



TAIWAN INTERNATIONAL
SCIENCE FAIR



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United States
美國



Switzerland
瑞士



Luxembourg
盧森堡



Hungary
匈牙利



Brazil
巴西



Mexico
墨西哥



Tunisia
突尼西亞

Romania
羅馬尼亞



Turkey
土耳其



Russia
俄羅斯



Korea
韓國



Japan
日本



Taiwan
臺灣



Hong Kong, China
中國香港



Macao
澳門



Guam
關島



Philippines
菲律賓



Malaysia
馬來西亞



Singapore
新加坡



South Africa
南非



Saudi Arabia
沙烏地阿拉伯



Iran
伊朗



Pakistan
巴基斯坦



Nepal
尼泊爾



Thailand
泰國



Indonesia
印尼



New Zealand
紐西蘭



劉火欽

國立臺灣科學教育館館長

歡迎各位參加 2024 年的「臺灣國際科學展覽會」。

這是臺灣每年最重要的國際科學賽事，在舉辦的 20 餘年來，我們培育了不計其數的優秀學生代表臺灣到包含亞洲、美洲、歐洲等國外科學展覽會參與，成績表現亮眼，屢屢成為國際注目焦點；同時，我們也邀請外國科學展覽會之優秀作品前來臺灣分享其研究成果，希望提供臺灣及國外師生間彼此更多互相觀摩交流的機會。

為了讓來自國外的臺灣國際科學展覽會參與者能有時間調整時差及欣賞臺灣之美，今年大會日程從 6 天延長至 9 天，並精心籌辦多項如大師講座、學生工作坊、教師交流會、科學之旅、文化之夜等活動，也特別為了遠道而來的外國師生規劃文化之旅，希望讓國外朋友們能認識更多樣化的臺灣。

2024 年的臺灣國際科學展覽會有來自 27 個國家，超過 200 件的作品齊聚一堂，比去年的 22 個國家計 174 件作品增長不少；這不僅僅是代表著臺灣國際科學展覽會已引起外國師生們的高度關注，也更加促使我們致力於讓臺灣國際科學展覽會成為亞洲最具影響力之科學展覽會。

我們衷心期待大家在各項活動中能踴躍交流，藉以激盪出創意火花、激發研究想法，為未來科學發展貢獻一分心力。

謝謝大家！

國立臺灣科學教育館館長



Dr. Liu, Huoo-Chin
Director-General

National Taiwan Science Education Center

Welcome to the 2024 Taiwan International Science Fair.

This is Taiwan's most important international scientific event. Over the past decades, we have nurtured numerous outstanding students to represent Taiwan in various international science fairs across Asia, the Americas, and Europe. Most of Taiwanese projects had achieved remarkable results and earned international recognition. Meanwhile, we have invited some excellent research projects selected from representative international fairs to share their findings. TISF provides the opportunities for supervisors and students to exchange their experience in science study and training.

This year, we have extended the duration of TISF from 6 to 9 days and thus we hope that the international participants will have more time to adjust from jet lag and experience the beauty of Taiwan. We have organized various activities including the keynote speech, workshops for students and supervisors, scientific tours, culture night, and cultural trips for those who have traveled a long way to Taiwan, exploring the diverse aspects of Taiwan.

2024TISF have gathered more than 200 projects from 27 countries compared to 22 countries with 174 projects last year. The increasing country and project numbers indicates that TISF has attracted extensive attention from overseas students and teachers. We dedicate ourselves to organize TISF to become the most influential science fair in Asia.

We sincerely hope that everyone can lively exchange their point of views, stimulating creative thinking and inspiring research notion which may contribute to the advancement of science in the years ahead.

Thank you and look forward to meeting you all!

A handwritten signature in blue ink that reads "Liu, Huoo-Chin". The signature is written in a cursive, flowing style.

Dr. Liu, Huoo-Chin
Director-General
National Taiwan Science Education Center

為扎根臺灣科學教育，拓展我國中學生國際視野，國立臺灣科學教育館（以下簡稱科教館）自 1991 年開始，由全國中小學科展獨立分開辦理「中華民國參加國際科學展覽活動」，從中選拔國際科學展覽會之學生代表。2002 年更名為「臺灣國際科學展覽會」。為增加我國師生國際科技教育交流及觀摩機會，1992 年開始邀請泛太平洋地區國家組隊參加全國中小學科展，2002 年改邀請參加臺灣國際科學展覽會，以名符其實。自此，國外參展作品件數及參展國家數逐年增加。

科教館為辦理臺灣國際科學展覽會，經由「中華民國科學展覽會諮詢委員會」制定「臺灣國際科學展覽會實施要點」，並報請教育部核備，依據上述要點規範成立評審委員會，審查程序包括了規格審查、安全審查、三階段評審；獎項類別則有青少年科學獎、一至四等獎及特別獎；參展科別參考美國 ISEF（International Science and Engineering Fair）國際科技展覽會共 13 科，為一嚴謹之科學賽事。

2024 年臺灣國際科學展覽會國內外作品於去年 12 月參加初審，共有 565 位學生，315 件作品報名，最後甄選並進入複審學生為 273 位，157 件作品，將與來自美國等 26 個參展國家或地區 82 位學生 54 件優勝作品進入決賽評審。本次競賽合計國內外師生約計 27 國 630 位師生，211 件優勝作品進入決賽。

為拓展我國學生科學研究視野，與來自世界各地的青年科學精英分享彼此的研究成果，並加強國際科技教育的交流，本館於 2024 年臺灣國際科學展覽會期間辦理開幕典禮暨大師講座、學生及教師交流會、文化參訪及公開展覽作品觀摩等一系列活動，藉由師生共同參與，達到學術與文化交流之目的。

科教館每年自「臺灣國際科學展覽會」中評選出優秀得獎作品學生，代表我國參加美國、ESI、義大利、突尼西亞、土耳其、俄羅斯、巴西及瑞士等國際科學展覽會，屢有優異表現。尤以參加全球最大規模，有「中學生科學奧林匹亞」之稱的 ISEF 成績最為亮麗，2023 年選派 14 名學生 12 件科學研究作品代表我國參賽，從 62 個參賽國、近 1,638 位學生、1,333 件作品中脫穎而出，勇奪 5 項大會獎、2 項特別獎，代表團成績有目共睹。

為使獲選派代表國家參加國際科學競賽學生，在升學上無後顧之憂，並全力投入科學研究，教育部特訂頒「參加國際數理學科奧林匹亞競賽及國際科學展覽成績優良學生升學優待辦法」，依據此升學優待辦法，使具有科學才能的國際科展績優生，享有保送、推薦入大學或公費出國留學的獎勵，為國家厚植培育更多優秀的科技人才。

Since 1982, two student contestants have been selected from the National Primary and High School Science Fair of the Republic of China, to participate in the International Science and Engineering Fair (ISEF) of the United States of America. The Selecting Fair for International Activities was established in 1991. In 2002, the Selecting Fair was converted to the Taiwan International Science Fair (TISF).

The TISF is identified by Ministry of Education (MOE) of Republic of China and the TISF guideline is formulated by the Science Fair Consult Commission. The judging procedure includes D&S review, three-stage interview and the award categories are Young Scientist Award, the First to Fourth award and Special Awards which references to the ISEF and is a rigorous science fair.

The TISF is a science research competition for high school students from grades nine through twelve. With the mission of identifying and nurturing talented young scientists, TISF 2024 brings together 630 domestic and overseas participants and 211 projects from 27 nations/regions to compete for awards. The National Taiwan Science Education Center (NTSEC) is very proud to organize such a prestigious event. Held from January 28 to February 2, 2024, participating students are divided into domestic and international groups.

Domestic winners, besides winning grand awards, are selected to represent Taiwan at various fairs around the world: namely, the International Science and Engineering Fair (ISEF) in the USA, I giovani e le scienze in Italy, International Festival of Engineering, Sciences and Technology in Tunisia(I-FEST2), Buca International Music Science Energy Engineering Fair(Buca IMSEF) in Turkey, Expo Science International(ESI)in Abu Dhabi, MOSTRATEC in Brazil, and International Swiss Talent Forum(ISTF) in Switzerland.

Between 1982 and 2023, students from Taiwan have performed very well at the ISEF, which is well known as the “High School Science Olympiad” . During ISEF 2023, we received 5 Grand Awards and 2 Special Awards from 62 countries with 1638 students representing 1333 projects.

The outstanding performance of Taiwanese contestants has drawn international recognition. In order to let the students who are representing Taiwan nationally concentrate on science research without any worries, MOE issues the “Regulations Governing Academic Advancement Incentives for Students with Great Performance in International Mathematics or Science Olympiads and International Science Fairs” so that the talented young scientists can have the recommendations for admission to higher education.

We hope that all participating students fulfill their potential and make contributions to the society in the near future.

2024 年臺灣國際科學展覽會日程表

時間 活動 內容 日期	09:00 ~ 09:30	09:30 ~ 12:00	12:00 ~ 13:00	13:00 ~ 16:00	16:00 ~ 17:00	17:00 ~ 21:00
1/28 (日)		報到及展品布置 規格審查 B1	午休	*16:30 前完成報到、 展品布置及規格審查		歡迎晚會 18:00-20:00 5F
1/29 (一)		開幕典禮暨 大師講座 10:00-12:00 7F 西側特展廳	師生交流會及工作坊 13:00-16:00 4F、6F、7F、8F		公布安全審 查結果 16:00 B1	18:00 公告未通過安審 複查名單
			午休	參展作品 安全審查	17:00 前 修改完畢	
1/30 (二)		第一階段評審 09:00-12:25 B1	午休	第一階段評審 13:25-18:35 B1		
1/31 (三)		第二階段評審 09:00-12:00 B1	午休	16:00 前公布三階名單 B1		
2/1 (四)		第三階段評審 公開展覽 09:00-12:00 B1	午休	第三階段 評審 公開展覽 13:00- 16:00 B1		18:00- 21:00 文化之夜 1F
2/2 (五)		自由活動		頒獎典禮 14:00-16:00 南海劇場	出國代表 座談會 16:00- 16:30	
2/3 (六)		海報展覽 B1		海報展覽 B1	拆展 16:00-17:00	

- 請搭乘東側 1、2、3 電梯。
- 各電梯及樓梯位置請參考附錄二中各樓層平面圖。

壹、報到及展品布置

一、參加人員：國內外參展作者。

二、活動時間：113 年 1 月 28 日 (日) 9:30 至 16:30

(請提早報到並於 16:30 前布置完成，逾時恕不受理，未報到者視同放棄。)

三、活動地點：

(一) 報到：國立臺灣科學教育館 B1。

(二) 布展：國立臺灣科學教育館 B1。

四、活動流程：

項目	注意事項	地點
報到	<ol style="list-style-type: none"> 1. 確認繳交電子檔案。 2. 領取識別證等報到資料袋 	B1 服務臺
布展	<ol style="list-style-type: none"> 1. 本館統一提供作品說明板厚紙板。參展作品說明及實物規格如附錄一 (p.55)，海報請標明中英文作品名稱 (以英文名稱參展者，僅需標示英文名稱)，不符實施要點規定者不予評審。 2. 布置作品時，請自備布展工具，若因不當使用而損壞作品說明板或桌面時，應負賠償責任。 3. 英文作品摘要 A4 紙本一張 (約 350 字，含英文作品名稱)，請置於作品說明板桌上之透明板內。 4. 海報如於展覽會後欲攜回，請於 2/3 (六) 下午 16:00-17:00 至科教館 B1 展覽會場自行拆除，逾時一律由大會拆除處理。 	B1 展覽會場
規格審查	<ol style="list-style-type: none"> 1. 作者於 B1 完成布展後，請至規格審查服務台告知該科審查人員，並於展示板前等候審查人員做規格審查，作品通過規格審查後由審查人員於「作品規格審查表」上簽署。 2. 所有參展物品 (含筆電、實驗日誌及所有展品) 皆須通過規格審查及安全審查，請務必於 1/28 (日) 報到當日將所有展示品攜至會場進行布置，禁止在其他時間再帶入展示。 請務必攜帶實驗日誌，並刪去人名、校名等個人資料。 * 文具、指揮棒皆不貼規格審查貼紙，請於規格審查當天留在會場。 * 	B1 展覽會場
繳回表格	<p>至報到服務台交回 3 張表單。</p> <ol style="list-style-type: none"> A. 「作者聯繫及展品處理調查表」 (務必詳填 1/28-2/2 之緊急聯繫方式) B. 「作品規格審查表」 C. 「作者報到檢核表」 	B1 服務臺

貳、歡迎晚會

- 一、參加人員：國內外參展師生
- 二、活動時間：113 年 1 月 28 日 (日) 下午 18:00 至 20:00
- 三、活動地點：國立臺灣科學教育館 5 樓

參、開幕典禮暨大師講座

- 一、參加人員：國內外參展師生
 - 二、活動時間：113 年 1 月 29 日 (一) 上午 10:00 至 11:30
 - 三、活動地點：國立臺灣科學教育館 7 樓西側特展廳
(場內座位有限，網站同步直播，歡迎未能入場來賓觀禮。)
- 四、活動流程：

