

香港科學館 HONG KONG SCIENCE MUSEUM

# 教育通訊 Education Newsletter

秋季 AUTUMN 2015 第二十四期 VOL.24



各位 親愛的校長和老師：

2015/16年的新學期又開始了，在此謹祝各位工作順利。香港科學館將繼續舉辦一連串專為老師和學生而設的教育活動，歡迎各位踴躍參加。

香港科學館拓展組

Dear principals and teachers,

We wish you a great success in the new school year of 2015/16. The Hong Kong Science Museum will continue to organise an array of educational programmes for teachers and students. We look forward to your participation.

Development Unit, Hong Kong Science Museum

## 專題展覽

### 海洋怒吼 — 塑膠垃圾關注計劃

塑膠是一種高分子聚合物材料，由於這種物料質地輕而耐用，可塑性高，生產成本便宜，因此現今被廣泛地應用在我們的日常生活裏。雖然塑膠的使用為我們帶來方便，可是它經過很多年都不會自然分解，對堆填區帶來嚴重的負擔，而且燃燒時會產生有害物質。當這些垃圾漂浮流入海洋後，在洋流的影響下，在海域更形成「垃圾島」，對海洋生態構成嚴重威脅。

是次展覽融合了科學與藝術，透過展示一大堆由北大西洋、夏威夷、波羅的海和世界各地沙灘收集回來的海洋塑膠垃圾，從而喚起公眾對塑膠垃圾的關注。除此之外，展覽亦包括多套錄象節目及設計獨特的互動展品，讓市民深入認識各種塑膠的化學成份、分類和回收過程，了解塑膠垃圾如何傷害鳥類和海洋動物，反思減少消耗塑膠產品的重要，積極支持回收塑膠行動。

為加強展覽的教育意義，我們特別邀請了「學校起動」計劃的學生到海灘收集塑膠垃圾，把它們分類，並利用塑膠垃圾創作藝術作品，在展覽期間一同展出。

展期：2015年11月27日至2016年2月17日

地點：香港科學館特備展覽廳

常設展覽參觀人士不另收費

常設展覽廳票價：\$25 / \$17.5<sup>#</sup> / \$12.5<sup>\*</sup>

<sup>#</sup>20人或以上於同時段參觀的團體之標準票特惠價

<sup>\*</sup>適用於全日制學生、殘疾人士（及一名陪同的看護人）  
及六十歲或以上高齡人士

博物館通行證持有人、博物館週票持有人及  
由持票成人陪同參觀的四歲以下小童免費參觀  
星期三免費入場

聯繫課程：

小學常識科「人與環境」和「日常生活中的科學與科技」、中一至中三科學科「物料新紀元」、中四至中六化學科必修部分：「化石燃料和碳化合物」和「碳化合物的化學」、中四至中六化學科選修部分：「物料化學」、中四至中六組合科學科化學部分：「化石燃料和碳化合物」、中四至中六通識教育科「能源科技與環境」

康樂及文化事務署與瑞士總領事館聯合主辦

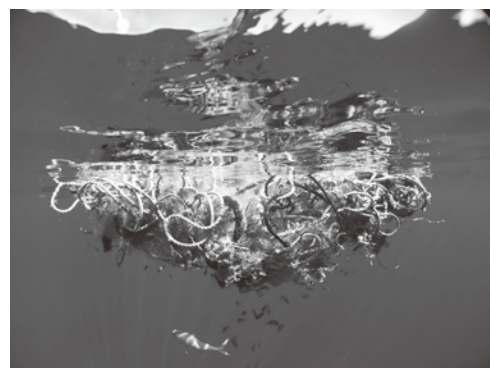
香港科學館、蘇黎世設計博物館及蘇黎世藝術大學香港—蘇黎世藝文空間聯合籌劃

展覽由蘇黎世設計博物館提供

德索斯基金贊助

合作伙伴：「學校起動」計劃及大華銀行「藝坊」

支持機構：海洋復原聯盟及海岸清潔跨部門工作小組



太平洋大垃圾帶下的世界

Under the surface, Great Pacific Garbage Patch, 2009

© Lindsey Hoshia

## **Special Exhibition**

### **Out to Sea? The Plastic Garbage Project**

Plastic is a kind of polymer with a high molecular weight. Because of its characteristics of light weight, high durability, malleability and low production cost, it has been widely applied in our everyday lives. Although it is very convenient to use, it fails to degrade naturally even after hundreds of years and as such causes tremendous problems for landfill sites. Furthermore, the combustion of plastic generates toxic substances. When plastic rubbish gets into the oceans, it can be carried by the ocean currents and ends up forming sea garbage gyres which threaten the marine ecosystem to a large extent.

