

香港科學館 HONG KONG SCIENCE MUSEUM

# 教育通訊 Education Newsletter

春季 SPRING 2023

第三十八期 VOL.38



HK  
SciFest  
香港科學節

# 2023 香港科學節

## HK SciFest 2023

香港科學節是香港最大型推廣普及科學的活動之一，自2014年起由香港科學館主辦。香港科學節集合了科學組織、教育機構、學校、大專院校、博物館和各個政府部門，提供各式各樣精彩的科學節目，讓你探索科學，發現和享受科學的趣味。我們希望香港科學節能成為燃起大眾探索科學的火花，從而培養勇於探究及創新的科學文化。

2023 香港科學節的主題為「常伴有理」。在超過 70 個合作夥伴和單位的共同努力下，我們將會呈獻 140 多個與今年主題相關的精彩節目，形式包括展覽、專題講座、工作坊、參觀及導賞、科學示範等。這些節目將會讓觀眾了解更多自然現象的科學、日常生活物品的運作原理以及提升生活質素的科技。我們亦會舉辦社區外展活動以及全新的線上科學嘉年華，讓觀眾無論在何時何地都能接觸科學。此外，我們會繼續透過各種與STEM相關的活動，在香港科學節中推廣學習科學、科技、工程和數學。

HK SciFest is one of the largest events in Hong Kong to promote popular science. It has been organised by the Hong Kong Science Museum since 2014. The festival brings together science and technology organisations, education institutions, schools, tertiary institutions, museums and government departments to provide a wide variety of exciting science programmes to allow everyone to explore, discover and have fun in science. We hope the HK SciFest will kindle the public's interest in science, thereby fostering an inquisitive and innovative science culture.

The theme of HK SciFest 2023 is "Science Around You". With over 70 partners and units working in tandem, the HK SciFest 2023 is proud to present more than 140 fascinating programmes related to this year's theme "Science Around You", including exhibitions, science lectures, workshops, site visits and guided tours. These programmes will allow you to learn more about the science of natural phenomena, the working principles of everyday products, and the technologies that improve our well-being. We will also organise outreach programmes in communities and a new online science carnival to bring science to the audience wherever they are, whenever they want. In addition, we continue to promote the learning of science, technology, engineering and mathematics in the festival through various STEM-related programmes.



HK  
SciFest  
香港科學節  
31.3 - 16.4.2023





參觀及導賞 Site visits and guided tours



科學講座 Science lectures



展覽 Exhibitions



工作坊 Workshops

## 聯繫課程 Curriculum Link

小學常識科、科學科（中一至中三）、  
綜合科學科和組合科學科（中四至中六）

General Studies (P1–P6), Science (S1–S3),  
Integrated Science and Combined Science (S4–S6)



📅 31.3.2023 – 16.4.2023

☎ 2732 3232

👉 [www.hk.science.museum/scifest2023/](http://www.hk.science.museum/scifest2023/)



# 天生我「材」—材料科學與設計

## Material Tales – The Life of Things

自古以來，材料與人類的文明有着密不可分的關係。由史前人們所巧用的石頭、青銅，到現代的塑膠，以至近年方興未艾的納米產品，都標誌着人類所掌握的科學知識及工程技術日見進步，而歷代器物亦反映了人類在各個歷史階段對生活都有着不同的需求，默默見證着人類文明的發展。

是次展覽帶領大家由材料的起源開始，認識人類如何運用精巧的技術和設計將材料轉化為適用於我們日常生活的產品；從材料背後的故事，了解地球資源對人類文明的貢獻之餘，更促使我們反思過度耗用資源帶來的嚴重後果。我們透過倫敦設計博物館的藏品、本地研發的嶄新材料和特別設計的互動展品，和大家分享創新的解決方案，合力創造可持續的未來。

Materials and human civilisation have been inextricably linked since time immemorial. From the stones and bronzes cleverly utilised by humans as far back as the prehistoric period, to plastics, which have been so widely used in the past few decades, and to the latest rise of nanoproducts, which are fast becoming household buzzwords, materials have marked the increase in sophistication in our understanding of science and technology. They reflect human needs in different epochs and have borne witness to the development of civilisations.

This exhibition traces materials from their origins to our cognisance of how humans transform them into daily products through ingenious technology and design. The story of materials allows us to appreciate the contribution of the earth's resources to the ascent of humans, while also grimly reminding us of the disastrous consequences of our ravenous consumption of natural resources. The London Design Museum's astounding collection, along with innovative, novel, locally developed materials and specially designed interactive exhibits, share inspiring solutions with the audience for creating a sustainable future together.