時間	內容
09:30-10:00	來賓接待
10:00-10:10	典禮開始 / 表演活動
10:10-10:15	介紹與會貴賓
10:15-10:20	長官致詞
10:20-10:35	介紹各國代表隊並進場
10:35-10:40	國立臺灣科學教育館館長致歡迎詞
10:40-11: 30	大師講座－「Learning by Doing」 林一平教授主講 Q&A 及結語
11:30-	禮成

五、大師講座簡介：

主題：Learning by Doing

盧梭在他具有影響力的小說《艾米爾》闡述了一種新的教育理論，強調表達的重要性，而不是抑制，以培養一個平衡、自由思考的孩子。創造者造萬物皆善，人類干預使它們變得邪惡。盧梭主張，傳統的教育方式，通過紀律和死記硬背教導道德品格，只會培養出暴君和奴隸。「杜威理論」對教育的創新理念聚焦於體驗學習的概念：即通過積極參與材料，而非被動聽講座或死記硬背事實，來實現最佳學習。他還主張在課堂中採用先進的提問和對話方法，以促進更有意義的交流。他主張所有形式的知識都應該與實際的現實世界經驗密不可分，只有當學生親身參與材料或透過實驗進行學習時，探索和學習才能真正發生。本演講敘述如何以 AI 及物聯網達到杜威做中學的目的。這也是 TISF 該追求的目標。



講者簡介

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研究興趣：個人通信網路、行動計算、系統模擬

經歷	<ul style="list-style-type: none">* Bell Communications Research (Bellcore) 擔任 Research Scientist(1990)* 國立交通大學資訊工程系系主任 (1997~1999)* 國立交通大學研發長 (2004~2006)* 國立交通大學資訊學院院長 (2007~2011)* 國立交通大學副校長 (2011~2014)* 科技部政務次長 (2014~2016.05)	<ul style="list-style-type: none">* 台灣聯合大學系統副校長 (2016.11~2019)* 中華大學講座教授 (2019~)* 東海大學名譽講座教授 (2020~)* 國立成功大學敏求智慧運算學院講座教授 (2021~)* 中國醫藥大學兼任講座教授 (2021~)* 亞洲大學兼任講座教授 (2021~)
榮譽	<ul style="list-style-type: none">* 112 學年度李國鼎榮譽學者 (2023)* 傑出領袖典範獎，第四屆全球物聯網與智慧服務最佳典範金龍獎 (2022)* 2022 未來科技獎* 110 年度中國電機工程學會會士* 亞軍, 2020 全球資通訊科技應用傑出貢獻獎 - 傑出公眾合作服務獎* 大渡山學會榮譽講座, 東海大學·大渡山學會 (2020)* 2020 智慧城市卓越貢獻獎, 社團法人台灣智慧城市發展協會* 2020 CES(Consumer Electronics Show) Innovation Awards, Las Vegas, USA	<ul style="list-style-type: none">* Digital Opportunity/Inclusion Merit Award, World Information and Technology and Service Alliance (WITSA) Global ICT Excellence Award 2019* 裴陶斐榮譽學會第 24 屆傑出成就獎 (2019)* Outstanding Achievement in Member Recruitment Award, IEEE(2018)* 李國鼎獎章, 管理科學學會 (2015)* 電機工程獎章, 中國電機工程學會 (2014)* Merit NSC Research Fellow Award(2012)* National Chair Award, Ministry of Education (國家講座)(2011)* TWAS Prize in Engineering Sciences(2011)

肆、國內外學生交流工作坊

- 一、活動日期：2024 年 1 月 29 日（一）
- 二、活動時間：13:00~16:00 (12:00-13:00 用餐)
- 三、活動地點：7 樓南側及西側區域、8 樓西側區域 (用餐地點為 7 樓南側區域)
- 四、活動對象：國內外參展作者 (需線上事先報名)
- 五、活動流程：

今年的學生交流工作坊有 4 種不同主題，邀請國內外參賽學生擇一參加，期望透過此活動，增進國內外學生間之國際交流。

- 六、協辦學校：臺北市立建國高級中學、國立臺灣師範大學附屬高級中學、臺北市立陽明高級中學、宜蘭縣宜蘭市中山國民小學等合計 12 所學校。

備註：

1. 當天下午 4 點前會公布安全審查結果，須於下午 5 點前修正完畢。
2. 每項交流工作坊皆有名額限制，將以報名順序錄取，額滿則自動遞補至下一個有名額的工作坊。

7 樓南側 A 區

歡樂過新年

臺灣新年活動體驗與跨國新年活動分享交流

將包含二大主題內容：

1. 臺灣新年活動體驗：包水餃、龍年小提燈製作、書寫春聯與剪紙、品嚐水餃 (好運水餃抽獎活動)。
2. 跨國新年活動分享交流：參加者請準備自己國家的新年節慶物品並分享國家的新年活動。

7 樓南側 B 區

推 3 阻 4

請參加者發揮創意，以小組合作方式，設計並完成組裝具備強大功能的 VEX 機器人，共同完成任務贏得勝利。

7 樓西側 C 區

量子糾纏知識快問快答及量子井字遊戲挑戰

參加者將以分組的方式，挑戰「量子疊加」與「量子糾纏」的知識快問快答以及「量子井字遊戲」，並選出積分最高的前三組獲勝。

8 樓西側 D 區

模擬聯合國

將以模擬聯合國的形式討論人與科技間的關係，本次主題為「ChatGPT 對教育領域帶來的影響」，期待世界各地學生間的互動與文化交流，並激發對科學的反思。




Section A

歡樂過新年-台灣新年活動體驗與跨國新年活動分享交流
Joyful New Year Celebration



Section B

推3阻4
Goal and Blocking



quantum tic-tac-toe

○	×	×
○	×	○
×	○	×

Allen Aspect developed this experiment, using a new way of sending the atoms so they can be arranged precisely at a higher rate. He could also search between different settings, so the system would not require any previous information that could affect the results.

© Allen Aspect/UC The Moore Institute of Science

Section C

量子糾纏知識快問快答及量子井字遊戲挑戰
The Challenge for Quantum Entanglement and Tic Tac Toe



伍、國內外教師交流會

- 一、參加人員：國內外參賽隊伍之指導教師（國內教師需事先報名）
- 二、活動時間：113 年 1 月 29 日（一）14:00 至 16:00
- 三、活動地點：本館 4 樓西側「HOMING 找家：回到人與萬物共存的希望星球」
生物多樣性常設展及 6 樓東側「半導體未來館」
- 四、活動內容：

本次教師交流會以 2022 年與 2023 年分別開幕的兩大常設展「找家」生物多樣性常設展廳以及「半導體未來館」為主軸，邀請負責策畫執行的兩位館員進行導覽，帶領大家走進科學博物館的幕前與幕後、體驗展覽中的工作坊與多媒體互動，從中認識臺灣島豐富的生態與科技人文風情，以及當代博物館如何透過多元的展示技術來開展適合全齡的展覽故事。

陸、安全審查

- 一、涉及電壓雷射 X 光、脊椎動物、人類及基因重組實驗之作品請參照「臺灣國際科學展覽會參展安全規則」之規定辦理（詳見臺灣國際科學展覽會實施要點附件五，請務必檢附相關切結書及證明文件。
- 二、審查進行方式
 - （一）113 年 1 月 29 日（一）13:00 開始，由「科學展覽作品審查委員會」之審查委員對所有參展作品進行安全審查。
 - （二）審查結果於 16:00 前公布於科教館 B1 大會公布欄及科展網站。
 - （三）未通過作品之作者憑證入場修正，於當日 16:00-17:00 前改正完畢，以順利參加評審。
 - （四）實驗日誌請於 1 月 28 日布展完成後留下，提供委員參考。

柒、評審

一、評審地點：國立臺灣科學教育館 B1 展覽廳。

二、評審時間：

(一) 第一階段評審：1 月 30 日 (二) 9:00 至 18:35

(每件作品原則上 15 分鐘，以 10 分鐘報告、5 分鐘問答為原則。)

(二) 第二階段評審：1 月 31 日 (三) 9:00 至 12:00

(三) 公布第三階段評審入圍名單：1 月 31 日 (三) 16:00

(四) 第三階段評審：2 月 1 日 (四) 9:00 至 16:00

三、評審期間每件作品全體作者應到場說明並回答評審委員問題，無故不到之作者予以除名 (實施要點拾參、四)

四、入出展覽場時間：

參閱「2024 年臺灣國際科學展覽會評審日程表」，作者請依下列時間入出展覽場。

2024 年臺灣國際科學展覽會評審日程表

類別	地點	入場時間	出場時間	備註
第一階段評審	B1 展覽廳	1月30日 08:10 檢錄		<ol style="list-style-type: none"> 僅學生入場 評審及學生作品交流時段，僅作者進場解說作品內容，指導教師及陪同人員請至本館7樓休息區等候。 第三段評審經公告入圍同學請於2月1日8:30準時進入會場，於作品前等待。 作者入場須佩帶作者證。 本注意事項如有未盡、更改或補充事宜，請隨時注意網站、會場公告或廣播。
		1月30日 08:50	1月30日 10:35	
		1月30日 10:00 檢錄		
		1月30日 10:40	1月30日 12:25	
		1月30日 12:35 檢錄		
		1月30日 13:15	1月30日 15:00	
		1月30日 14:25 檢錄		
		1月30日 15:05	1月30日 16:50	
		1月30日 16:10 檢錄		
第二階段評審	B1 展覽廳	1月30日 16:50	1月30日 18:35	
		1月31日 08:10 檢錄		
		1月31日 08:50	1月31日 10:20	
		1月31日 09:50 檢錄		
第三階段評審	B1 評審區	1月31日 10:30	1月31日 12:00	
		2月1日 8:30 報到		
		2月1日 9:00	2月1日 12:00	
公開展覽	全體參 展學生	2月1日 13:00	2月1日 16:00	
		2月1日 9:00	2月1日 16:00	

五、參展作品：

- (一) 作者完成參展作品參加評審，其「作品海報」、「研究報告」及「實驗日誌」均不得出現作者、指導教師之姓名或校名。
- (二) 請務必攜帶所有展示品(含電腦、「實驗日誌」、作品說明書)並於1月28日(星期日)報到時經規格審查人員審核貼標，有貼標才能展示。
- (三) 1月30日(星期二)至2月1日(星期四)評審期間，參展學生請勿穿著校服，但需穿著整齊服裝。
- (四) 第二階段、第三階段評審的目的，為該科評審委員對作品進一步瞭解或相關科別評審委員共同會審而請作者再予以說明。因此，第二階段、第三階段評審時，再作講解的作品與未再作講解的作品，其得獎機會相同。
- (五) 第三階段評審時段獲公告通知面談者：
 1. 請作者攜帶歷年成績證明正本1份、影本1份(自入學至112學年度上學期)。
 - (1) 正本1份：標註作品編號。
 - (2) 影本1份：刪去人名、校名等個人資料，並標註作品編號。
 2. 請作者攜帶如TOEIC、全民英檢等各種英文檢定成績證明正本1份、影本1份。
 - (1) 正本乙份：標註作品編號(會後發還作者)。
 - (2) 影本1份：刪去人名等個人資料，並標註作品編號。
 3. 請憑作者證由評審助理帶領至評審地點。
 4. 為瞭解學生之英文能力與研究態度，請作者準備3分鐘英文作品簡報(簡報檔於1月12日17:00前上傳雲端)，以備評審詢問。
- (六) 評審期間場內或場外作者及陪同人員請與工作人員合作，儘量保持安靜與維護場所的整潔。

113年2月1日(星期四)公開展覽結束後，作者可將貴重儀器及原始記錄帶走，作品海報仍需留在會場至2月3日(星期六)海報展覽結束後，於當日16:00-17:00再自行拆除。

捌、公開展覽

- 一、活動時間：113 年 2 月 1 日 (四) 9:00 至 16:00
- 二、參加人員：參展作者需全數參加並於作品前介紹作品
- 三、活動地點：國立臺灣科學教育館 B1 樓會場
- 四、活動內容：開放給民眾參觀

玖、文化之夜

- 一、參加人員：國內外參展學生及教師
- 二、活動時間：113 年 2 月 1 日 (四) 18:00 至 21:00
- 三、活動地點：國立臺灣科學教育館 1 樓
- 四、備註：鼓勵參加人員著具文化特色之服裝

拾、頒獎典禮

- 一、活動時間：113 年 2 月 2 日 (五) 14:00 至 16:00 · 13:00 開始入場
- 二、參加人員：限國內外參展作者憑作者證入場 · 並依號碼入座。
- 三、活動地點：南海劇場 (臺北市中正區南海路 47 號)
- 四、交通資訊：



捷運：

- (1) 淡水線中正紀念堂站 1、2 號出口
- (2) 小南門線小南門站下車 3 號出口

五、公告得獎名單：113年2月1日(五)16:00於國立臺灣科學教育館B1展覽廳公布欄及活動網站(<http://www.ntsec.gov.tw>)公告

六、參加者請穿著正式整齊服裝或校服

七、活動流程：

時間	內容
13:30-14:00	來賓接待及作者報到
14:00-14:10	典禮開始 / 表演
14:10-14:15	長官致詞嘉勉
14:15-14:20	評審總召集人講評
14:20-14:25	頒發感謝狀
14:25-14:30	國立臺灣科學教育館館長致詞
14:30-15:30	頒發獎項
15:30-15:35	播放回顧影片
15:35-15:40	長官致詞
15:40-15:50	頒發青少年科學家獎
15:50-16:00	頒發優良指導教師
16:00-16:10	大合照
16:10	禮成

