dr Cheung has also forged close ties with his alma mater. He has served as a Member and Chairman of the Departmental Advisory Committee for the Department of Building and Real Estate, contributed to the validation panel for the Department's doctoral programme and frequently participated as a speaker at various events.

Outstanding PolyU Alumni Award in Scholarly Achievement **Professor To Chi-ho**

Visiting Chair Professor of Experimental Optometry, School of Optometry, PolyU Chief Operating Officer and Deputy Scientific Director, Centre for Eye and Vision **Research Limited**

Professional Diploma in Optometry (1987), Hong Kong Polytechnic

Professor To is a globally recognised scholar in myopia and glaucoma. Apart from publishing in top journals and being a sought-after keynote speaker at international conferences, he is a pioneer leading his research team to develop the ground-breaking Defocus Incorporated Soft Contact (DISC) Lens and the Defocus Incorporated Multiple Segments (DIMS) Spectacle Lens, which have been proven to slow the progression of short-sightedness among children by as much as 60%. Recognised as significant technological breakthroughs in vision health, both innovations have received multiple awards, including Grand Prizes at the International Exhibition of Inventions Geneva.

His headship of PolyU's School of Optometry from 2013 to 2022 was equally impressive; in the Research Assessment Exercise (RAE) 2020, 88% of the School's research outputs were rated as "internationally excellent" or above. Moreover, Professor To has connected the School with research laboratories and scholars worldwide, sparing no effort to foster interdisciplinary research.

Outstanding PolyU Alumni Award in Community Service Achievement Mr Alex Wong Chun-bong

Founder, C. B. Wong & Co. Higher Diploma in Accountancy (1982), Hong Kong Polytechnic

Renowned for his philanthropic endeavours and volunteer work, Mr Wong firmly believes in community service and giving back to society. Leveraging his expertise in accounting, he has volunteered as an Honorary Auditor, Honorary Treasurer and Financial Advisor for various non-governmental organisations (NGOs), including the China Candlelight Educational Fund and UNESCO Hong Kong Association Glocal Peace Centre. He has also chaired the Association of Chartered Certified Accountants (ACCA) Hong Kong Executive Committee.

In addition to his two decades of service, he consistently provides financial support to the ACCA Charitable Foundation, ORBIS and other NGOs, as well as higher education institutions.

Mr Wong's contributions to his alma mater are equally impressive. Over the years, he has served as a PolyU Council and Court Member, President of the Federation of The Hong Kong Polytechnic University Alumni Associations, President of the Accounting and Finance Graduates Association, as well as a student mentor and event speaker, supporting University development, alumni engagement, and student growth on all fronts.

Recipient of the Outstanding PolyU Young Alumni Award 2023

Outstanding PolyU Young Alumni Award in Entrepreneurial Achievement

Mr Fang Bing

Co-founder, Hai Robotics

Bachelor of Engineering in Electronic and Information Engineering (2014), PolyU

Mr Fang is a co-founder of Hai Robotics, the first unicorn startup nurtured under PolyU's entrepreneurial ecosystem. The company independently developed HaiPick, the world's first Autonomous Case-handling Robot, a system that boosts warehouse operation efficiency by three to four times and storage density by 80% to 400%.

Hai Robotics currently serves customers from over thirty countries and regions, with offices in China, Japan, South Korea, Australia, the Netherlands, Singapore, and the U.S. Revolutionising warehouse logistics, it has filed over 1,800 patent applications worldwide and earned the RBR50 Robotics Innovation Award in 2022.

Mr Fang has played a crucial role in facilitating collaboration between PolyU and Hai Robotics, including the launch of the Smart Delivery System in the University's new Artificial Intelligence and Robotics Lab (AIR Lab) that not only strengthens robotics education, but also encourages co-creation and innovation among students and researchers.

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Excel x Impact







"INSPIRE" Mentorship Programme enriches students' learning experience



PolyU held the "INSPIRE" Annual Gathering in January 2024, bringing 260 mentors and mentees together.