This exhibition combines elements of science and art. A large centrepiece comprising plastic flotsam collected from the beach cleaning operations in the North Sea, Hawaii, the Baltic Sea and the rest of the world is displayed with the aim of arousing public awareness of plastic waste. In addition, the exhibition also makes use of different video footage and interactive exhibits featuring unique designs. Through the exhibition, visitors can gain an in-depth understanding of the chemical composition, classification and recycling processes of different plastic materials, and also learn about the harmful effects of plastic waste on birds and marine animals. The aim is to let us realise that we must curtail our consumption of plastic and encourage the recycling of plastic immediately.

To enrich the educational experience of the exhibition, we have specially invited the students of the “Project *WeCan*” to collect plastic garbage from the beach, classify them, and make different works of art using plastic garbage for display in the exhibition.

Exhibition Period: 27.11.2015 – 17.2.2016

Venue: Special Exhibition Hall, Hong Kong Science Museum

No extra fee is required for museum visitors of Permanent Exhibitions

Permanent Exhibition Ticket:

Admission Fee: \$25 / \$17.5# / \$12.5\*

# *Special rate of Standard Ticket for groups of 20 people or more per visit*

\* *Applicable to full-time students, people with disabilities (and one accompanying minder) and senior citizens aged 60 or above*

Free admission for Museum Pass holders, Museum Weekly Pass holders and children under 4 years old accompanied by an adult with ticket

Free admission on Wednesdays

Curriculum Links:

Primary School General Studies: “People and Environment” & “Science and Technology in Everyday Life”, S1-S3 Science: “Materials of the Modern World”, S4-S6 Chemistry Compulsory Part: “Fossil Fuels and Carbon Compounds” & “Chemistry of Carbon Compounds”, S4-S6 Chemistry Elective Part: “Materials Chemistry”, S4-S6 Combined Science Chemistry Part: “Fossil Fuels and Carbon Compounds”, S4-S6 Liberal Studies: “Energy Technology & the Environment”

*Jointly presented by the Leisure and Cultural Services Department and Consulate General of Switzerland*

*Jointly organised by Hong Kong Science Museum, Museum für Gestaltung Zurich and Connecting Spaces Hong Kong – Zurich, Zurich University of the Arts*

*An exhibition by the Museum für Gestaltung Zurich*

*Supported by Drosos Foundation*

*Partners: Project WeCan and UOB Art Academy*

*Supporting Organisations: Ocean Recovery Alliance and Working Group on Clean Shorelines*

## 「奇器來了！」外展互動劇場工作坊

這是一個全新的互動劇場工作坊，以互動話劇的形式來介紹西洋奇器的科技知識。這個互動劇場工作坊讓學校和註冊非牟利團體預約參加，因反應熱烈，表演日期會延長至2015年12月31日，節目花絮及預約詳情如下。



地點：學校或團體提供的室內場地，面積須不少於30平方米

人數：最少40人

語言：粵語 (to be conducted in Cantonese)

適合程度：高小及初中學生

費用：免費

表演日期：即日起至2015年12月31日

時間：星期一至日上午10時至下午6時，活動需時約1小時

申請辦法：即日開始接受申請，所有申請會以先到先得方式處理。申請人請將填妥的申請表格傳真至本館(傳真號碼：2311 2248)。如申請的表演日期距離遞交申請表的時間少於兩星期，有關申請將不獲接納。活動能否舉行須視乎表演者之人手安排。如申請獲接納，科學館會傳真覆函至申請團體以確定活動日期及安排。

詳情請瀏覽以下網址：

[http://hk.science.museum/zh\\_TW/web/scm/ed/special\\_programme.html](http://hk.science.museum/zh_TW/web/scm/ed/special_programme.html)

聯繫課程：

小學常識科：「日常生活中的科學與科技」、「國民身份認同與中華文化」及「了解世界與認識資訊年代」、中四至中六物理科必修部分：「力和運動」、中四至中六物理科選修部分：「天文學和航天科學」、中四至中六中國歷史科選修部分：「宗教傳播與文化交流」



## 巡迴展覽 Travelling Exhibitions

香港科學館為推展博物館教育服務至學校，製作了不同類型的教材，供學校免費借用。教師可以在校內利用本館的展品教材，實踐活動教學，豐富學生的認知。

我們一共提供三套巡迴展覽給學校作教學用途，展覽以中英對照的展板形式製作，主題包括：

### 1. 腦與認知

以人類腦部結構和功能為主題，揭示腦部神經傳遞信息機制與腦神經疾病的關係。展覽內容適合中四至中六生物科必修部分「生物與環境」、綜合科學科必修部分「體內平衡」，及組合科學科生物部分「生物與環境」課程。