八、由於南海劇場座席有限，除了參展學生憑作者證依科別就坐外，大會另安排國立臺灣藝術教育館南海書院2樓第三會議室(座位有限)空間供指導老師及家長透過轉播同步觀禮。

備註：轉播網址 <https://youtube.com/live/Ep64agzVEXA>



拾壹、出國代表座談會

- 一、活動時間：113 年 2 月 1 日 (五) 16:00 至 16:30
- 二、參加人員：推薦出國代表及指導教師
- 三、活動地點：南海劇場 (臺北市中正區南海路 47 號)

拾貳、海報公開展示

- 一、活動時間：113 年 2 月 3 日 (六) 9:00 至 2 月 3 日 (六) 16:00
- 二、參加人員：大眾自由參觀
- 三、活動地點：國立臺灣科學教育館 B1 樓會場

拾參、展覽

一、展覽：

113 年 1 月 28 日至 2 月 1 日

■常設展 (3-6F)

參展師生可憑識別證於展覽會期間參觀常設展

■臺北市立天文科學教育館

參展師生可憑識別證於展覽會期間參觀臺北市立天文科學館展示場

■臺北市立兒童新樂園

參展師生可憑識別證於展覽會期間免費進出臺北市立兒童新樂園

二、劇場：

本館 B1 沉浸式劇場 (小黑盒) 供科展參展師生免費觀賞場次：

1 月 28 日 11:30、15:30、16:30、17:30

1 月 29 日 16:30、17:00、17:30

1 月 30 日 11:30、15:30

1 月 31 日 11:30、15:30

2 月 01 日 11:30、15:30

三、備註：

- 請務必攜帶識別證。
- 影片簡介詳見附錄九。

拾肆、國內師生供餐資訊

		1/28 (日)	1/29 (一)	2/1 (四)
Lunch	學生		V 7 樓西南側特展廳 報名學生交流工作坊者	V 7 樓西南側特展廳
	老師		V 10 樓多功能會議室 報名教師交流會者	V 7 樓西南側特展廳
Dinner	學生	V 5 樓 歡迎晚會		V 1 樓大廳 文化之夜
	老師	V 5 樓 歡迎晚會		V 1 樓大廳 文化之夜

贊助單位 / Sponsors



財團法人崇友文教基金會
GFC Foundation



財團法人育秀教育基金會
Y.S. Educational Foundation



映象有限公司
Image Model Co. Ltd





GFC Foundation

GFC Foundation was founded by GFC Elevator Company(崇友實業) in 1996. The foundation's main service targets children and teenagers, and it mainly provides four major services such as "Scientific Education", "Aesthetic Education", "Service Learning", and "Caring for Minorities".

Promoting Scientific Education

Youth Science Research Project

Since 1996, the foundation has annually sponsored the "National Primary and High School Science Fair" hosted by National Taiwan Science Education Center to cultivate potential and aspire secondary school students to participate in scientific research.

Elevator Science Education

Combined elevator expertise from GFC Elevator Company, and transforms it into science and safety education materials that can promote through seminars at schools and community.

Rooting Arts and Humanities

GFC Humanity Lecture Hall

Founded in 2003, starts a series of aesthetic courses to root for arts and humanities education.

A cappella Events

The Harvard University Krokodiloes Choir has been invited annually to Taiwan, giving A cappella performances and increasing the international perspective of Taiwanese youths through interactions.

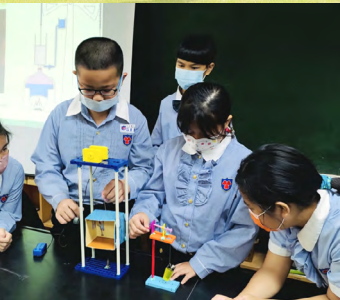
Youth Talent Training

GFC scholarship supports talented and needy young students to continue their education. GFC scholarship gives an opportunity to make those students' life better.

Caring for Minorities

Corporate Volunteer

Volunteer in social welfare agency monthly with GFC Elevator Company employees.



勁速想樂 勁升上遊



M820WD 產品簡介



如何開啟縮時錄影



如何匯出GPX

STARVIS

三年保固

MiVue™ M820WD

雙鏡頭60fps星光級

三合一駐車模式(全時/省電/縮時)

旅程縮時



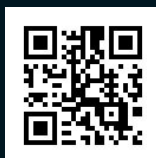


神通資訊科技 引領數位轉型 · 打造智慧未來

神通資訊科技前身為 1974 年成立的神通電腦，傳承其豐厚系統整合經驗及核心技術，於政府及企業「雲」與「端」整合的 AIoT 解決方案，在資通訊大型標案市場舉足輕重，客戶涵蓋企業、教育單位、金融機構等，是台灣「智慧城市」及「數位轉型」的重要領導廠商。神通資訊科技以 AIoT 平台 (MiAIOT) 為基礎，積極發展「雲-邊緣-端點」的產品與服務，建構完整的 AIoT 解決方案，持續為客戶引領數位轉型 · 打造智慧未來。

慧未來

於 2010 年成立，提供政
戶涵蓋政府機構、國/民
商。跨入 5G 世代，神通
構出各個智慧城市領域



【神通資科官網】



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Program

2024 Taiwan International Science Fair Program

Date / Time	09:30 ?	12:00 ?	13:00 ?	17:00 ?
	12:00	13:00	17:00	20:00
Jan 26 Fri	Arrival Hotel			
Jan 27 Sat	Culture Tour Yilan			
Jan 28 Sun	<ul style="list-style-type: none"> ● Registration ● Project Setup ● Display Inspections B1	Lunch	<ul style="list-style-type: none"> ● Delegation Rehearsal for Opening Ceremony ● Head of Delegation Meeting B1 Public Dining Area	18:00-20:00 Welcome Party 5F
Jan 29 Mon	10:00-12:00 Opening Ceremony 7F	Lunch	Student Workshop (12:00-16:00) 7F/8F Supervisor Workshop (14:00-16:00) 4F/6F	Announce for D&S Review
Jan 30 Tue	9:00-12:25 Judging Interviews B1	Lunch	Culture Tour Tamsui	
Jan 31 Wed	Culture Tour National Palace Museum	Lunch	Science Tour	
Feb 1 Thu	Open to the Public B1	Lunch	Open to the Public B1	18:00-21:00 Cultural Night 1F
Feb 2 Fri	9:30-12:00 Free time	Lunch	Award Ceremony 14:00-16:00 Nanhai Theater	

Schedule of Events

I. Registration / Project Set-up

● **Time & Date:** 09:30 Jan. 28th Sun.

● **Venue:** B1

1. Project Setup (B1)

■ Put Abstract into the Acrylic Sheet

■ Get 「D&S Form」

* Forms will be provided on the display desk

2. Display Inspections (B1)

Get display inspections and approved from judge assistants then turn in at the information desk on B1.

3. Paint Lab Coat (Rest area, 7F)

■ One representative of each country showing the coat on the stage of the opening ceremony

■ Confirm the representative to Staff

4. Rehearsal for Opening Ceremony

The representatives for showing coat assemble in West Exhibition Hall, 7F before 15:00.



II. Head of Delegation Meeting

- **Attendance:** Educators and supervisors of domestic and overseas teams.
- **Time & Date:** 14:00-16:00 Sun. Jan 28th
- **Venue:** Public Dining Area, B1

III. Welcome Party

- **Time & Date:** 18:00 Sun. Jan 28th
- **Venue:** 5F
- **Dress Code:** Smart Casual

IV. Opening Ceremony

- **Time & Date:** 10:00-12:00 Mon. Jan 29th
- **Venue:** Exhibition Hall, 7F
- **Note:** Because of the limited seats, you can also watch live streaming in our website.
- **Dress Code:** Business Attire

Time	Program
09:30-10:00	Welcome Guests
10:00-10:10	Opening Show
10:10-10:15	Introduction of Guests
10:15-10:20	Welcome Remarks
10:20-10:35	Introduction of Participating Delegation
10:35-10:40	Welcome Remarks
10:40-11:30	Meet the Scientist "Learning by Doing" -- Prof. Jason Yi-Bing Lin --
11:30-	End of Ceremony

*After the opening ceremony, all student participants following NTSEC staffs to attend Students Workshop on 7F.

*All teachers go to 10F for lunch and attend Supervisor Workshop on 4F/6F.

V. Keynote Speech

Topic : Learning by Doing

In the influential novel Emile (1762) Rousseau expounded a new theory of education, emphasizing the importance of expression rather than repression to produce a well-balanced, free-thinking child. The Creator makes all things good; man meddles with them and they become evil. Contending that the traditional means of teaching moral character through discipline and learning by rote produced tyrants and slaves. Dewey Theory's innovative ideas about education focused on the idea of experiential learning : the idea that we can learn best by actively engaging with the material rather than passively listening to lectures or memorizing facts. He also advocated for progressive methods of powerful questioning and dialogue to enable more meaningful exchange during classrooms. He argued that all forms of knowledge should be grounded inseparably in practical, real-world experience and that meaningful exploration and learning could only truly take place when students engaged with their material firsthand or through experimentation. This presentation discusses how to achieve Dewey's educational goals through AI and the Internet of Things (IoT). This aligns with the objectives that TISF should pursue.



Speaker:
Jason Yi-Bing Lin

Education

Ph.D., Computer Science, University of Washington.

Experience

Lifetime Chair Professor , Department of Computer Science, National Yang Ming Chiao Tung University (2021~)

Adjunct Chair Professor, Asia University (2021~)

Adjunct Chair Professor, China Medical University (2021~)

Chair Professor, Miin Wu School of Computing, NCKU (2021~)

Adjunct Chair Professor, China Medical University (2021~)

Awards

2021 Ta-You Wu Memorial Award

2021 Taiwan Outstanding Young Women in Science

2020 Amazon AWS Machine Learning Research Awards

2019 FAOS Young Scholar Innovation Award

2018 MOST Young Scholar Fellowship

2017 Google Faculty Research Awards

Research Interest:

Personal Communication Services Network, Mobile Computing, System Simulations

Honor & Awards:

2023 K. T. Li Honorary Scholar Award

Paragon Award (Leadership), 2022 GLOBAL BEST PRACTICE OF IOT AND
SMART SERVICE CONFERENCE, 2022

2022 MOST FutureTech Award

Fellow, The Chinese Institute of Electrical Engineering 2021

Runner Up, 2020 WITSA Global ICT Excellence Awards – Public/Private
Partnership Award

DDS Chair Professor, DDD Institute of Advanced Education, 2020

2020 Excellent Contribution Award for Smart City, Taiwan Smart City
Association

2020 CES(Consumer Electronics Show) Innovation Awards, Las Vegas, USA
Digital Opportunity/Inclusion Merit Award, World Information and
Technology and Service Alliance (WITSA) Global ICT Excellence Award
2019

Outstanding Achievement Award, The Phi Tau Phi Scholastic Honor Society
of the Republic of China, 2019

Outstanding Achievement in Member Recruitment Award, IEEE, 2018

K. T. Li Management Medal, Chinese Management Association ,2015

Medal, The Chinese Institute of Electrical Engineering, 2014

Merit NSC Research Fellow Award, 2012

National Chair Award, Ministry of Education, 2011

VI. Student Workshop

- **Date:** Mon. Jan. 29th
- **Time:** 13:00-16:00 (12:00-13:00 Lunch time)
- **Venue:** South and East Wing at 7F and 8F, NTSEC
- **Attendance:** International and Taiwanese Students
- **Activities:**

This year's student workshops feature four different themes, students will participate in one of student workshops which will enhance international exchanges among students from both domestic and foreign backgrounds.

- **Cooperating Schools:**

Taipei Municipal Chien Kuo High School 、 The Affiliated Senior High School of National Taiwan Normal University 、 Taipei Municipal Yangming High School 、 Jhongshan Elementary School and 9 other schools.

Remark:

1. Check SRC Results at 16:00, and make corrections before 17:00.
2. As enrollment will be based on the order of registration, if the workshop a student selected reaches the maximum capacity, they will be placed to the next available workshop.

Section A (7F South Wing), Joyful New Year Celebration

This workshop includes two sections,

1. Taiwanese New Year Activities: Making dumplings, crafting lanterns for the Year of the Dragon, writing couplets and paper cutting. Tasting dumplings (Lucky Dumplings).
2. Cross-Cultural New Year Activity Sharing and Exchange: Participants from different countries are invited to prepare traditional New Year festival items from their own countries and share their New Year activities with other participants.

Section B (7F South Wing), Goal and Blocking

Participants will unleash their creativity, collaborating in teams to design and assemble a powerful VEX robot and accomplish tasks to achieve victory.

