



SES eNewsletter

JAN 2026

(Highlights of 2025)

NEWS & EVENTS

Inspiring Lecture on Climate Change by Honorary Doctors featuring Prof Michael E. Mann at EdUHK



The Education University of Hong Kong was honored to host the distinguished lecture by climate scientist Professor Michael E. Mann, a Presidential Distinguished Professor at the University of Pennsylvania and an Honorary Doctorate recipient from EdUHK, for an engaging and thought-provoking lecture titled “Urgency and Agency in Addressing the Climate Crisis.” The event took place at our Tai Po campus and drew a diverse audience eager to learn about one of the most pressing challenges facing our world today.

Organized by the Department of Science and Environmental Studies, this memorable lecture served as a platform for meaningful dialogue among students, faculty members, researchers, and community stakeholders. Professor Mann’s presentation highlighted the scientific realities of climate change, emphasizing the critical need for immediate action and the power of individual and collective agency in driving meaningful change. His insights underscored the importance of understanding the science behind climate change, fostering hope, and inspiring proactive responses.

The event not only provided valuable educational insights but also fostered a spirit of community engagement and shared responsibility. Attendees had the opportunity to ask questions, exchange ideas, and reflect on their roles in addressing this global crisis. It was a reminder that combating climate change requires a united effort across all sectors of society. We extend our heartfelt gratitude to Professor Michael E. Mann for his generosity in sharing his expertise and passion with us. His presence and insights have undoubtedly inspired many to take action and contribute to a sustainable future. We also sincerely thank everyone who participated in this event, whose enthusiasm and commitment made it a resounding success.



As we continue our journey toward environmental awareness and responsibility, events like these serve as important milestones in our collective effort to create a more sustainable and resilient world. We look forward to hosting more inspiring lectures and activities that empower our community to make a difference. [Read More & Video](#)

Hong Kong Launches First Large-Scale Inquiry-Based Science Program for Primary Schools – “JC CoolScience”

The Hong Kong Jockey Club Charities Trust, in partnership with The Education University of Hong Kong (EdUHK), has launched “JC CoolScience,” Hong Kong’s first comprehensive inquiry-based science education initiative for primary schools. Supported by over HK\$265 million in funding, the four-and-a-half-year program aims to boost students’ interest and literacy in science, strengthen teachers’ pedagogical skills, and align with the new curriculum introduced by the Education Bureau.



The launch ceremony on 16 October was attended by key officials, including the Permanent Secretary for Education, May Chan, and EdUHK President, Professor John Lee Chi-Kin. The project will benefit approximately 30,000 students across 120 schools and provide professional development for 500 teachers.



Led by EdUHK’s Department of Science and Environmental Studies, the initiative features curriculum design, innovative teaching resources, and hands-on training. Collaborations with institutions like Beijing Normal University and the Smithsonian Science Education Center have resulted in locally relevant, evidence-based teaching materials. The program offers 300 minutes of enrichment modules that foster scientific inquiry, critical thinking, and self-directed learning, with real-world Hong Kong contexts integrated into the units.

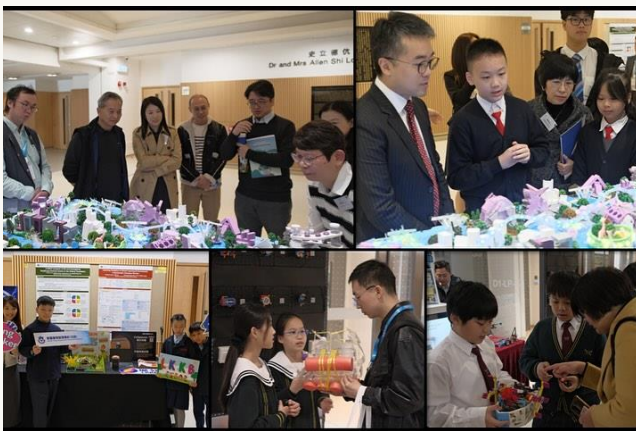
Key experiential learning venues, including the Eco-Garden at EdUHK and other local sites like Hong Kong Wetland Park and the Hong Kong Science Museum, provide students with immersive science experiences beyond the classroom. The project also promotes community engagement through science shows, competitions, and workshops, inspiring curiosity and enthusiasm for science among students and the wider community.