Courtesy of Alastair Phillip Wiper

現代生活中一些重大發明都使用到金屬，包括摩天大樓、飛機、汽車和圖中世界上最大的貨櫃船。

Metals are used in some of the most important inventions in modern life, including skyscrapers, aeroplanes, cars, and the largest container ship in the world, shown here.



Courtesy of Gryffyn M.

人類濫伐森林，肆意攫取資源，我們賴以生存的地球卻要承受災難性的後果。

Human deforestation and the plundering of resources are taking a heavy toll on our planet with catastrophic consequences.

## 聯繫課程

### Curriculum Link

小學常識科：日常生活中的科學與科技

科學科（中一至中三）：從原子到材料

化學科（中四至中六）：物料化學

General Studies (P1-P6): Science and Technology in Everyday Life

Science (S1-S3): From Atoms to Materials

Chemistry (S4-S6): Materials Chemistry

## 展覽入場安排

### Admission Arrangement for the Exhibition

有關學校團體參觀是次展覽事宜，  
請致電2732 3220與本館職員聯絡。

For school visit application to the exhibition,  
please contact our staff at 2732 3220.

康樂及文化事務署主辦

香港科學館籌劃

由倫敦設計博物館策劃的巡展


科學合作夥伴(香港)：納米及先進材料研發院

Presented by the Leisure and Cultural Services Department

Organised by the Hong Kong Science Museum

A touring exhibition from the Design Museum, London

Scientific Partner in Hong Kong: Nano and Advanced Materials Institute (NAMI)

 19.5.2023 – 18.10.2023

 香港科學館特備展覽廳  
Special Exhibition Hall, Hong Kong Science Museum

 [https://hk.science.museum/zh\\_TW/web/scm/exhibition/material2023.html](https://hk.science.museum/zh_TW/web/scm/exhibition/material2023.html)



# 常設展覽預告：古生物展廳

Upcoming Permanent Exhibition : Palaeontology Gallery

生命自數十億年前首次在地球上出現以來，就不斷地演變。也許你對恐龍已經非常熟悉，但你又是否知道曾經有翼展近七十厘米的「蜻蜓」稱霸天空？香港科學館即將開幕的古生物展廳將透過有趣的互動展品、機械恐龍模型、動畫和超過一百件化石標本等，帶領學生回到史前時期，探索奇妙的生物史。

在展覽中，學生可走進六億三千五百萬年以來不同的史前生態環境。他們可以探索遠古的生物多樣性和物種的演化，探究化石的形成和發現，以及了解生物如何掙扎求存，適應環境以渡過大滅絕，從而體會到生命的韌性。



來自馬達加斯加的寒武紀三葉蟲化石

A trilobite fossil from the Cambrian of Madagascar



在展覽中，史前生態環境將會以栩栩如生的動畫呈現出來。

In the exhibition, prehistoric ecosystems are vividly depicted by animations.

Life has been evolving for billions of years since its emergence on our planet. While most of us are familiar with dinosaurs, did you know that prehistoric “dragonflies” with a wingspan of almost 70 cm once ruled the sky? The Hong Kong Science Museum’s upcoming Palaeontology Gallery offers an exciting opportunity for students to explore the fascinating history of life through interactive exhibits, animatronic dinosaurs, animations, and over 100 fossil specimens.

In this exhibition, students can travel back in time and experience different prehistoric environments spanning 635 million years. They can observe the incredible biodiversity and evolution of life in the distant past, learn about how fossils were formed and discovered, and gain insight into how organisms adapted to survive mass extinctions, demonstrating the remarkable resilience of life.



學生可以透過輕鬆有趣的角色扮演遊戲，探索古生代森林。  
Students can delve into the Palaeozoic forests through an intriguing role-playing game.

## 聯繫課程

### Curriculum Link

小學常識科：人與環境

生物科（中四至中六）：遺傳與進化

General Studies (P1–P6) : People and Environment

Biology (S4–S6) : Genetics and Evolution



確實開放日期容後公布 The exact opening date will be announced later



香港科學館地下展覽廳 G/F Exhibition Hall, Hong Kong Science Museum

# 裘槎科學周 2023

Croucher Science Week 2023

裘槎科學周 2023 將邀請來自澳洲、新西蘭、瑞典、英國及美國的科學傳意者透過網上廣播帶來不同的科學表演。

成功登記的學校除了可於活動期間無限次觀看公眾活動影片外，亦可參與一系列學校活動，精彩內容包括英國 The Gastronomist 及澳洲科學表演團體 Street Science 帶來一系列的科學劇場及示範，英國的 The Royal Institution 更會帶來科學談，讓學生揭開數學世界的神秘面紗。

Science communicators from Australia, New Zealand, Sweden, the United Kingdom and the United States will gather at Croucher Science Week 2023 and bring along a variety of science performances through online broadcast.