Section C (7F West Wing), The Challenge for Quantum Entanglement and Tic TaC Toe

Participants will face the group challenge includes a lightning round of Quantum Superposition and Quantum Entanglement questions, along with the Quantum Tic-Tac-Toe game. The top 3 teams with the highest scores win.

Section D (8F West Wing), 2024TISF Mock MUN

Participants are going to discuss the relationship between people and technology on the topic of “The Effect that Chat GPT brought to Education Field”. We look forward to the event being an international cultural exchange opportunity and a reflection on science that sparks vibrant interactions between students from all over the world.



Section A

歡樂過新年-台灣新年活動體驗與跨國新年活動分享交流
Joyful New Year Celebration



Section B

推3阻4
Goal and Blocking

quantum tic-tac-toe

○	×	×
○	×	○
×	○	×

Alan Aspect developed this experiment, using a new way of finding the errors as they entangle entangled photons at higher rates. He used this search between different settings, so the system could not contain any advance information that could affect the results.

© 2019 copyright The New Yorker/Division of Science

Section C

量子糾纏知識快問快答及量子井字遊戲挑戰
The Challenge for Quantum Entanglement and Tic TaC Toe

Section D

2024TISF微模聯
2024TISF Mock MUN

VII. Guided Tour and Workshop for Supervisors

- **Attendance:** Educators and supervisors of domestic and overseas teams.
- **Time & Date:** 14:00-16:00 Mon. Jan 29th
- **Venue:** 4F and 6F, NTSEC

The guided tour and workshop focus on two permanent exhibitions "HOMING Finding Home", the Biodiversity Permanent Exhibition and the "Semiconductor Pavilion of the Future" that newly opened in 2022 and 2023 respectively. Two museum colleagues who involved in curation and execution are here to conduct a detailed guide tours, taking everyone into the front and behind scenes of the Science Center, experiencing the workshops and multimedia interactions in the exhibition. So as to learn about Taiwan's rich ecology, science and technology culture, and how contemporary museums use diverse display technologies to develop exhibitions suitable for all ages.

VIII. Judging Interviews

- **Time & Date:** 09:00~12:25 Tue. Jan. 30th
- **Venue:** Exhibition Hall, B1
- **Dress Code:** Business Attire

Category	Location	In	Out	Remarks
Preparation Session	Exhibition Hall, B1	Jan 30 th 08:30		Students only
Judge Session		Jan 30 th 09:00	Jan 30 th 12:25	

NOTE:

- *Only students may enter the Exhibition Hall during Judging.
- *Please wear the nametag to enter the Exhibition Hall.
- *If there are any unsettled, changed or supplementary notices, please note the website, venue announcement or broadcast.

IX. Cultural Tour for Supervisors & Students

- **Time & Date:** 9:00~18:00 Sat. Jan. 27th
- **Gathering Point:** Hotel
- **Note:** It is an outdoor activity, please bring raincoats or umbrellas.
- **Destination:** Yilan

- **Time & Date:** 13:00~18:00 Tue. Jan. 30th
- **Gathering Point:** : NTSEC
- **Note:** It is an outdoor activity, please bring raincoats or umbrellas.
- **Destination:** Tamsui

- **Time & Date:** 9:00~12:00 Wed. Jan. 31st
- **Gathering Point:** : Hotel
- **Destination:** National Palace Museum

X. Science Tour for Supervisors & Students

Science Tour Route 1

Craft Your Unique Cabinet of Curiosities!

Workshop + National Taiwan University Campus Tour

Time: 2024 1.31(Wed.) 13:30-17:30

Join the workshop hosted by the NTU Museum of Zoology to explore animalnique cabinet of curiosities, revealing the values behind your selections and telling the story of your creation."

Science Tour Route 2

Preliminary Program of Intelligence Technology Course-Learn it, See it, Do it! + National Taiwan University Campus Tour

Time: 2024 1.31(Wed.) 13:30-17:30

This course is specially designed for high school juniors and seniors interested in Intelligence Technology. It is designed to learn the hardware and software principles through a so-call Beta-Go Project. Students will have the opportunity to explore Intelligence Technology via making devices (named GameBaby), programming, and interconnecting. Students will experience an interactive course through lectures and experiments at the College of Electrical Engineering and Computer Science, National Taiwan University.

- **Learn it:** learn not only the basic hardware and software principles, but also the important skills of hardware making, programming and interconnecting.
- **See it:** GameBaby.
- **Do it:** hands-on device making and programming.

Science Tour Route 3

Time: 2024 1.31(Wed.) 13:30-16:30

Visit the Microsoft Office in Taipei

Visit the Microsoft Office in Taipei. Learn about the company and meet the engineers of Microsoft and know about their work.

Science Tour Route 4

Zhishan Cultural and Ecological Garden Tour and DIY activity


Time: 2024 1.31(Wed.) 13:30-16:30

Introduction

Time	Activity
13:30-13:50	Depart for Zhishan Cultural and Ecological Garden
13:50-14:00	Arrive at Zhishan Cultural Ecological Garden
14:00-15:00	Outdoor guide and 1F Exhibition hall introduction
15:00-15:30	Indoor Course- Plant Seeds
15:30-15:45	Seed DIY Activity
15:45-16:00	Discuss and sharing
16:00-16:30	The end of today' s science tour

Visiting the Zhishan Cultural and Ecological Garden, one will discover an exceptionally unique ecological environment. The garden preserves native plants from different periods and habitats around Taipei Lake, encompassing coastal, swamp, and terrestrial vegetation, creating diverse forest ecosystems. As a result, the garden becomes a rich habitat for various wildlife, resembling a natural ecological museum!

This uniqueness can be attributed to Zhishan being designated as a security forest and natural monument during the Qing Dynasty and Japanese occupation. During the era of the Nationalist government, it served as a military intelligence agency ammunition depot. Eventually, it transformed into Taiwan's first cultural ecology park, significantly reducing human interference and development. Consequently, the park features rare giant tree landscapes and entwined phenomena. Situated on a small hill with an elevation of only 51.8 meters, Zhishan records the changes in the greater Taipei environment. It stands as a precious urban leisure green space and forest treasure,



offering a glimpse into the shifting landscapes of the metropolitan area. Simultaneously, it serves as one of the best locations for observing the biodiversity of Taipei.

This science tour visits and guides the natural environment and historical textures of Zhishan Cultural and Ecological Garden, and arranges plant seed DIY activities. Come join us!

XI. Project Open to the Public

- **Time & Date:** 9:00~16:00 Thu. Feb. 1st
- **Venue:** Exhibition Hall, B1
- **Dress Code:** Business Attire
- **Note:** Finalists should stay at your booth and present your project to the public.

XII. Cultural Night

- **Time & Date:** 18:00~21:00 Thu. Feb. 1st
- **Venue:** 1F Lobby
- **Dress Code:** Costumes that showcase culture or tradition.
- **Note:** For the schedule of Talented show or performance, please note the website, venue announcement or broadcast.

XIII. Award Ceremony

- **Time & Date:** 14:00~16:00 Fri. Feb.2nd
- **Venue:** Nanhai Theater
- **Travel Information:** 13:00 Boarding at the hotel;

For those who travel by themselves,

MRT

Danshui Line to Chiang Kai-Shek Memorial Hall (Exit at No. 1 or 2)

Xiaonanmen Line to Xiaonamen (Exit at No. 3)



- **Dress Code:** Business Attire

●**Note:**

Time	Activity
13:30-14:00	Guests Arrival
14:00-14:10	Award Ceremony starts /Performance
14:10-14:15	Remarks
14:15-14:20	Speech by Head Judge
14:20-14:25	Appreciation Plaque to Sponsors & Co-organizers
14:25-14:30	Remarks of NTSEC Director
14:30-15:30	Awards Announcement
15:30-15:35	Recap Video
15:35-15:40	Remark
15:40-15:50	Young Scientist Awards Announcement
15:50-16:00	Awarding of Excellent Teachers
16:00-16:10	Group Photo
16:10	End of Ceremony

XIV. Poster Exhibition

- Time & Date** : Feb.3rd Sat. 9:00~ 16:00.
- Venue** : Exhibition Venue, B1
- Note** : exhibition open to the public.

XV. Free Admission

Students and supervisors have free admission for visiting National Taiwan Science Education Center、Taipei Astronomical Museum and Taipei Children's Amusement Park.

●**Date** : Jan 28 to Feb. 1

●**Exhibitions:**

1. Permanent Exhibitions (3-6 F) of NTSEC

Finalists can visit the permanent exhibitions by nametag during TISF 2024.

2. Taipei Astronomical Museum

Finalists can visit Taipei Astronomical Museum by nametag during TISF 2024.

3. Taipei Children's Amusement Park

Finalists can visit Taipei Children's Amusement Park by nametag during TISF 2024.

●**NTSEC Theater (B1)**

Free Screening for TISF delegates.

Jan 28 11:30、15:30、16:30、17:30

Jan 29 16:30、17:00、17:30

Jan 30 11:30、15:30

Jan 31 11:30、15:30

Feb 1 11:30、15:30

●**Note:**

1. Nametag is required.

2. The representatives for showing coat need to go back to

Rest area, 7F before 15:00. Jan. 28th

3. Others can rest in rest area, 7F.

XVI. Shuttle Bus Schedule

Date	Activity	Start	Arrive	Venue
Jan27 Sat.	Culture Tour	8:00	09:30	Hotel → Yilan
		18:30	20:00	Yilan → Hotel
Jan28 Sun.	Projects Set-up Welcome Party	09:30	10:00	Hotel → NTSEC
		20:30	21:00	NTSEC → Hotel
Jan29 Sun	Opening Ceremony Student Workshop Supervisor Workshop	09:00	09:30	Hotel → NTSEC
		17:10	17:40	NTSEC → Hotel
Jan 30 Tue.	Judging Interviews	08:00	08:30	Hotel → NTSEC
		13:00	13:30	NTSEC → Tamsui
		16:30	17:30	Tamsui → Hotel
Jan31 Wed.	Culture Tour/ Science Tour	08:30	09:30	Hotel → National Palace Museum
		11:30	12:00	National Palace Museum → NTSEC
		13:00	13:30	NTSEC to different locations
		17:30	18:20	Bact to Hotel from different locations
Fed 1 Thu.	Open to Public	08:00	08:30	Hotel → NTSEC
	Culture Night	21:30	22:00	NTSEC → Hotel
Feb 2 Fri.	Award Ceremony	13:00	13:30	Hotel → Nanhai Theater
		16:30	17:00	Nanhai Theater → Hotel

*Time table may change subject to actual situation.

XVII. Taipei Sightseeing Information



●About TAIPEI 101

Located in the finest district Taipei has to offer, TAIPEI 101 is the largest engineering project ever in the history of the Taiwan construction business. Supported by a dozen or so domestic businesses, the TFC Corp. was fortunate to have local and international experts in charge of the planning, and world-class architect C.Y. Lee was responsible for the design of the project. The design transcends the uni-body concept and is based on the Chinese number 8, a numeral long considered lucky in Chinese culture. Eight-floor structural units are connected one by one on top of each other to form the whole. This kind of rhythmic aesthetic is new to skyscrapers. The sectional TAIPEI 101 employs a Mega Structure System for disaster and wind damage prevention. As every eight floor constitutes an autonomous space, wind effects on the surface seen in high - rise buildings are eliminated. The design of the foundation guarantees pedestrian safety and comfort. Resembling the flexible yet persistent bamboo that rises into the sky, the building is a reflection of traditional Chinese building philosophy. Inclining 7 degrees inwards, the structure increases in size as it gets higher. The transparent and non-reflective curtain walls are energy efficient and heat

reflective, enabling those in Taiwan's tallest building to have a clear view of the world around them. High - tech materials and innovative illumination creates a see - through effect with transparency and clarity that facilitates the harmony between the building and its natural environment.

●About TAIPEI 101 Observatory

At 382 meters above the ground the 89F Observation Floor offers visitors a commanding view of the city and Taipei Basin at all directions. The world's largest damper, weighing 660 metric tons, is also exhibited at this level. The Observatory is equipped with high - power binoculars, drinks bar, image services, pre-recorded audio tour guides in seven languages, & souvenir shops.

TAIPEI 101 Observatory's elevators are Guinness Record - breaking high-speed pressurized elevators in 2004, with a speed of 1010 meters per minute. It takes only 37 seconds to reach the 89th Floor.

●Travel Information

(Traffic information is subject to change. Please check with the transportation station before departure.)

■**Address** : No. 45, Shifu Rd., Xinyi District, Taipei City

■**Tel** : +886-8101-7777

■**Latitude**: 121.564837/25.033194

■**Web**: <http://www.taipei-101.com.tw/>

■Transportation:

- Nat'l Hwy 1 → Exit at the Tiding Interchange → Sec. 1, Tiding Blvd. → Maishuai 2nd Bridge → Sec. 1, Keelung Rd. → Shifu Rd. → TAIPEI 101
- Nat'l Hwy 3 → Exit at the Muzha Interchange → Nat'l Hwy 3A → Exit at the Wangfang Interchange → Xinyi Expressway → Sec. 5, Xinyi Rd. → Shifu Rd. → TAIPEI 101
- Public: Take THSR or TRA to Taipei Main Station → continue by Taipei MRT to Taipei 101 / World Trade Center Station.