The launch featured interactive experiments by Dan Plane from The Royal Institution of Great Britain, showcasing the excitement of inquiry-based learning. Early success stories from pilot schools highlighted how the program is transforming science education in Hong Kong. [Read More](#)



2025 Annual Conference of the Global Chinese Academy for Science Education Research

The Department of Science and Environmental Studies and The Department of Curriculum and Instruction of The Education University of Hong Kong (EdUHK) hosted the 2025 Conference of the Global Chinese Academy for Science Education Research (the Academy) on its Tai Po campus from 3 to 4 January 2025. The theme of the conference is “Sustainable Science Education: Shaping a Brighter Future” with experts in science education from both local and international spheres were invited to discuss the latest advancements in science education research and reform.



The conference is supported by the Education Bureau (EDB) of the Hong Kong Special Administrative Region Government, the University of Hong Kong, the Chinese University of Hong Kong, the Hong Kong Federation of Education Workers, the Hong Kong Association for Science and Mathematics Education, and the Guangdong-Hong Kong-Macao University Alliance for Primary and Secondary STEAM Education. It has attracted over 400 experts, scholars, teachers, and educational researchers from



around the world. [Read More](#)

EdUHK's ECO-CONNECT FESTIVAL Promotes Sustainability and Green Living

The EdUHK ECO-CONNECT FESTIVAL, held on 14-15 October 2025, exemplifies the university's strong commitment to sustainability and experiential education. Organized by the Department of Science and Environmental Studies and Centre for Environment and Sustainable Development, the event brought together over ten environmental organizations to inspire sustainable living through practical demonstrations and hands-on activities. Participants learned about organic gardening, upcycling clothing, natural herbal care, and eco-friendly shopping practices, gaining valuable insights into how individual actions can contribute to environmental preservation. The festival also featured guided tours of the ECO-GARDEN and interactive workshops, fostering awareness of key concepts such as soil health, regenerative farming, and resource conservation. As part of EdUHK's broader efforts aligned with the United Nations' Sustainable Development Goals, the event aimed to empower students, staff, and visitors to adopt greener lifestyles and promote collective responsibility for a sustainable future. Through engaging experiences and community participation, the festival highlighted the importance of environmental consciousness and innovative approaches to sustainability within educational settings. [Read More](#)



Guangdong-Hong Kong-Macao University Alliance for Primary and Secondary STEAM Education Inauguration Ceremony and Forum

On March 22nd, The Education University of Hong Kong (EdUHK), in partnership with South China Normal University (SCNU) and the University of Macau (UM), hosted a grand inauguration ceremony and forum to celebrate the establishment of the Guangdong-Hong Kong-Macao University Alliance for Primary and Secondary STEAM Education (GHMU-APSSE). Over 180 esteemed experts, scholars and teachers from the Guangdong-Hong Kong-Macao region gathered to witness this significant milestone in advancing STEAM education.



Alliance Objectives

The GHMU-APSSE brings together experts in STEAM education from Guangdong, Hong Kong and Macao, aiming to create a cross-institutional and cross-disciplinary collaborative development model for STEAM education in primary and secondary schools across the Guangdong-Hong Kong-Macao Greater Bay Area (GBA). It seeks to enhance the interdisciplinary teaching skills of student teachers in member schools and cultivate more interdisciplinary innovative talents for the GBA.

Forum Highlights

Experts shared insights on the construction and practice of STEAM education systems in primary and secondary schools and the collaborative innovation in technology literacy education between universities and these schools, particularly in exploration and reflection regarding teacher training.

Teacher Sharing Session

Teachers' experiences with STEAM education practices in primary and secondary schools were presented and shared, along with successful cases from the Guangdong-Hong Kong-Macao region, offering fresh perspectives and recommendations for the future STEAM education development.

Looking Ahead

The Alliance will further advance educational collaboration and innovation across the region, injecting renewed momentum into the development of STEAM education and fostering a new generation of interdisciplinary talents for the Greater Bay Area.

For more information, please visit: [Press Release](#) and [Website](#)

School-based Support on STEAM Education through QTN-T

The development of students' STEAM (Science, Technology, Engineering, Arts, and Mathematics) capabilities has been a key focus for many local schools and a significant priority within the Hong Kong Government's educational policy. The school-based supports provided by the Department of Science and Environmental Studies (SES) at the Education University of Hong Kong (EdUHK), funded by the QTN-T (Quality Education Fund Thematic Network – Tertiary Institutes) scheme of the Quality Education Fund (QEF) of the Education Bureau (EDB), has played an important role in advancing STEAM education across Hong Kong. For the 2024-2025 period, the project emphasizes enhancing STEAM literacy. Currently, it supports 24 schools, including 10 primary schools, 10 secondary schools, and 4 special school.