The university-wide "INSPIRE" Mentorship Programme enriches students' holistic experience and facilitates their all-rounded development through mentoring by prominent leaders and role models, who serve as advisors and life coaches of the mentees.

PolyU held the Annual Gathering in January 2024 at Hotel ICON, gathering around 260 mentors and mentees to share their interesting discoveries made through their mentoring journeys over the year.

The theme of this year's gathering was "A Journey of Discovery". PolyU's Council and Court members, who were also mentors, and senior management gave a toast to kick off the event. Mentors Mr Andy Wong, Lead of Desktop Support Service, Standard Chartered Bank (Hong Kong), and Ms Wendy Man, Senior Human Resources Manager of a media agency, shared that mentorship facilitates mutual learning and intergenerational understanding. They have found fulfilment in witnessing mentees' growth.

Their respective mentees, students Ms Corrina Leung Oi-lam and Ms Connie Cheung Man-ying, described their mentorship experience as rewarding and transformative. They credited their mentors' insights, guidance, and inspiration for helping them explore diverse career opportunities and broaden their perspectives, which contributed to their personal and professional growth.



"INSPIRE" promotes the holistic development of students

Since its launch in 2020, the "INSPIRE" Mentorship Programme has gained huge support from over 340 local and international leaders and role models, including PolyU Council and Court members, University Fellows, outstanding alumni and Polypreneurs, who have served as mentors to offer insightful guidance to more than 1,400 undergraduate and postgraduate student mentees with diverse cultural backgrounds and from all faculties and schools. Mentees benefit from an array of activities that enable personal, academic, and professional growth, such as face-to-face and online meetings, company visits, workshops, themed talks, and sharing sessions.

Mentors Ms Wendy Man (second from left) and Mr Andy Wong (second from right) said that mentorship facilitates mutual learning.



Talk on the international situation and China's diplomacy



A seminar on the topic "Current International Nation's efforts in promoting and constructing Situation and China's Diplomacy" was held on a community for the betterment of mankind. He campus in November 2023. Mr Fang Jianming, welcomed PolyU and other tertiary institutions in Deputy Commissioner of the Office of the Hong Kong to expand their cooperation to foster the Commissioner of the Ministry of Foreign Affairs of the Belt and Road Initiative. People's Republic of China in the HKSAR (the Office), was the honourable guest speaker of the seminar. Professor Jin-Guang Teng, President, Professor Ben Young, Around 200 staff and students attended the event. Vice President (Student and Global Affairs), and

Mr Fang shared the current international situation in the new era, China's diplomatic concepts and innovative practices, with a shared vision of the

Student-led club topped the women's rowing regatta



The PolyU SAO Rowing Club brought home the championship in the Women's Eight in the Xiangshan Rowing Regatta (Qianshan River), one of the events of the Henggin Tinmuk Rowing Invitational Regatta 2023, held in Zhuhai in November 2023.

The PolyU team was among the rowing teams from 14 institutions invited to participate in the Henggin Tinmuk Rowing Invitational Regatta, one of the



Mr Fang Jianming shared his insights with PolyU staff and students.

Ir Professor Albert P.C. Chan, Dean of Students, warmly welcomed the delegation from the Office. Professor Teng also expressed his gratitude for their long-standing support for PolyU.

The PolyU SAO Rowing Club excelled in its skills and teamwork to top Women's Eight in the Xiangshan Rowing Regatta (Qianshan River) 2023.

most historical and popular inter-university rowing contests in Mainland China. After fierce competition with the rowing teams from Hong Kong, China, and overseas, including Tsinghua University and Yale University, the PolyU team topped the Women's Eight in the Xiangshan Rowing Regatta (Qianshan River). Notably, PolyU is the sole university in Hong Kong to claim a championship in that year's events.

PolyU Community

PolyU Grand Concert 2023

Bringing together esteemed artists to foster the inheritance of musical greatness

ollowing the overwhelming success of the Grand Concert last year, the PolyU Artists' Alliance presented the PolyU Grand Concert 2023 at the Jockey Club Auditorium in mid-December 2023, attracting a full house of guests, including staff, students, alumni, and supporters of PolyU, who came together to enjoy a variety of spectacular performances spanning different genres and art forms.