Apart from having unlimited access to the public programmes during the event period, registered schools can enjoy a series of exclusive-for-school programmes, including an array of mini shows and science demonstrations by The Gastronomist from the UK and science show production group Street Science from Australia. The Royal Institution from the UK will also deliver a science talk to lead students to explore more about the hidden world of maths.



迷你科學劇場：粗俗科學

Mini Science Show: Rude Science

## 聯繫課程

### Curriculum Link

小學常識科、科學科(中一至中三)、  
綜合科學科和組合科學科(中四至中六)

General Studies (P1-P6), Science (S1-S3),  
Integrated Science and Combined Science (S4-S6)

## 學校活動教育資源

### Education Resources for School Programmes


工作紙 / 活動指南 (迷你科學劇場-光與聲音、粗俗科學：科學談-數學世界的神秘面紗；科學行者-Oobleck：隨你所想、椰菜指示劑、毛球發射器)

Worksheets/Activity Guides (Mini Science Show-Lights and Sounds, Rude Science; Science Talk-The Hidden World of Maths; Hands-on Science-Oozing Oobleck, Cabbage Indicator, Making a Pom Pom Launcher)

由香港科學館、裘槎基金會及教育局聯合主辦

Jointly organised by the Hong Kong Science Museum, the Croucher Foundation and the Education Bureau


 **22.3.2023 – 30.4.2023**

 網上廣播 (部分節目透過 Zoom 直播) 及現場舉行

Online broadcast (with some programmes to be live-streamed via Zoom) and on-site programmes

 免費活動，請於裘槎科學周學校活動網頁報名

All activities are free. Please register on the Croucher Science Week school programme website.

 粵語或英語 (部分英語活動將提供中文字幕或粵語傳譯)

Cantonese or English (with Chinese subtitles or Cantonese interpretation for some English activities)

 <https://croucherscienceweek.hk/hk/>



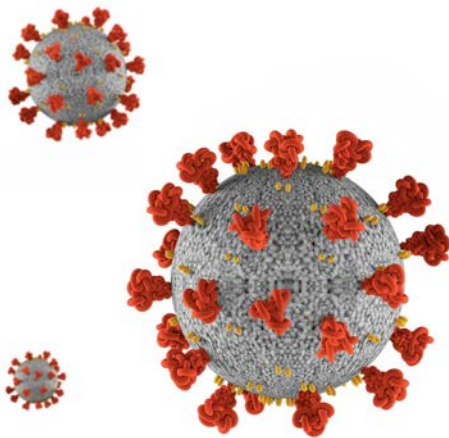


# 任國榮先生生命科學講座——蛋白質的微觀世界

Yen Kwo Yung Lecture in Life Sciences – The Microscopic World of Proteins

蛋白質對生物非常重要。我們體內有很多的功能都需要蛋白分子來運作，如果這些分子功能失常，就會導致嚴重的疾病。此外，微生物感染人體細胞的過程，亦常會涉及蛋白分子。例如，2019 冠狀病毒病是由新型冠狀病毒引起，感染過程涉及病毒表面的刺突蛋白與人類受體蛋白結合。那麼蛋白分子是甚麼模樣？它們如何執行特定的功能？講者會介紹近年在生物化學的研究取得突破下，我們如何觀察納米尺寸的蛋白分子，及它們於納秒時間內進行的工作。

Proteins are vitally important to living organisms. Malfunction of protein molecules, which perform most of the functions in our bodies, often leads to serious diseases. In addition, infection of microorganisms to human also involves protein molecules. For example, COVID-19 is the disease caused by a new coronavirus. Its infection pathway involves binding of the spike protein on the viral surface to the human receptor protein. So what do protein molecules look like, and how do they perform specific functions? The speaker will share with us the breakthroughs in biochemical research over the last few years, how we observe protein molecules at the nanometer scale and their functions at the nanosecond time scale.