Since 2017, seven similar school-based support projects have been carried out. These include one completed under the University-school Support Programme (USP) from 2017 to 2019 and five completed under the QTN-T scheme during the academic years from 2019/20 through 2023/24. Over the years, these projects have supported **58 primary schools, 43 secondary schools and 9 special schools, a total of 110 schools.**

01

Self-Directed Learning Approach

Professional development programs help teachers master essential content knowledge, pedagogical content, and teaching skills related to STEAM education using SDL as the core approach.

02

Comprehensive Support Activities

Co-planning meetings with school STEAM teams, professional development workshops, pre-lesson preparation, technology tool workshops, prototype making and testing, and on-site technical assistance.

03

Continuous Improvement

Lesson observations followed by feedback sessions help improve teaching practices.

04

Knowledge Dissemination

Territory-wide dissemination seminars and a publicly accessible project website continuously share outcomes and resources to support STEAM education development.

[Read More](#)



2024-25 QTN-T Professional Development Programme Workshop

Environment and Conservation Fund Project - "Educating Secondary School Communities on Managing Indoor Air Quality in Schools"



Funded by the Environment and Conservation Fund, the Educating Secondary School to Manage School Indoor Air Quality project, led by Dr Deng Wenjing from the Department of Science and Environmental Studies, launched in March 2025.

Indoor air quality (IAQ) directly impacts the health and learning efficiency of teachers and students, yet most schools lack systematic awareness and practical capabilities to address this issue.

This project aims to enhance the understanding of IAQ among secondary school teachers and students through science education, hands-on training, and campus outreach, fostering a healthier and more sustainable indoor school environment. Over 10 secondary schools were invited to participate, and the opening ceremony was held on June 7, 2025. [Read More](#)

Alumni Sharing Session

Empowering Future Educators: Insights from the EdUHK Alumni Sharing Session on Primary Science Education.

On 26 May 2025, SES hosted an insightful Alumni Sharing Session dedicated to primary science education. This event served as a valuable platform for knowledge exchange between experienced educators and aspiring primary science teachers.

Education Bureau officials, primary school principals, and alumni who are frontline teachers shared their expertise on effective strategies for teaching primary science and STEAM education. Their contributions offered valuable insights into innovative pedagogies, bridging the gap between theoretical knowledge and practical application in primary education for both undergraduate students and alumni.



A prominent focus of the event was on innovative teaching methods. Alumni guest speakers presented strategies for supporting non-local students and discussed the effective use of digital resources to enhance student engagement. Additionally, alumni provided practical guidance on the transition from academic studies to the teaching profession.

An interactive Q&A session enabled participants to seek tailored advice from speakers and explore potential collaborations with educational institutions. Attendees underscored the importance of applying the shared insights to enhance their professional practice.

27th Primary STEAM Project Exhibition

Co-Organized by SES and CESD, EdUHK

Co-organized by the Department of Science and Environmental Studies (SES) and the Centre for Environment and Sustainable Development (CESD) at EdUHK, among others, the **27th Primary STEAM Project Exhibition (PSPE)**, one of the largest STEAM exploration exhibitions in Hong Kong's primary education sector, was successfully held with the theme "**Climate Change on Air Quality and Soil**" on 8 May 2025.

The exhibition attracted **over 1,000 primary school students and teachers from across Hong Kong and the Greater Bay Area.**



Designed to cultivate critical thinking skills, the exhibition encouraged students to explore the relationship between climate, the environment, and human health, fostering an understanding of sustainable development from a young age. [Read More](#)



HKSciFest 2025: SES Science Programmes

The Department of Science and Environmental Science at EdUHK participated in and organized a series of engaging activities during HKSciFest 2025 at Hong Kong Science Museum, held from 18 to 27 April 2025. Through these interactive programmes—including "**Upcycling Waste Residuals into Eco-products**," "**A Glimpse of the Microscopic World**," and "Science in Action: Innovations and Research in SES@EdUHK"—we provided the public with valuable hands-on experiences in environmental sustainability and scientific innovation. These initiatives aimed to foster scientific literacy, raise awareness of environmental issues, and inspire innovative thinking among visitors, contributing to our shared goal of promoting science and sustainability within the community. [Read More](#)