■**Open Hours**: Daily 10:00 - 21:00

○ Last ticketing & entry: 20:15

*Operating hours during holidays are subject to change.



■ **Admission Fee**

- Adult NT\$600
- Concession NT\$540 / Children under 12
- Group Ticket NT\$540 / For 20 people or more
- Fast Pass NT\$1200

■ **Complimentary:**

- Each child under 115 cm should be accompanied by an adult.
- Group reservation please made by 17:00 the previous day.
- No same day sale for Group Ticket.

■ **Remarks:**

- TAIPEI 101 Observatory is a non - smoking area. Betel nuts and chewing gums are also not permitted.
- Visitors wearing improper attire or slippers will not be permitted entry.
- Please observe the movement of lines and follow as directed.
- Please carefully guard your possessions.
- Do not bring food, pets, banned substances, or dangerous items.
- No vandalism. Violators will pay for compensation.



●About Raohe Street Tourist Night Market

Raohe Street Tourist Night Market is located on Raohe Street, Taipei, 600 meters in length. This area was called Xikou and was a business center because of its location and transportation. However, with the development of transportation, Raohe Street has become a secondary road and the business has also declined. Therefore, the government set up a night market in 1987. It is the second tourist night market in Taipei. Various products and local foods are sold in the night market.

Raohe Street Tourist Night Market is 600 meters in length, near Shongshan Railway Station. There is a decorated-archway in front of the entrance. There are various shops and stands in the night market. It presents Taiwanese characteristic and is definitely a place worth visiting.

●Travel Information

(Traffic information is subject to change. Please check with the transportation station before departure.)

■**Address:** Raohe St., Songshan Dist., Taipei City 105, Taiwan (R.O.C.)
Longitude

■**Tel:** +886-8101-7777

■ **Latitude:** 121.57463/25.050358

■ **Web:** <https://eng.taiwan.net.tw/m1.aspx?sNo=0002016&id=R177>

■ **Transportation:**

- Nat'l Hwy 1 → Exit at Neihu Interchange → Sec. 2, Chenggong Rd. → Xinming Rd. → Chengmei Bridge → Sec. 3, Nangang Rd. → Sec. 4, Bade Rd. → Raohe St.
- Public: Take TRA/MRT to Songshan Station.



- For other languages or more travel info, please visit:

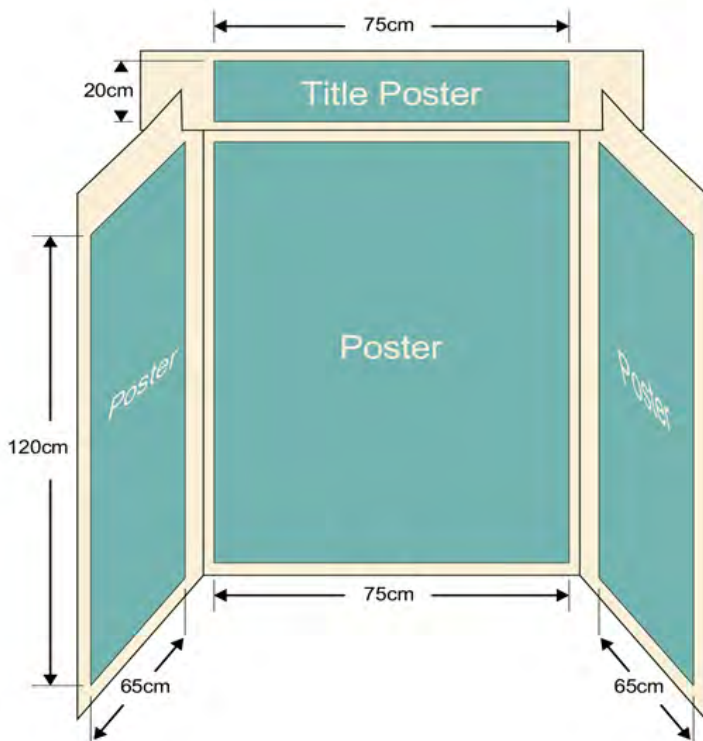
<https://eng.taiwan.net.tw/>



- For Muslim-friendly Dinning, please visit:

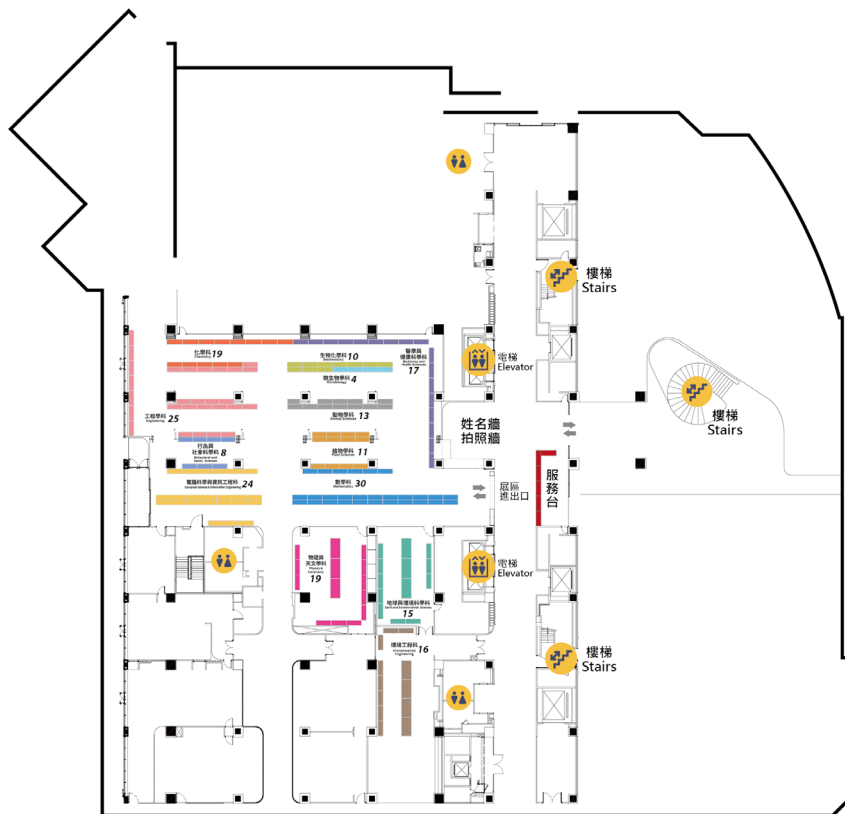
<https://eng.taiwan.net.tw/m1.aspx?sNo=0020308>



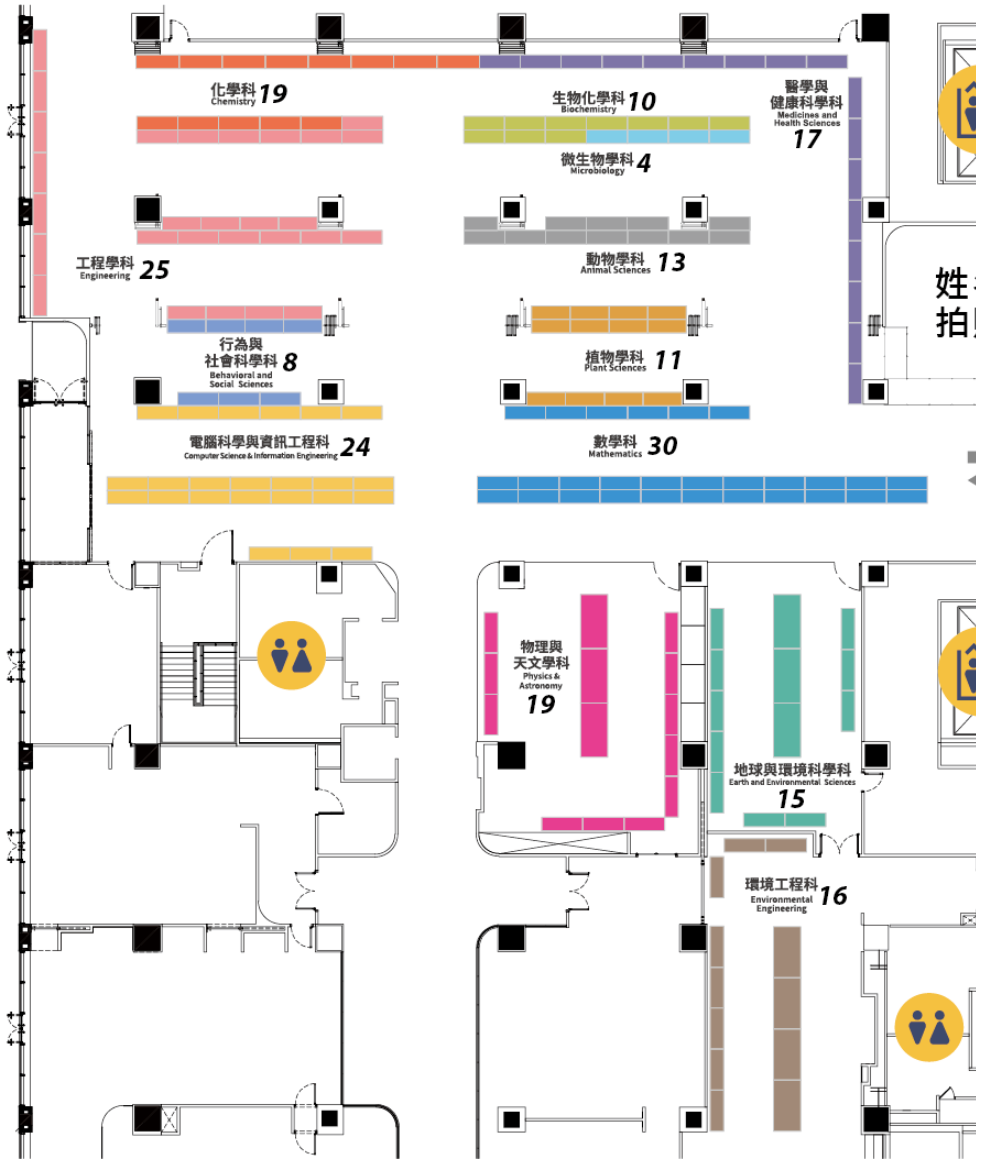


1. 作品說明板（材質：厚紙板）由國立臺灣科學教育館統一提供。
The display panel is provided by NTSEC.
2. 參展作品海報規格左、中、右三面各寬 65、75、65 公分，高 120 公分。
標題海報寬 75 公分，高 20 公分。
The display panels from left to right are 65, 75, and 65 cm in width and 120 cm in height. The display panel for the title is 75 cm by 20.
3. 放置在展覽桌上之實物，不得超過桌面，且重量不得超過 20 公斤。
The weight of display object on the desk is limited in 20 kilometers and shall not exceed the desktop.

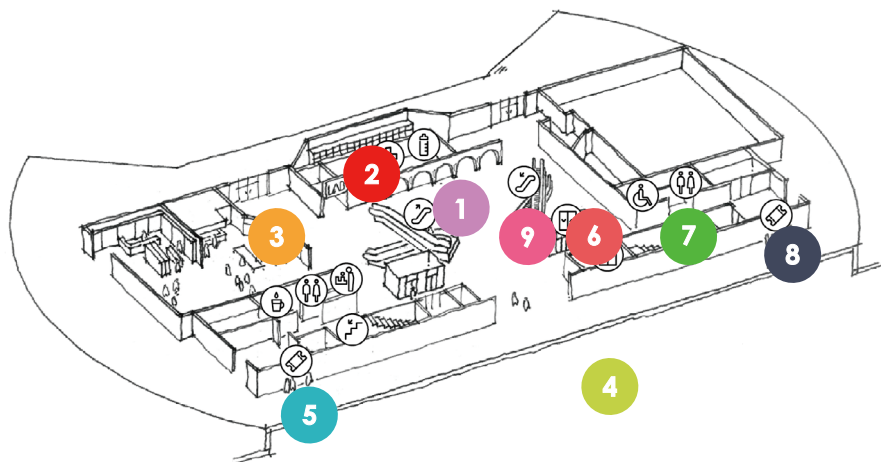
(一) B1 展場平面圖 / B1 Floor Layout



數學科 Mathematics	化學科 Chemistry	地球與環境科學科 Earth and Environmental Sciences	植物學科 Plant Sciences	動物學科 Animal Sciences
物理與天文學科 Physics & Astronomy	生物化學科 Biochemistry	微生物學科 Microbiology	環境工程科 Environmental Engineering	醫學與健康科學科 Medicines and Health Sciences
行為與社會科學科 Behavioral and Social Sciences	工程學科 Engineering	電腦科學與資訊工程科 Computer Science & Information Engineering		