## 聯繫課程

### Curriculum Link

科學科（中一至中三）、  
生物科及化學科（中四至中六）

Science (S1–S3),  
Biology and Chemistry (S4–S6)

📅 15.4.2023

📍 香港科學館一樓演講廳 1/F Lecture Hall, Hong Kong Science Museum

💰 免費 Free

🌐 英語 English

☎ 2732 3223

✉ [hkscmpp@lcsd.gov.hk](mailto:hkscmpp@lcsd.gov.hk)

🖱 [https://hk.science.museum/zh\\_TW/web/scm/event/si/yenkwoyung.html](https://hk.science.museum/zh_TW/web/scm/event/si/yenkwoyung.html)



# 「好奇號 — 納米世界」外展活動

## “Gear Up – Nano World” Outreach Programme

納米塗層甚至納米樓，大家都可能耳熟能詳，但你們有沒有見過「納米車」？科學推廣組設立了「好奇號」外展活動車，以「納米世界」為主題，透過流動展覽，介紹納米科學。展覽以精采的漫畫故事，讓大家與主角一起在納米世界探險。互動展品則可讓大家親身體驗納米材料的奇妙特性。當然少不了主角「好奇號」特色小型展覽車，它雖然身材嬌小，卻五臟俱全，擺設了各式各樣在生活中應用的納米產品，儼然是一所「納米科技示範單位」。

我們將於2023年10月到2024年6月期間走訪學校和社區，歡迎各學校報名參加。申請詳情將於2023年6月下旬在科學推廣組網頁公布。



You may be familiar with the terms nanocoatings or even nano flats. But have you ever heard of nanocars? The Science Promotion Unit has set up an outreach vehicle “Gear Up” to introduce nanoscience through a travelling exhibition with the theme of “Nano World”. The exhibition features a fascinating comic story to allow students to explore the nano world with the main characters. Students may also experience the amazing properties of nanomaterials with the interactive exhibits of the exhibition. Of course the “Gear Up” classic mini exhibition van should not be missed. While it may look tiny similar to a nanocar, it is equipped with everything

you need for a nanotechnology product demonstration unit.

We will travel to schools and communities from October 2023 to June 2024. Schools are welcome to submit their application. The details will be announced on the website of Science Promotion Unit in late-June 2023.



透過操作互動展品，學生們可體驗納米材料的獨特特性。

Students can experience the unique properties of nanomaterials with the interactive exhibits.

📅 **10.2023 – 6.2024** (暫定 tentative)

📍 學校提供的場地 Venues provided by schools

💰 免費 Free

🌐 粵語 (所有展板和展品均設有中英文解說)  
Cantonese (All panels and exhibit captions are bilingual)

☎ 2731 5588

✉ [spu@lcsd.gov.hk](mailto:spu@lcsd.gov.hk)

🖱 <https://www.spu.hk/tc/>



# 學校活動

## School Activities

### 小小科學家探索活動

#### Little Scientist Exploration Programme

本學年主題為「古生物能否復活？」，以化石和古生物為引子，讓學生認識細胞和遺傳學的基本知識。活動適合小四至小六學生參與。

“Can We Bring Back Prehistoric Creatures?” is the theme for this school year. Using fossils and prehistoric creatures as lead-in, students can learn about basic knowledge of cells and genetics. The programme is suitable for P4 to 6 students.



👉 [https://hk.science.museum/zh\\_TW/web/scm/event/sp/lsep.html](https://hk.science.museum/zh_TW/web/scm/event/sp/lsep.html)



### VR電玩家

#### Virtual Electrician

同學們可以透過VR（虛擬實境）技術，在虛擬世界設計並測試不同電路組合。一起來應用電路基本知識，成為真正的電路專家！活動只接受已成功申請學校參觀的學校報名。

Students can assemble and test their circuit designs through VR (Virtual Reality) technology inside the virtual world. Apply your basic knowledge of circuits and become a real circuit expert! Schools are eligible for enrolment upon successful application of school visit.

👉 [https://hk.science.museum/zh\\_TW/web/scm/event/sp/vre.html](https://hk.science.museum/zh_TW/web/scm/event/sp/vre.html)




## 學校參觀

### School Visit

凡學校團體人數達20人或以上，或特殊學校團體人數達10人或以上，即可以學校名義申請學校參觀。


School groups of 20 or more members, or groups from special schools of 10 or more members, are eligible for School Visit Application.

 [https://hk.science.museum/zh\\_TW/web/scm/event/sva.html](https://hk.science.museum/zh_TW/web/scm/event/sva.html)




## 學校活動查詢

### School Programme Enquiries

 2732 3220 星期一至五 Mon to Fri 9:00am – 1:00pm, 2:00pm – 5:00pm  
公眾假期除外 except public holidays

 2311 2248

 [hkscmschool@lcsd.gov.hk](mailto:hkscmschool@lcsd.gov.hk)

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### Subscribe to e-Education Community

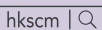
登記訂閱電子資訊以收取我們的最新展覽、節目、教育資源和教育通訊。

Join our mail list to get the latest exhibition updates, programmes, education resources and education newsletters delivered directly in your inbox!



## 追蹤我們

### Find us on



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