Enhancing Primary Science Education: Teacher Training Courses Empowering Curriculum Leadership

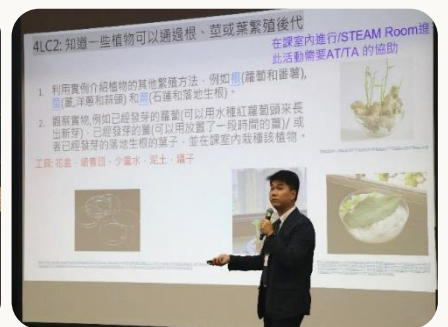
From April to October 2024, the Department of Science and Environmental Studies (SES) successfully delivered a series of professional development courses for primary science teachers. The program aimed to cultivate future curriculum leaders capable of effectively implementing the upcoming Primary Science curriculum framework.

The training comprised two seminars focusing on curriculum leadership and development, alongside 24 practical, interactive workshops covering topics such as curriculum planning and management, as well as learning, teaching activities, and assessment design. These face-to-face sessions attracted over 1100 teachers.

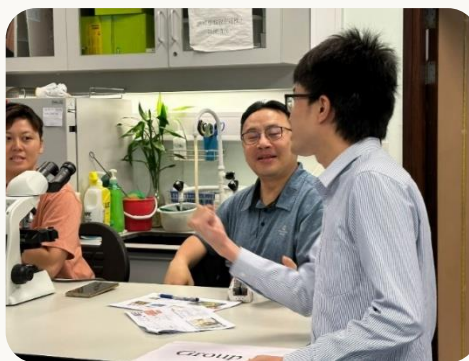
Participants provided overwhelmingly positive feedback, with 98.5% indicating that the course deepened their understanding of scientific concepts, and 98.3% affirming that the content was highly applicable to their daily teaching practices. The training not only enhanced teachers' professional knowledge but also equipped them with practical strategies to promote inquiry-based learning in their classrooms.

As the new curriculum framework prepares for its 2025/26 implementation, these professional development initiatives play a vital role in empowering teachers to lead effective science education and create inspiring learning environments for students.

Seminar



Workshop



Hong Kong Professional Development Programmes for Primary and Secondary School Principals and Teachers, 15-19 Oct 2024

Principals and Teachers Synergistic Innovation Training Centre

Hong Kong Professional Development Programmes for Primary and Secondary School Principals and Teachers: Primary and Secondary STEAM Education.

1

Training Target:

- 50 primary and secondary school principals and teachers from Chinese Mainland, Macau and Hong Kong

2

Training Purpose:

- Providing training for primary and secondary school principals and teachers from Chinese Mainland, Hong Kong and Macau region through thematic lectures, workshop discussions, and study exchanges
- Creating a platform for exchange and discussion between principals and teachers from Chinese Mainland and those from Hong Kong and Macau, fostering their ability to engage in innovative education for the future.



[Read More](#)

Large-scale Primary Science Inquiry-based Learning (IBL) Project

JC CoolScience



JC CoolScience is a 4.5-year project launched in 2024, created and funded by The Hong Kong Jockey Club Charities Trust, in collaboration with the Education University of Hong Kong (the Department of Science and Environmental Studies (SES) and the Centre for Environment and Sustainable Development (CESD)) as the strategic partner.



The Project aims

to support the development of future-ready competencies and student agency in our next generation to tackle global challenges and drive innovation, through Inquiry-based Learning (IBL).

30K

Students Benefited

From 120 primary schools across Hong Kong

120

Primary Schools

Participating in the programme

4.5

Years Duration

Comprehensive project timeline

Project Components

A. Inquiry-based Learning Experience Programme

Provide Extended Educational Experiences for Primary Science Curriculum through the Inquiry-Based Learning Framework



Teaching Materials Development

Overseas and mainland academic institutions (such as Beijing Normal University) developed teaching materials and experimental kits for Hong Kong teachers to pilot inquiry-based experiential programmes



Professional Development

Professional development and training for primary science teachers

B. Primary Science Teacher Professional Development and Training

01

Advanced Teacher Fellowship

Provide opportunities for high-quality, passionate primary science teachers to undertake overseas and Chinese Mainland study visits and advanced training.