Themed "Echoes of Generations", the Grand Concert 2023 brought together respected musical legends and rising young talents to create a captivating musical journey that connected generations and fostered the inheritance of art and culture as well as musical greatness.

The Concert was presented by the PolyU Artists' Alliance, and the Concert programme was curated by the Alliance's Convenor, Dr Liza Wang, a University Fellow of PolyU and a highly respected, multi-talented performing artist. The Concert was directed by PolyU Artists' Alliance member Mr Leung Kin-fung, a University Fellow of PolyU and a world-class musician.

Dr Liza Wang, Convenor of the PolyU Artists' Alliance, curated the Concert programme. Her expert touch made the evening memorable.

Dr Liza Wang said, "Through performances in music, dance, and other art forms, we presented classic pieces that carried a series of historical and cultural memories, as well as pieces which incorporated

modern elements. We aimed to integrate ancient and modern cultures from East and West and connect generations via diversified artistic performances and collaboration between artists and PolyU's staff, students, and alumni."

Holding art and cultural events is part of PolyU's efforts to foster the whole-person development of our students. The University also expressed gratitude to the generous sponsors of the University's Art and Culture Development Fund.

An all-star lineup

The Grand Concert featured distinguished artists delivering a variety of world-class performances. Distinguished performers included renowned opera tenor Dr Warren Mok; guzheng virtuoso Dr Lunlun Zou, a University Fellow of PolyU; renowned Steinway Artist Dr Vivian Cheng Wai; soprano Ms Bing Bing Wang; soprano Ms Louise Kwong; conductor of the PolyU Choir Mr Alex Tam; the Hong Kong Dance Company; current undergraduate student and popsinger Miss Gigi Yim Ming-hay; and undergraduate student Mr Tony Au Yeung. The Concert also featured talents from the PolyU community, PolyU Orchestra and PolyU Choir.

> Dr Lunlun Zou performed a guzheng solo from Singing the Night among Fishing Boat

The Concert was directed by PolyU Artists' Alliance member Mr Leung Kin-fung, a University Fellow of PolyU and a world-class musician.

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 Mr Leung Kin-fung, who is also a renowned violinist, performed a violin solo from the Butterfly Lovers Violin Concerto Excerpt.

The renowned tenor Dr Warren Mok (right) and soprano Ms Bing Bing Wang (left) respectively performed the songs O Sole Mio and Meine Lippen, sie küssen so heiss from Giuditta. They also performed a chorus of Brindisi from La Traviata.

Steinway Artist Dr Vivian Cheng Wai (front) performed a piano solo from the Yellow River Piano Concerto, 3rd & 4th movements and Hungarian Dance No.1 Piano Duet with PolyU student Mr Tony Au Yeung (back).

Conducted by Mr Alex Tam, the PolyU Choir sal The Song of PolyU, and I Will Sing You the Stars.

> Soprano Ms Louise Kwong performed O mio babbing ca , (Oh my dear Papa) from Gianni Schicchi.

PolyU student and pop singer Miss Gigi Yim Ming-hay sang three pop songs - 大開眼界, Only for Me, and 今生今世

The Hong Kong Dance Company, a PolyU Artists' Alliance member, performed Group Dance (Han Dynasty).



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PolyU Artists' Alliance promotes art and culture on campus and beyond



The PolyU Artists' Alliance was inaugurated in early 2023. Comprising renowned artists in different fields, the Alliance promotes art and culture on campus and beyond, extending its impact to the community and the younger generation.

The Hong Kong Polytechnic University Magazine **Excel** x Impact

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Excel x **Impact** is published quarterly to keep the local and international communities informed of PolyU's activities, people and achievements. For contributions and enquiries, please contact the Communications and Public Affairs Office at paadmin@polyu.edu.hk.

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The PolyU Grand Concert 2023, curated by the PolyU Artists' Alliance, not only represented the University's commitment to advancing art and culture but also fostered creativity and promoted an appreciation for art and culture among the next generation and in the wider community.



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