### 2. 幻影

以視覺感觀為主題，挑戰觀眾的知覺及常識，揭開人類認知的奧秘。展覽內容適合中四至中六生物科必修部分「生物與環境」及組合科學科生物部分「生物與環境」課程。

### 3. 「沙士」與病毒

以「沙士」及病毒為主題，揭開病毒傳播的途徑。展覽內容適合中四至中六生物科選修部分「微生物與人類」、綜合科學科選修部分「持守健康」及組合科學科生物部分「健康與疾病」課程。

學校須自行安排運送、裝拆及歸還展覽。

查詢借用詳情可致電2732 3220 (星期一至五：上午9時至下午1時及下午2時至5時，公眾假期除外)或瀏覽：[http://hk.science.museum/zh\\_TW/web/scm/ed/travelling.html](http://hk.science.museum/zh_TW/web/scm/ed/travelling.html)

To extend the Museum's education services to schools, the Hong Kong Science Museum produces various types of educational kits on loan to schools for free. Teachers can utilise these resources to supplement their teaching in order to enrich students' knowledge.

There are three exhibitions available on loan to schools. They are produced in the format of graphic panels with English and Chinese texts. Topics include:

### 1. Brain and Cognition

Exhibits the structure and functions of human brain and reveals the linkage between neural transmission and brain problems. This exhibition is suitable for S4-6 Biology compulsory part "Organisms and Environment", Integrated Science compulsory part "Balance within Our Body" and Combined Science Biology part "Organisms and Environment".

### 2. Optical Illusion

Challenges your common perceptions and unveils the mystery of human recognition through illusion games. This exhibition is suitable for S4-6 Biology compulsory part "Organisms and Environment" and Combined Science Biology part "Organisms and Environment".

### 3. SARS and Viruses

Demonstrates the pathway of viral infection with SARS and some typical viruses as examples. This exhibition is suitable for S4-6 Biology elective part "Microorganisms and Humans", Integrated Science elective part "Keeping Ourselves Healthy" and Combined Science Biology part "Health and Diseases".

**Schools shall be responsible for installation and dismantling as well as round-trip transportation of the exhibition.**

For enquiries, please contact us at 2732 3220 (Mon to Fri: 9am - 1pm and 2pm - 5pm, except public holidays) or browse the following website:

[http://hk.science.museum/en\\_US/web/scm/ed/travelling.html](http://hk.science.museum/en_US/web/scm/ed/travelling.html)

## 其他學生活動 Other Student Programmes

### 1. 「小小科學家」探索活動 — 「奇幻之光」

#### Little Scientists Exploration Programmes – Wonders of Light

香港科學館舉辦「小小科學家」探索活動，旨在藉 饒有趣味的實驗，向高小學生介紹與特定主題有關的科學知識。為配合2015光和光基技術國際年，本館於10至12月期間推出「奇幻之光」探索活動，讓學生認識光的各種性質以及有關特性在日常生活中的應用。本活動歡迎學校及家長教師會報名參加，詳情請瀏覽本館網頁 <http://hk.science.museum/zhTW/web/scm/ed/lsep.html>。

地點：香港科學館實驗室

適合程度：小四至小六學生

費用：每人30元

名額：每節40人

截止報名日期：活動日期前兩星期

語言：粵語 (conducted in Cantonese)

聯繫課程：小學常識科「日常生活中的科學與科技」

### 2. 學校參觀申請 School Visit Application

凡師生人數達20人或以上及當中的學生人數不少於15人，並於參觀日期前最少兩星期提出申請，則在申請獲得批准後可獲豁免入場費用。所有申請會以先到先得方式處理。

註：豁免入場費用只適用於教師和學生。參觀的學校團體中如有家長／義工等其他人士，則該團體的聯絡人須於參觀日期前，向本館職員查詢為該等人士購票的事宜。

Admission fee will be waived for school groups with **20 or more teachers and students** and **at least 15 students among them** upon approval of the application for visit, which is made **at least 2 weeks** before the date of visit. All applications will be processed on a first come, first served basis.

Remarks: Waiving of admission fee is applicable to **teachers and students only**. The contact person of a visiting school group has to contact our staff before the date of visit regarding admission fee for persons other than teachers and students such as parents / volunteers.

## 各項活動查詢及報名 Programme Enquiries and Registration

申請方法：填妥有關活動的申請表，並傳真至「香港科學館」拓展組。

How to apply: Complete the application form and fax it back to the Development Unit of the Hong Kong Science Museum.

查詢電話 Telephone 2732 3220 (劉小姐 Ms Lau)

服務時間 Office Hours 星期一至五：上午9時至下午1時及下午2時至5時 (公眾假期除外)  
Monday to Friday: 9am - 1pm and 2pm - 5pm (except public holidays)

傳真 Fax: 2311 2248

網址 Website [http://hk.science.museum/zh\\_TW/web/scm/ed.html](http://hk.science.museum/zh_TW/web/scm/ed.html)