02

Local Training and Community of Practice

Led by EdUHK team (SES & CESD), enhance teachers' capabilities in science education and teaching, including the development of inquiry-based learning materials based on local issues

03

Activities

Peer mentoring and guidance, sharing sessions with top science experts, and exchange visits in the Greater Bay Area



C. Optimize Science Education Facilities

Enhance extracurricular learning and field trips, integrating scientific theories with real-life applications to enrich students' experiential learning in science

- Renovate science education facilities and procure equipment, such as those at the Ecogarden, EdUHK
- Strengthen the learning program using an inquiry-based learning framework (e.g., guided tours and educational kits)



D. Public Participation in Science

Provide opportunities for primary school students, teachers, parents, and the community to engage in science

- Learning experiences include: Science performances, science hackathons, mobile museums, and dialogues with astronauts

[Read More](#)

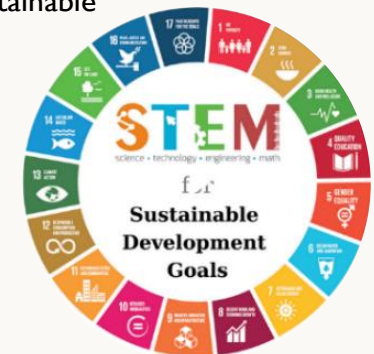
Earth Academy - ESG Youth Leadership Training Programme

To raise awareness among Hong Kong youth about climate change and sustainable development, and to cultivate them into ESG young leaders, Friends of the Earth (HK) has launched the Earth Academy - ESG Youth Leadership Training Programme in partnership with the Department of Science and Environmental Studies (SES) and the Center for Environment and Sustainable Development (CESD) at The Education University of Hong Kong.



This programme encompasses on-site visits to advanced low-carbon technology bases and environmental enterprises in the Greater Bay Area, aiming to enhance knowledge exchange in technology and education between Hong Kong and Chinese Mainland through an understanding of local advanced low-carbon and green technologies.

Through the development of innovative GREEN STEAM educational materials, it provides future educators in Hong Kong with valuable opportunities for exploration, innovation, and practical experience, thereby driving innovation and reform in sustainable development education.



Innovative Journey in Sustainable Development Education

Student representatives join the GBA short-term training to explore climate change and the Sustainable Development Goals (SDGs) while gaining insights into Earth's ecosystems and low-carbon green practices for future educational reforms.



Creation of "GREEN STEAM" Teaching Kit

Student representatives participate in the "GREEN STEAM Co-Learning Workshop" and work in groups to formulate innovative teaching material proposals that integrated environmental protection with STEAM (Science, Technology, Engineering, Arts, and Mathematics) elements.



GREEN STEAM Experimental Classes

Outstanding student representatives are assigned as "Earth Academy" teachers in Experimental Classes at primary & secondary schools, incorporating environmental protection and STEAM elements into the curriculum.

2024 Pilot Programme: Highlights Recap at 📺 <https://youtu.be/tvuFADhs5rs>

2025 Programme: Funded over HK\$1 million. Click [here](#) for more details!

President's Awards for Outstanding Performance 2024/25

The presentation ceremony was held on 20 May 2025. Congratulations to Dr CHONG Yee Ling and Dr LEE Hoi Man Sarah, Senior Lecturers II in the Department of Science and Environmental Studies, for their remarkable achievements!

Their dedication and hard work are truly inspiring. Be sure to check out their inspiring sharing to learn more about their experiences and insights!



Dr CHONG Yee Ling



Received the Individual Award (General Faculty Member Category) for Outstanding Performance in Teaching.

She remarked:

"Education isn't just about knowledge; it's also about sparking positive transformation."

"When we empower learners to reflect critically, act collaboratively and lead empathetically, we create waves of change that ripple across communities and beyond."

[Read More](#)

Dr LEE Hoi Man Sarah



Honored with the Team Award (Achievements in Creating Social Impacts and Sustainability in the Community) for Outstanding Performance in Knowledge Transfer.

She expressed:

"It's really my great pleasure to work with colleagues from different departments to promote ECE STEM! The project opens my eyes on how young children learn and enjoy STEM as well as how the kindergarten teachers put effort and show passion in STEM classroom! I sincerely hope our next generation can be motivated through STEM and become active learner for the challenges in the future!"