(二) 1樓展區平面圖 / 1st Floor



1 大廳 / Lobby

2 保健室 / Medical Station

3 賣店區 / Stores

4 半戶外廣場 / Semi-outdoor Plaza

5 特展售票處 / Box Office for Special Exhibitions

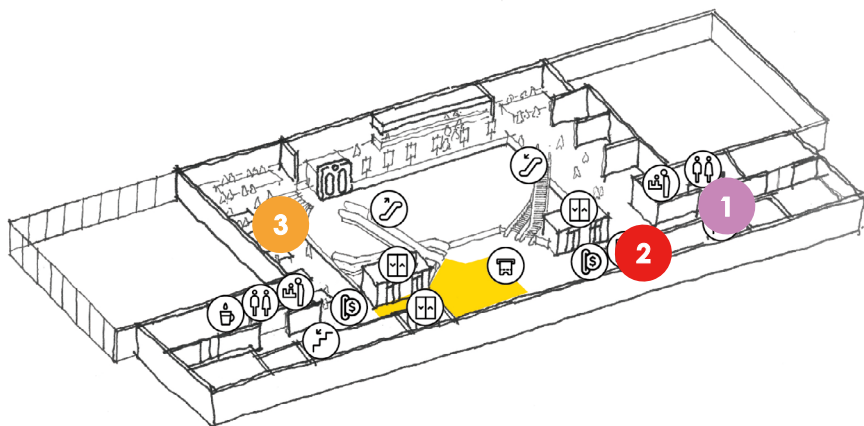
6 電梯 / Elevator

7 樓梯 / Stairs

8 本館售票處 / Box Office for Permanent Exhibitions

9 服務中心 / Information Desk

(三) 2樓展區平面圖 / 2nd Floor

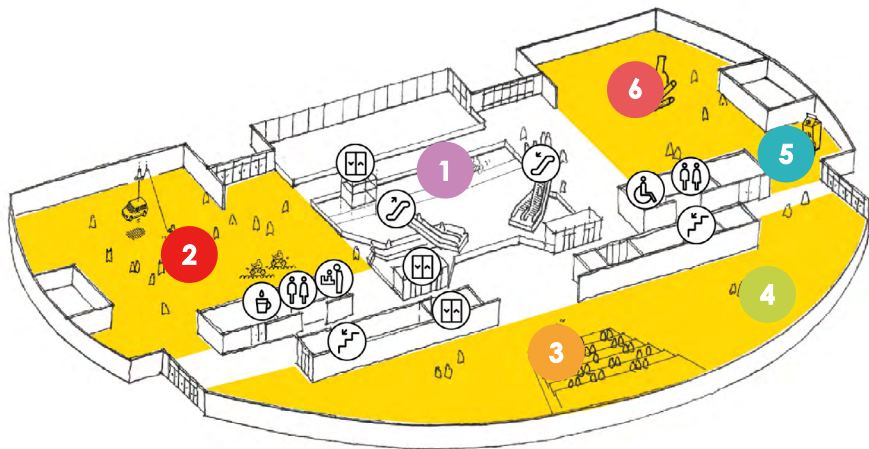


1 電梯 / Elevator

2 樓梯 / Stairs

3 用餐區 / Dining Area

(二) 5樓展區平面圖 / 5th Floor



1 空中腳踏車 / Sky Cycle

6 探索化學世界 /
Explore the World of Chemisthy

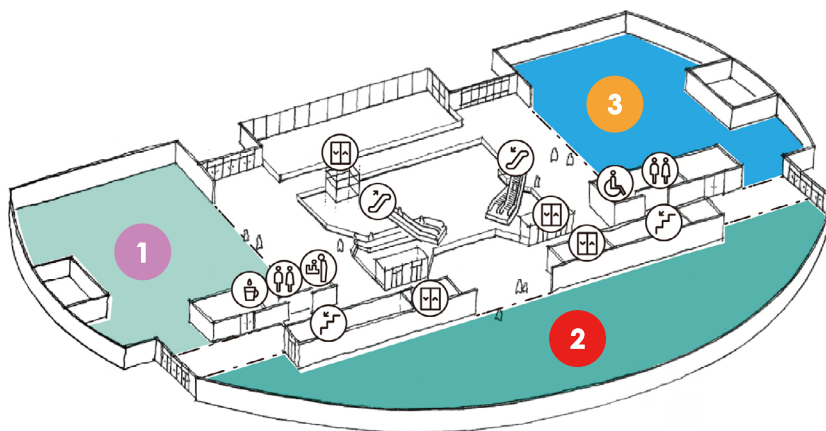
2 遊戲科學世界 /
Science Playground

3 極大極小劇場溫暖小池塘 /
Exploer the World of Physics

4 探索物理世界 /
Explore the physical world

5 未來廚房 / Science Kitchen

(四) 7樓展區平面圖 / 7th Floor

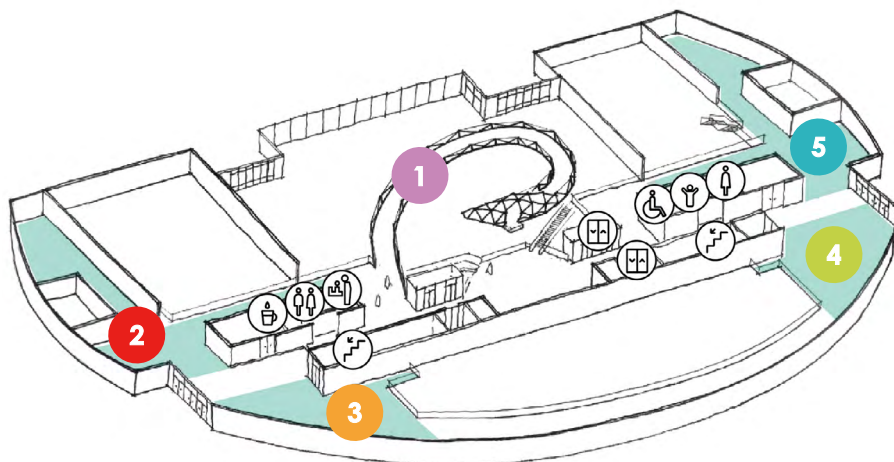


1 特展區西側 / West Wing Temporary Exhibition

2 特展區南側 / South Wing Temporary Exhibition

3 特展區東側 / East Wing Temporary Exhibition

(五) 8樓展區平面圖 / 8th Floor



1 博物館之橋 / Museum Brisge

2 西側特展區 /
West Wing Temporary Exhibition

3 西南側特展區 /
South Wing Temporary Exhibition

4 東南側特展區 /
Southeast side Temporary Exhibition

5 東側特展區 /
East Wing Temporary Exhibition

1 月 30 日 第一階段評審 參展作者進出場秩序表

Jan 30 First Stage of Judging Interviews

第一梯次 Group One

評審時間 Time	9:00-10:35 每件作品評審時間約『15分鐘』 9:00-10:35, approximately 15 minutes for each project						
進出場 時間流程 Rundown	8:10 第一梯次作者檢錄 Check In 8:40 第一梯次作者準備進場 Prepare to Enter the Exhibition Hall 8:50 第一梯次作者進場 Enter the Exhibition Hall 9:00-10:35 評審 Judging Interviews 10:35 第一梯次作者開始離場 Leave the Exhibition Hall 10:40 清場 < 出入管制 > Clearance (access control)						
作品編號 Project Number	數學 Math	化學 Chemistry	動物 Animal Sciences	植物 Plant Sciences	微生物 Microbiology	生物化學 Biochemistry	醫學與健康 Medicine and Health Sciences
	010004 010007 010013 010054 010055 010056	030002 030005 030008 030030 030032	050002 050010 050020 050021 050022	060001 060004 060010 060022	070002 070003 070004 070007	/	090001 090005 090010 090023 090025 090027
	工程 Engineering	行為與 社會科學 Behavioral and Social Sciences	物理與天文 Physics and Astronomy	地球與 環境科學 Earth and Environmental Sciences	電腦與 資訊工程 Computer and Information Engineering	環境工程 Environmental Engineering	
	100004 100007 100038 100040 100042	130003 130005 130009 130011	160003 160009 160012 160044 160045	180001 180003 180016 180018 180020	190001 190033 190035 190037 190039 190041	200006 200014 200016 200018 200020	

備註 Note : 橘字為國外作品編號

1月30日 第一階段評審 參展作者進出場秩序表

Jan 30 First Stage of Judging Interviews

第二梯次 Group Two

評審時間 Time	10:50-12:25 每件作品評審時間約『15分鐘』 10:50-12:25, approximately 15 minutes for each project						
進出場 時間流程 Roundown	10:00 第二梯作者檢錄 Check In 10:30 第二梯作者準備進場 Prepare to Enter the Exhibition Hall 10:40 第二梯作者進場 Enter the Exhibition Hall 10:50-12:25 評審 Judging Interviews 12:25 第二梯作者開始離場 Leave the Exhibition Hall 12:30 清場 < 出入管制 > Clearance (access control)						
作品編號 Project Number	數學 Math	化學 Chemistry	動物 Animal Sciences	植物 Plant Sciences	微生物 Microbiology	生物化學 Biochemistry	醫學與健康 Medicine and Health Sciences
	010018 010022 010027 010029 010031 010035	030003 030011 030014 030031 030033	050008 050013 050016 050018	060002 060005 060014 060016	/	080004 080008 080010 080017 080018	090013 090019 090022 090024 090026 090028
	工程 Engineering	行為與 社會科學 Behavioral and Social Sciences	物理與天文 Physics and Astronomy	地球與 環境科學 Earth and Environmental Sciences	電腦與 資訊工程 Computer and Information Engineering	環境工程 Environmental Engineering	
	100011 100013 100039 100041 100043	130004 130008 130010 130012	160014 160018 160022 160026	180008 180012 180017 180019 180021	190003 190009 190034 190036 190038 190040	200010 200015 200017 200019 200021	

備註 Note : 橘字為國外作品編號

1月30日第一階段評審 參展作者進出場秩序表

Jan 30 First Stage of Judging Interviews

第三梯次 Group Three

評審時間 Time	13:25-15:00 每件作品評審時間約『15分鐘』 13:25-15:00, approximately 15 minutes for each project						
進出場 時間流程 Rundown	12:35 第三梯作者檢錄 Check In 13:05 第三梯作者準備進場 Prepare to Enter the Exhibition Hall 13:15 第三梯作者進場 Enter the Exhibition Hall 13:25-15:00 評審 Judging Interviews 15:00 第三梯作者開始離場 Leave the Exhibition Hall 15:05 清場 < 出入管制 > Clearance (access control)						
作品編號 Project Number	數學 Math	化學 Chemistry	動物 Animal Sciences	植物 Plant Sciences	微生物 Microbiology	生物化學 Biochemistry	醫學與健康 Medicine and Health Sciences
	010005 010037 010041 010046 010049 010053	030007 030016 030026 030029	050012 050015 050017 050019	060012 060015 060019	/	080003 080006 080009 080011 080015	090003 090007 090011 090015 090020
	工程 Engineering	行為與 社會科學 Behavioral and Social Sciences	物理與天文 Physics and Astronomy	地球與 環境科學 Earth and Environmental Sciences	電腦與 資訊工程 Computer and Information Engineering	環境工程 Environmental Engineering	
	100017 100022 100024 100027 100035	/	160006 160010 160013 160015 160037	180002 180006 180010 180014 180015	190004 190013 190015 190020 190026 190030	200003 200004 200007 200008 200011 200012	

1月30日 第一階段評審 參展作者進出場秩序表

Jan 30 First Stage of Judging Interviews

第四梯次 Group Four

評審時間 Time	15:15-16:50 每件作品 評審時間約『15分鐘』 15:15-16:50, approximately 15 minutes for each project						
進出場 時間流程 Rundown	14:25 第四梯作者檢錄 Check In 14:55 第四梯作者準備進場 Prepare to Enter the Exhibition Hall 15:05 第四梯作者進場 Enter the Exhibition Hall 15:15-16:50 評審 Judging Interviews 16:50 第四梯作者開始離場 Leave the Exhibition Hall 16:55 清場 < 出入管制 > Clearance (access control)						
作品編號 Project Number	數學 Math	化學 Chemistry	動物 Animal Sciences	植物 Plant Sciences	微生物 Microbiology	生物化學 Biochemistry	醫學與健康 Medicine and Health Sciences
	010011 010014 010019 010025 010028 010030	030009 030013 030015 030025 030028					
	工程 Engineering	行為與 社會科學 Behavioral and Social Sciences	物理與天文 Physics and Astronomy	地球與 環境科學 Earth and Environmental Sciences	電腦與 資訊工程 Computer and Information Engineering	環境工程 Environmental Engineering	
	100006 100010 100012 100016 100037		160019 160024 160029 160035 160040		190011 190014 190016 190025 190028 190032		

1月30日第一階段評審 參展作者進出場秩序表

Jan 30 First Stage of Judging Interviews

第五梯次 Group Fifth

評審時間 Time	17:00-18:35 每件作品評審時間約『15分鐘』 17:00-18:35, approximately 15 minutes for each project						
進出場 時間流程 Rundown	16:10 第五梯作者檢錄 Check In 16:40 第五梯作者準備進場 Prepare to Enter the Exhibition Hall 16:50 第五梯作者進場 Enter the Exhibition Hall 17:00-18:35 評審 Judging Interviews 18:35 第五梯作者開始離場 Leave the Exhibition Hall 18:40 清場 < 出入管制 > Clearance (access control)						
作品編號 Project Number	數學 Math	化學 Chemistry	動物 Animal Sciences	植物 Plant Sciences	微生物 Microbiology	生物化學 Biochemistry	醫學與健康 Medicine and Health Sciences
	010034 010036 010039 010043 010048 010051						
	工程 Engineering	行為與 社會科學 Behavioral and Social Sciences	物理與天文 Physics and Astronomy	地球與 環境科學 Earth and Environmental Sciences	電腦與 資訊工程 Computer and Information Engineering	環境工程 Environmental Engineering	
	100020 100023 100025 100028 100036						