[Read More](#)

Bachelor of Science (Honours) in Integrated Environmental Management [BSc(IEM)] - Overseas Field Trip

From 22 to 26 June 2025, our BSc(International Environmental Management) students embarked on an enriching overseas field trip to Tokyo, Japan. This experiential learning journey aimed to bridge classroom theory with practical application, offering students an immersive environment to enhance their understanding of environmental management in a global context. Through the real-world observations, students gained valuable insights and skills that will support their academic and professional development in the field of environmental science.



Global Connections: Exploring SDGs Through Intercultural Collaboration

What better way to connect than at Hong Kong Ocean Park?

On 29 March 2025, our local and non-local students teamed up to learn about ecotourism, ecosystem preservation, sustainable lifestyles, and Sustainable Development Goals. Through this collaborative effort, we are making waves for a greener tomorrow!



Stanford University List of World's Top 2% Scientists

Stanford University has announced its 2025 list of the top 2% of scientists worldwide, highlighting the exceptional contributions of researchers across various fields. Notably, several scientists from the Department of Science and Environmental Studies at The Education University of Hong Kong have been recognized for their outstanding work. Professor Ho Wing Kei has been acknowledged for his research in Physical Chemistry. Professors Wong Ming Hung and Dr Li Wai Chin, along with Dr Tsang Yiu Fai, have been recognized for their significant contributions to Environmental Science. Additionally, Professor Wu Shiu Sun Rudolf has been honored for his research in Marine Biology & Hydrobiology, Professor Yung Kin-lam Ken for his work in Neurology & Neurosurgery, Professor Chow Cheuk Fai Stephen for his achievements in Organic Chemistry, and Dr. Li Liguang for her contributions to Microbiology. Their inclusion reflects their impactful research and dedication to advancing scientific knowledge in their respective disciplines.



Research Announcement: Detecting and Constraining Axion Dark Matter by Using the Data of the Inner Galactic Center | Dr Chan Man Ho

Led by Dr Chan Man Ho from the Department of Science and Environmental Studies (SES), the research project “**Detecting and Constraining Axion Dark Matter by Using the Data of the Inner Galactic Center**”, funded by the **2024/25 General Research Fund**, focuses on determining whether an axion dark matter core exists at the Galactic Centre and constraining the mass range of ultra-light axions (ULA).



What Are Axions?

Axions are hypothesized particles that could solve significant problems in particle physics. They have mass, are stable, and interact minimally with normal matter, making them prime candidates for dark matter.

Key Focus Areas:

1. **QCD Axions:** We will observe neutron stars using the Nanshan Radio Telescope to detect signals indicating axion-to-photon conversion
2. **Ultra-light Axions:** By analyzing stellar orbits around the supermassive black hole, we aim to confirm the existence of an axion dark matter core.

Our findings could pave the way for future discoveries of axions, and we look forward to sharing our results through journal articles, academic conferences, and public talks. [Read More](#)

Research Announcement: EdUHK Scholar Co-Authors Groundbreaking Climate Study in Nature Communications

A landmark international study published in *Nature Communications*, led by Zhejiang University, uncovers that traditional climate models significantly underestimate the warming effect of black carbon (BC) particles emitted by wildfires. Dr Joseph Ching, EdUHK Scholar, played a vital role in this discovery.

Key Highlights:

- **The "Absorption Gap" in Climate Models:** Traditional models assume BC particles are simple "core-shell" structures with a single core. However, field observations show that in wildfire-affected regions, about 21% of BC particles contain multiple cores, especially larger particles with diameters over 400 nm and core sizes over 200 nm. This structural complexity significantly increases BC's light absorption capacity.
- **Innovative Findings:** Using transmission electron microscopy, the team confirmed that coagulation leads to multi-core structures, which are more efficient at absorbing sunlight than previously thought. Electric field simulations demonstrated that multi-core particles can enhance light absorption up to 1.81 times compared to the core-shell assumption, effectively closing the ~50% underestimation gap in models.
- **Advanced Modeling & Machine Learning:** By employing machine learning techniques, researchers identified key physical proxies—specifically particle diameter parameters—that reliably predict multi-core structures. This breakthrough allows large-scale incorporation of these effects into existing climate models, overcoming previous observational challenges.
- **Implications for Climate Policy:** Coupling their findings with global atmospheric models, the team estimates that multi-core BC particles could increase global BC absorption by approximately 19%, with particularly strong effects in wildfire-prone regions such as Southeast Asia, South Asia, and parts of Africa. This highlights the urgent need to include coagulation and complex mixing states in future climate assessments.