1月31日第二階段評審 參展作者進出場秩序表

Jan 31 Second Stage of Judging Interviews

第一梯次 Group One

評審時間 Time	9:00-10:20						
進出場 時間流程 Rundown	8:10 第一梯次作者檢錄 Check In 8:40 第一梯次作者準備進場 Prepare to Enter the Exhibition Hall 8:50 第一梯次作者進場 Enter the Exhibition Hall 9:00-10:20 評審 Judging Interviews 10:20 第一梯次作者開始離場 Leave the Exhibition Hall 10:25 清場 < 出入管制 > Clearance (access control)						
作品編號 Project Number	數學 Math	化學 Chemistry	動物 Animal Sciences	植物 Plant Sciences	微生物 Microbiology	生物化學 Biochemistry	醫學與健康 Medicine and Health Sciences
	奇數	奇數	奇數	奇數	奇數	奇數	奇數
	工程 Engineering	行為與 社會科學 Behavioral and Social Sciences	物理與天文 Physics and Astronomy	地球與 環境科學 Earth and Environmental Sciences	電腦與 資訊工程 Computer and Information Engineering	環境工程 Environmental Engineering	
	奇數	奇數	奇數	奇數	奇數	奇數	

1月31日第二階段評審 參展作者進出場秩序表

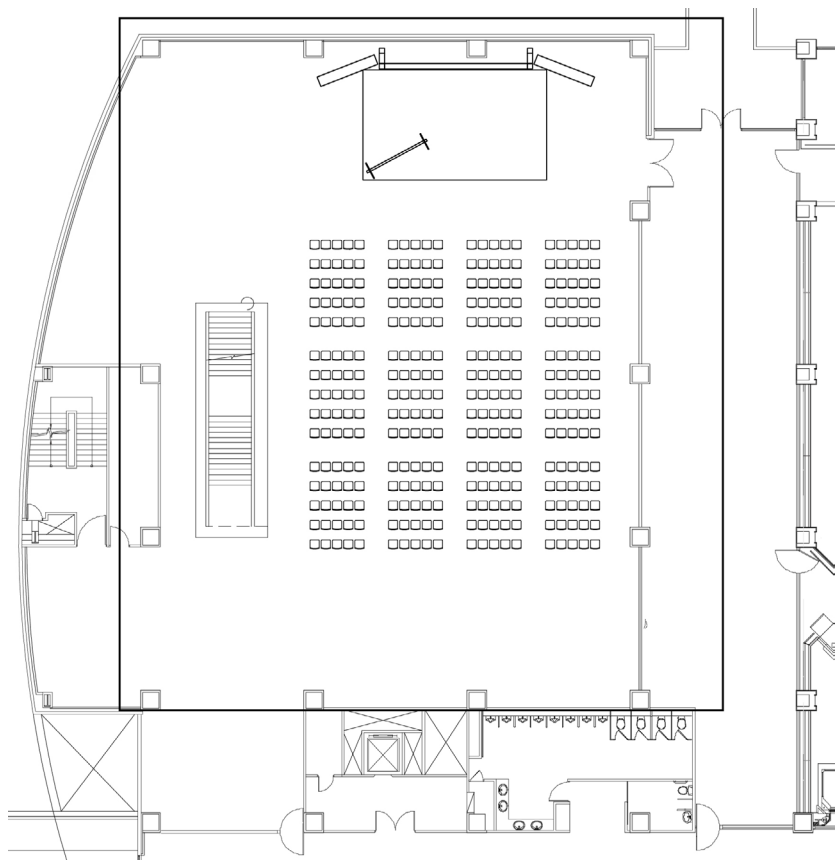
Jan 31 Second Stage of Judging Interviews

第二梯次 Group Two

評審時間 Time		10:40-12:00					
進出場 時間流程 Roundown	9:50 第二梯次作者檢錄 Check In 10:20 第二梯次作者準備進場 Prepare to Enter the Exhibition Hall 10:30 第二梯次作者進場 Enter the Exhibition Hall 10:40-12:00 評審 Judging Interviews 12:00 第二梯次作者開始離場 Leave the Exhibition Hall 12:05 清場 < 出入管制 > Clearance (access control)						
作品編號 Project Number	數學 Math	化學 Chemistry	動物 Animal Sciences	植物 Plant Sciences	微生物 Microbiology	生物化學 Biochemistry	醫學與健康 Medicine and Health Sciences
	偶數	偶數	偶數	偶數	偶數	偶數	偶數
	工程 Engineering	行為與 社會科學 Behavioral and Social Sciences	物理與天文 Physics and Astronomy	地球與 環境科學 Earth and Environmental Sciences	電腦與 資訊工程 Computer and Information Engineering	環境工程 Environmental Engineering	
	偶數	偶數	偶數	偶數	偶數	偶數	

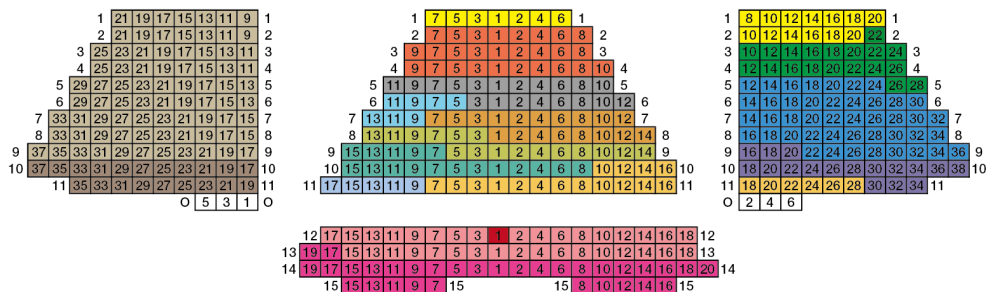
7 樓西側特展廳配置圖

7th Floor West Exhibition Hall, NTSEC

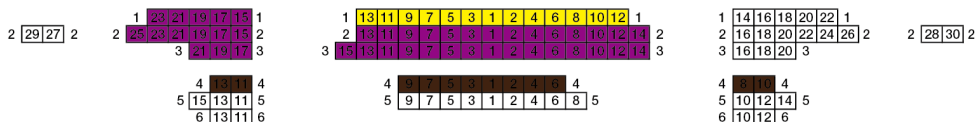


國立臺灣藝術教育館 南海劇場

舞台



1F



2F



● 頒獎典禮採對號入座，請依作者證標示座位入座。

Please check your author ID and take assigned seat at the award ceremony.

● 典禮會場禁止飲食、飲水。

Food and beverages cannot be brought into the venue.



地址：臺北市士林區士商路 189 號

Add: No. 189, Shihshang Road, Shihlin, Taipei City, Taiwan

●捷運 / MRT

○捷運劍潭站 1 號出口轉乘公車紅 3、紅 30、41 至「科學教育館」。

MRT Jiantan Station (Exit 1) transport buses will stop at the Center.
[Red 3, Red 30, 41]

○捷運士林站 1 號出口轉乘公車 255、620、紅 3、紅 12 至「士林區行政中心」或「士林高商」。

MRT Shilin Station (Exit 1, across street) transport buses will stop at Shihlin District Hall (Shi Lin High School of Commerce).[255, 620, Red 3, Red 12]

●公車 / Buses

○至「科教館」站：620、紅 3、紅 12、紅 19

- [620, Red 3, Red 12, Red 10] Get off at NTSEC station.
- 至「士林高商」站：255、250、620、紅 12
[255, 250, 620, Red 12]] Get off at Shi-Lin High School of Commerce station.
- 至「天文館」站或士林行政中心」站：41、紅 3、紅 12、紅 30
[255, 250, 620, Red 12] Get off at Shi-Lin High School of Commerce station.

●國道 / National Freeways

- 至「科學教育館」站 中興巴士 [士林 - 中壢]
Jhongsing Bus [Shilin – Jhongli] Route
- 光華巴士 (基隆客運)[士林 - 基隆]
Guanghua (Keelung Buses) [Shilin – Keelung] Route

營運狀況 Operation Status	營運時間 Hours		備註 Notice
休館 Close	每週一 Monday		國定假日及特定假日除外、寒暑假天天開館 Opened on all days of winter and summer vacation except public holidays and special holidays
開放服務 1 Open (1)	開放時間 (Opening Hours)	AM9:00- PM18:00	週六、週日、國定例假日、寒暑假 Saturdays, Sundays, holidays and winter/summer vacation
	售票時間 (Ticket Booth Hours)	AM9:00- PM17:00	
	截止入場 (Entrance closed)	PM17:00	
開放服務 2 Open (2)	開放時間 (Opening Hours)	AM9:00- PM17:00	非寒暑假之週二至週五 Tuesday, Wednesday, Thursday, Friday (Summer/winter vacation except)
	售票時間 (Ticket Booth Hours)	AM9:00- PM16:00	
	截止入場 (Entrance closed)	PM16:00	

附錄六：台北捷運路網圖

Appendix 6: Map of Taipei Metro



數學

編號	作品名稱
010004	布洛卡點的定義擴充與存在之充要條件探討
010005	心線相依 The Extensions of Euler Line
010007	格子點的可見性研究
010011	艾雪三角形磁磚對稱密鋪圖研究
010013	無限棋盤上的各種騎士
010014	Expected edge number of closed walks in a simple graph
010018	正 n 邊形內接正 m 邊形
010019	三角形與四邊形內最短探測路徑研究
010022	史坦納樹性質探討與優化
010025	從心開始 - 三角形的四心到各邊距離和
010027	Candy Can 遞 Can 遞
010028	由楊氏矩陣變形之三角楊氏陣列的探討
010029	探討「互相牽制」中整除問題的整數解
010030	以分塊矩陣及生成函數探討多人跳躍數列在多顆球下的方法數
010031	Generalized Skolem-type Sequence 的相關探討
010034	解決機器人等距回程路徑問題的數學模型及其擴展
010035	分割子三角形的內切圓與旁切圓之新性質
010036	任意進位制下計數問題的公式解
010037	多面體滾漆問題
010039	k 距離集合與分類
010041	低維度的 cap set 大小探討
010043	多「圓」文化的延伸——Japanese Temple Geometry Problem

010046	兩組直線所構造的三角形外心軌跡性質與推廣
010048	排排相扣—2341 和 3421 – avoiding 交替排列的組合關係探討
010049	所有可拼出的正三角形之達成性
010051	連通圖上行走步數期望值之研究
010053	圓桌中對應編號的錯排問題

化學

編號	作品名稱
030002	利用碳酸鉀作為觸媒對於甲醇解聚碳酸酯效能之探討
030003	苧麻線微流體應用於工業廢水全範圍濃度量測
030005	以計算化學探討全取代四氫吡咯酮的不對稱合成
030007	探討鐵鎳合金催化劑對電解產氫之影響
030008	自製奈米銀添加至染料來提升 DSSCs 的轉換效率
030009	青出於藍·勝於藍
030011	探討電漿沉積六甲基二矽氮烷與四氟化碳對材料疏水性與抗腐蝕性之影響
030013	Synthesis of functionalized mesoporous silica nanoparticles as drug delivery carriers for therapeutic agents
030014	以磁鄰近誘發非傳統超導
030015	利用水凝膠進行亞硝酸鹽的檢測
030016	透過超音波敏感性聚合物膠束達成藥物投遞減少根管治療癒後復發的應用
030025	開發組織蛋白酶 B 之抑制劑前驅藥物及其效能探究
030026	含 3- 高醯基香豆素之二烯羧酸酯合成方法探討
030028	可同時用於霧水收集與風力發電的石墨烯仿生陣列魔毯
030029	血跡檢測 - 色素替代試劑與現行酚酞法之比較

動物學

編號	作品名稱
050002	硬骨魚鰓上用以適應淡水酸化獨特的產氨與排氨機制
050008	構造、力學與能耗比較淡水螺的仰泳機制
050010	探討黃胸錐腹螺羸交尾、做巢行為對產卵與育幼之影響
050012	Down Syndrome Cell-adhesion Molecules 基因參與果蠅神經迴路發育的細胞機制
050013	探討果蠅神經膠細胞核的遷移機制
050015	探討內源性大麻素對果蠅細胞自噬與生理功能的影響及角色
050016	以擴展顯微鏡探討年齡對果蠅腸道幹細胞粒線體造成的影響
050017	老化相關之組蛋白N端乙醯酶 Naa40p 於小鼠神經細胞 HT-22 的功能探討
050018	Sequentially bidirectional gastrovascular flows in highly branched digestive tracts of planocericid flatworm
050019	獵物狀態對蜈蚣捕食行為的影響