Expert Insights:

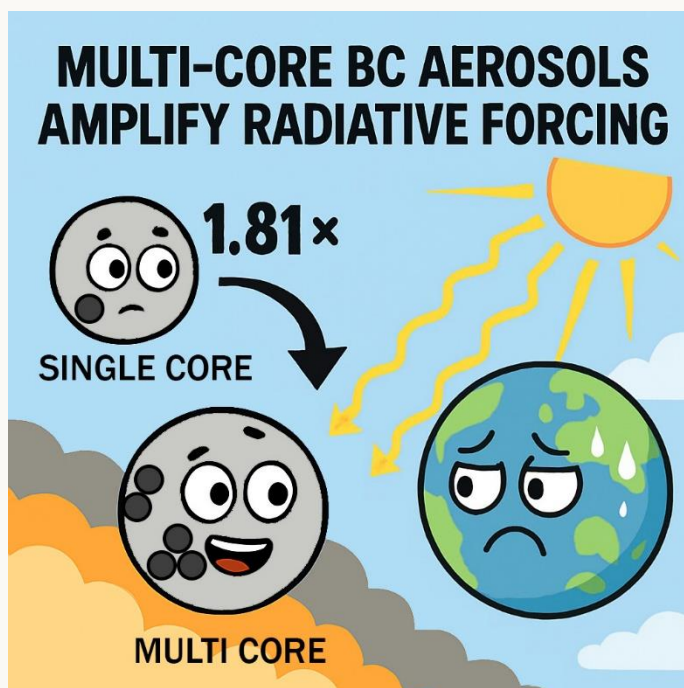
Dr. Joseph Ching emphasized that recognizing multi-core structures is crucial for accurate climate modeling and policy development. Professor Li Weijun highlighted how these particles significantly increase BC's warming potential, while Professor Mark Jacobson stressed updating models to better guide mitigation efforts.

Conclusion:

This discovery significantly advances our understanding of black carbon's true climate influence. Accounting for multi-core structures in models will lead to more accurate estimates of BC's radiative forcing, informing better mitigation strategies amid rising wildfire activity and human emissions.

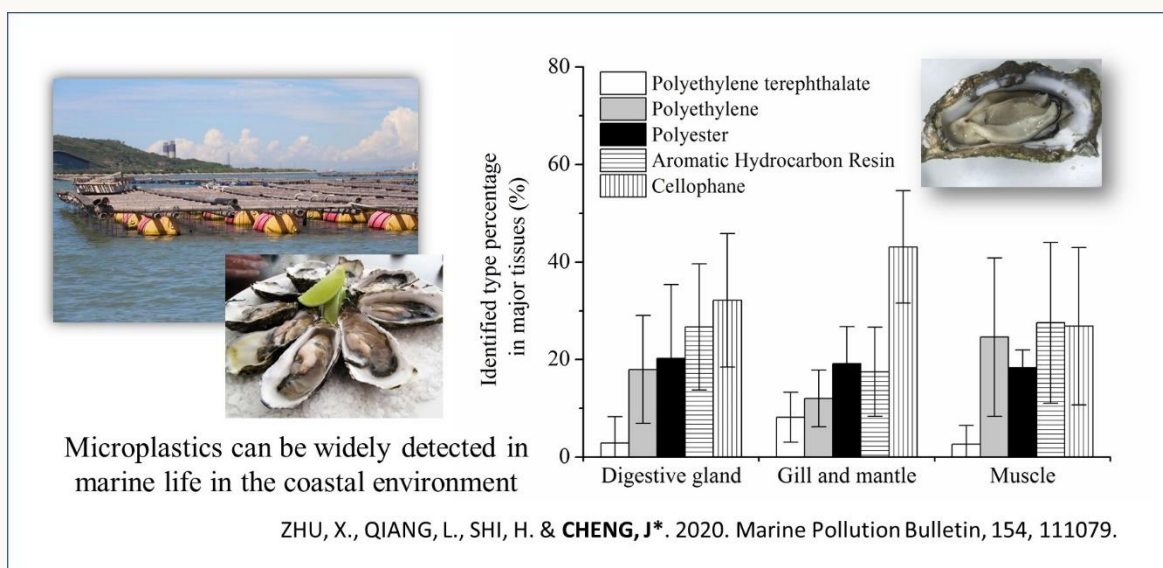
Read the full study for detailed insights: [Nature Communications Article](#)

[Read More](#)



Research Announcement: Unraveling the Dynamics of Antibiotic-Resistant Genes and Pathogens in Microplastic Biofilm in Marine Aquaculture Environment: Assemblage, Dissemination, and Associated Environmental and Health Implications | Dr Cheng Jinping

Led by Dr **Jinping Cheng** from the Department of Science and Environmental Studies (SES), this research project, funded by the Early Career Scheme of the HK Research Grant Council, is being conducted from the **2024/25** academic year. Building on Dr Cheng's established research on microplastic accumulation in aquaculture products and the microbial colonization of plastic surfaces, the project aims to further explore the recruitment, development, and transmission mechanisms of pathogens and antibiotic-resistant genes from marine aquaculture farms to microplastic biofilms, and ultimately to fish and coastal waters.



🔍 Research Focus:

- **Microplastics** can account for up to **6%** of the total in **aquaculture environment**, serving as a potential medium for the transmission of pathogens and antibiotic-resistant genes.
- The presence of antibiotics and other pollutants may accelerate the proliferation of antibiotic-resistant bacteria, facilitating their spread via microplastic biofilms.
- This project will explore how microplastic biofilms select, enrich, and disseminate pathogens and antibiotic-resistant genes.

💡 Why It Matters:

- **Microplastics** can account for up to **6%** of the total in **aquaculture environment**, serving as a potential medium for the transmission of pathogens and antibiotic-resistant genes.
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EdUHK Scientific and Research Learning for Youth: Popular Science Series

To strengthen STEAM education for primary and secondary school students in Hong Kong and to foster research collaboration and exchange between Chinese Mainland and Hong Kong, The Education University of Hong Kong (EdUHK) has launched the "Scientific and Research Learning for Youth: Popular Science Series" by providing lectures by distinguished guests, holding a variety of hands-on courses, training camps, and symposiums.

The inaugural symposium took place on 18 January 2025, and featured Professor So Kwok-fai, academician, pioneer in the field of axonal regeneration in the visual system and the first scientist to discover the regeneration of the optic nerve. He shared his experiences and scientific journey with around 200 secondary school teachers and students, as well as EdUHK students, and present certificates to secondary school students who participated in the pioneering activity in July 2024.



Distinguished Appointment: At the launch, EdUHK was honoured to announce the appointment of Professor So as a Distinguished Honorary Professor, to promote research collaboration and innovative development with the University.



[Read More](#)

EdUHK Researchers Launch International Campaign to Promote Indoor Air Quality in Sri Lankan Schools

A research team from EdUHK, led by Professor Ho Wing Kei and Dr Deng Wenjing, has taken significant steps to raise awareness about indoor air quality (IAQ) in schools through educational outreach in Sri Lanka. Their recent activities included workshops and STEM programs in districts such as Kandy, Ratnapura, and Kegalle, engaging over 1,000 students from 25 schools. The initiative received strong support from local educators and organizations, including the Environmental Brigade and Science Clubs.



The team's research is pioneering in detecting harmful substances like endocrine-disrupting chemicals (EDCs) and bacteria within school environments. Their findings, which extend from Hong Kong to Belgium, reveal that children can be exposed to these pollutants through non-dietary routes, emphasizing the importance of maintaining healthy indoor air conditions in educational settings.

Professor Ho emphasized the importance of addressing air quality to safeguard children's development and called for increased attention from local governments worldwide. Dr Deng highlighted Sri Lanka as the pilot site for their international outreach efforts, with plans to expand to Indonesia, Malaysia, and Nepal to promote global awareness and healthier learning environments.

This effort builds on similar awareness campaigns conducted earlier in 2024 in Hong Kong, demonstrating EdUHK's dedication to improving children's health through environmental education and research on indoor air quality. [Read More](#)

Research Announcement: Latest Perspective by Dr Li Liguan in Nature Water Highlights Cross-Sector Insights into Antimicrobial Resistance

Dr Li Liguan's latest perspective paper has been published in *Nature Water*, one of the world's leading scientific journals. The study, "Assessing Antimicrobial Resistance Connectivity Across One Health Sectors," explores how antimicrobial resistance (AMR) genes move between humans, animals, and the environment—shedding light on a global health challenge.

By advancing our understanding of AMR through genomics and cross-sector collaboration, Dr Li's work demonstrates the innovative research happening at our university and its impact on global health solutions. [Read More](#)