植物學

編號	作品名稱
060001	解析水稻新穎轉錄因子調控叢枝菌根菌共生的分子機制
060002	Temperature Vulnerability of PAMP Elicited Plant Immunity Depends on a Heat-Sensitive Enzyme to Activate a Cytokine
060004	蔗糖、葡萄糖及果糖對阿拉伯芥幼苗 防禦基因 PR1 表現的影響
060005	空氣鳳梨毛狀體降低空汙之探討與應用
060010	Unraveling a Transcriptional Enigma: Exploring the Action Model of the Concealed BPC Network on the Circadian Oscillation System 玄機暗藏：深究轉錄因子家族 BPC 對晝夜節律系統之作用模式
060012	探討蒲公英萃取物對纖維母細胞增生及移行之影響
060014	水蕨孢子的發芽及打破休眠機制
060015	探討玉米不同種原間減數分裂染色體互換之差異
060016	好咖配好茶
060019	綬草根部分生真菌的多樣性探討

微生物學

編號	作品名稱
070002	Raising the Microscopic Guardians from the Ocean - Pioneering A Natural Solution for Vibrio Control in Mariculture Using Marine Bacterivorous Ciliates <i>Euplotes</i> sp.
070003	泛基因組分析破囊壺菌產油基因
070004	尋找提升淡紫青黴菌 BA1S 菌株降解 PBAT 塑膠能力之因子
070007	代謝物 2'O Methyluridine 對乳癌細胞株的影響及作用機制探討

生物化學科

編號	作品名稱
080003	利用合成生物學重建酵母菌性別轉換系統
080004	以限制酶酵素切位多樣性檢驗臺灣入侵紅火蟻基因體重組事件
080006	防曬仙丹 – 矮仙丹花青素的抗 UV 功能及影響
080008	路蕎對抑制血管收縮素轉化酶活性及降血壓之評估
080009	利用氧化應激法結合膠原蛋白微島誘導人類臍帶間質幹細胞分化
080010	3- 氨基苯硼酸修飾的奈米纖維素與二硫化物交聯製成的核酸奈米水膠在抗癌藥物載體的應用
080011	利用果蠅視覺系統探討不同 Cullin 在阿茲海默症毒性下對於 PAICS 泛素化形成嘌呤體的影響
080015	RBM4 調控 BDNF 表達對發育的重要性

醫學與健康科學

編號	作品名稱
090001	神經胜肽 Urocortin 對微膠細胞抗發炎、吞噬的作用
090003	Connectivity Analysis of Glucose Metabolism in Huntington' s Disease: A New Perspective Provided by Dynamic Glucose-Enhanced MRI
090005	The Role of Impaired SUV3 in Mitochondrial Dysfunction and Its Linkage to Insulin Resistance in Type 2 Diabetes
090007	探討 miR-17-92 透過調控 T 細胞分化影響腎纖維化
090010	探討 C1GALT1 與 IL-1 受體醮基化在關節炎中的角色並尋找可能的治療藥物
090011	Establishment of a bacteria-based delivery approach in regulating mosquito development as a novel vector control strategy
090013	維持粒線體功能的重要基因 Rrm2b 對於不同種類中樞神經細胞的調控與影響
090015	Metformin 對肝臟細胞選擇性粒線體自噬作用之活化機制探討
090019	研究淋巴細胞質蛋白 -1 在腎小管間質纖維化之角色
090020	Toll-like 受體 3 在慢性鼻竇炎合併鼻息肉吸菸患者之表現
090022	探討長片段非編碼 RNA:IRX4-AS1 在前列腺癌中的角色 Investigate the Role of Long Non-Coding RNA: IRX4-AS1 in Prostate Cancer

工程學

編號	作品名稱
100004	利用六軸加速度計與 SLAM 演算法回饋控制之車輛動態防側傾駕駛輔助系統
100006	評估 UAV 資料與衛星資料在邊坡崩落潛勢機器學習模型之可應用性
100007	以海源醫材製備新穎有機無機骨組織工程複合支架
100010	運用 LSTM 深度學習技術調整 PID 控制於倒單擺應用之探討
100011	Eco-friendly fungal-based protein wood adhesives: A non-toxic and effective alternative application
100012	光控生產不同硬度之蛋白質電紡絲生醫材料
100013	當蠶寶寶遇上碳量子點：探索環境友善螢光蠶絲之特性及應用
100016	以 CFD 模擬探討熱對流發電裝置之效率
100017	新型蘋果果膠修飾技術對氧化鋅氣體感測器性能影響探究
100020	Utilization of Coffee Protein and its Antimicrobial and Antioxidant Properties for Biodegradable Active Packaging Membranes
100022	Look your eyes, know your life~A portable body detection device
100023	探討護木漆塗層對於抑制金屬升溫之影響
100024	聲子晶體結合共振腔與其聲音放大效果之研究
100025	智慧車的「聲」存之道
100027	雙層式水平軸風力渦輪機葉片結合尾流之探究
100028	以廢棄香灰與陶瓷 3D 列印製成磚瓦於改善環境酸雨與碳捕捉應用功效之研究 The Study of the Utilization of Waste Ash for Ceramic 3D Printing Bricks to Improve Acid Rain Issues and Carbon Capture Applications
100035	基於深度學習與自動化技術降低桌球硬體需求之開發
100036	石墨烯 - 銀異質結構的優化與功能開發 The Optimization and Development of Graphene/Ag-doped heterostructure
100037	漂浮型振盪衝擊式波浪能轉換器設計開發與研究

行為與社會科學

編號	作品名稱
130003	賦權基本面指標型投資模型之建構與績效分析
130004	探討地震相關因子對於斑馬魚社交行為之影響
130005	探討一種新穎腺苷調控藥物對於思覺失調症及焦慮症的治療潛力 - 以藥物及壓力引發之疾病小鼠為模式 Investigating the therapeutic potential of a novel adenosine modulator(NAM) on the treatment of schizophrenia and anxiety disorders using mice as a model
130008	背景音樂與閱讀理解的神經處理機制

物理與天文學

編號	作品名稱
160003	微流道 - 孔隙介質之排水時間與模式探討
160006	親疏有別 - 水滴在親疏交錯界面之運動現象探討
160009	攻角對水漂跳動行為的力學分析
160010	溶液深淺長短跑—創新方法精密測量折射率與液體濃度的關係
160012	光程差與焦散影響下的雷射圖紋
160013	A Study on the Dynamics of Coupled Oscillators within Magnetic Environments
160014	金屬豐度對類太陽恆星氦閃的影響
160015	探討星系交互作用對恆星形成速率與恆星質量關係的影響
160018	使用藝亞資料庫探討球狀星團中天琴座 RR 型變星的組成
160019	Study on acoustic wave and disturbances in thermal flow fields
160022	探討溫度對蝴蝶翅膀彩蝶效應特性之影響
160024	恆星磁場的觀測與分析計算 - 主序星磁場的規律
160026	氣泡的作用範圍與氣泡性質的關係 - 氣泡的實際應用
160029	探討高速轉盤風切聲的性質與原理
160035	以數據驅動方式探究類星體於可見光與無線電光譜之性質關聯
160037	偏心馬達振動對物體運動速度之影響
160040	滴肆縱橫 - 探討不同液池移動速度與液滴反彈情形的關係

地球與環境科學

編號	作品名稱
180001	高山地區暖化之探討
180002	洞察號探索 - 火星環境對非地震訊號影響分析
180003	衛星影像分析 - 集集攔河堰水體計算
180006	南太平洋在北半球冰川擴張事件時物理海洋與碳埋藏速率變化研究
180008	死水現象—船速與內波之關聯探討
180010	軒嵐諾颱風 2022 與卡努颱風 2023 冷水坑成因之能量通量分析
180012	利用震源回歸建立斷層面
180014	論屏東地區午後對流雨與氣象要素之關係
180015	旋風登台：引領流型—探討西行侵台颱風之流型變化與實驗模擬

電腦科學與資訊工程

編號	作品名稱
190001	FVeinLite: 輕量化 CNN 手指靜脈辨識模型與醫療領域之應用
190003	基於受人類行為啟發的貝氏深度元強化學習之研究與應用程式的探討
190004	AI 時光機 - 利用照片轉換技術重溫在地歷史
190009	使用大型語言模型生成音樂中的故事
190011	修正未切換注音輸入法產生之字元
190013	幾何圖形的創意設計與應用
190014	噪音之眼：結合聲源定位與影像辨識的聲音照相系統
190015	Instruction-Tuning 在法律對話模型上的影響之探討
190016	A Real-time Home Health Monitoring System with Motion Waveform Using Millimeter-wave FMCW Radar
190020	以 LoRa 物聯網通訊技術及去中心化網狀網路構建緊急救難發報系統
190025	大開眼界 - 機器人影像與對位系統評估
190026	利用 Chain-of-thought Prompt 優化 ChatGPT 邏輯推理方面的能力
190028	利用 FBP (Filtered Back Projection) 進行三維錫球重建並分析探討不同濾波器造成的影響
190030	基於對抗性機器學習技術的數位影像浮水印機制之研究
190032	惡意程式無所遁形—以自然語言處理模型實現惡意程式之識別

環境工程

編號	作品名稱
200003	以甲醇與甲酸為營養源評估甲醇利用菌的碳利用效能
200004	利用碳化含鐵金屬有機架構物進行廢水中金之選擇性回收
200006	雙酚 A 對白線斑蚊幼蟲生長發育的影響及病媒蚊防治策略探究
200007	可可殼生物炭活化過硫酸鹽降解四環黴素之性能、機制及其生物毒性研究
200008	邁向淨零之低碳海水淡化整合技術
200010	Experimental Study on Optimal CADR Filter Thickness of Air Purifiers
200011	藍已去除 – 探討二氧化鈦奈米線在不同製程下對亞甲藍的降解效果
200012	3D 仿生昆蟲翅膀感測器設計 - 利用 SERS 偵測微量污染物分子

Mathematics

Project NO.	Country	Project	School	Author
010054	Luxembourg	Edge Points in Three-Dimensional Arithmetic Billiards	Unviersity of Standford California	Steve Mendeleev
010055	Singapore	On the Application of Inequalities Containing Sums of Minimum/ Maximum of Numbers	NUS High School of Mathematics and Science	Wang Jiayu
010056	United States	Strict Inequalities for the n-crossing Inequality	Princeton High School	Nicholas Hagedorn

Chemistry

Project NO.	Country	Project	School	Author
030030	Japan	Resolving the Phosphate Fertilizer Dilemma through Progressive Wastewater Treatment	Shizuoka Kita High School	Hayato Yamashita
				Kento Hagiwara
				Kaede Honda
030031	Japan	Observation of volcanic gases with a simple alkaline filter paper method at Sakurajima Volcano in Kagoshima, Japan.	Ikeda High School	Yu Yoshii
				Chiyono Kawamoto
				Kokoro Kurose
030032	Indonesia	Detection of Calcium Oxalate in Nephrolithiasis Using Ca-D	Semesta School	Callista Aditia
				Melati Ayundhita Parwoto
030033	Saudi Arabia	Development of a nano-filtration membrane using different linear aliphatic amines and linear cross-linkers for purification of expensive and precious organic solvents	University Schools	Noura Majed Algarawi

Animal Sciences

Project NO.	Country	Project	School	Author
050020	Russia	Non-invasive study of the electrical activity of the brain of various chordate animals	Autonomous non-profit educational organization "Phystech-lyceum" named after. P.L. Kapitsa	Maria Iliuk
050021	Switzerland	Whose feather is that? A cross-views between a naturalist and a molecular biologist	Collège St-Michel	Ambrosini Lauriane (Marie)
050022	Korea	Straw manufacturing for epidemic prevention	Heamil-HighSchool	Kwak KoEun
			Heungdeok Highschool	Roh Sua

Plant Sciences

Project NO.	Country	Project	School	Author
060022	Pakistan	Evaluation of the Effect of Different Nutrients' Concentration and Composition on Hydroponically Grown Plant	Government Girls High School, Wassanpura, Lahore	Ayesha Kanwal
				Zoha Jamil

Biochemistry

Project NO.	Country	Project	School	Author
080017	Hong Kong, China	SeaUveed Succeed	Heep Yunn School	Maisie Cheung Cheuk Yu
				Ashley Wong Sin Hang
				Sophie Chan Fei
080018	Indonesia	In Silico Carotenoid Compound with Protein in Durian (Durio zibethinus Murr.) Seed Waste and Hedonic Test Innovation in Making Healthy Cereal Organic (HCO) (Nutrient-rich Functional Food Alternative)	SMP Islam Al Azhar 1 Jakarta	Zacarich Widjoyo

Medicine and Health Sciences

Project NO.	Country	Project	School	Author
090023	Philippines	In silico Screening of Forty Antiviral Phytochemicals as Inhibitors to the Envelope Protein of Dengue Virus Serotype 2 (DENV-2)	Philippine Science High School - Main Campus	Corel L. Lee
				Katrina Isabelle P. Dela Rama
				Precious Raivel C. Siazon
090024	Switzerland	Sport specific assessment of inter-limb asymmetries: A way to reduce injuries	Bündner Kantonsschule Chur	Meret Guttinger
090025	Saudi Arabia	Creating an Early Diagnostic Method for Glaucoma Using Convolutional Neural Networks	Al-Batool International Schools	Areej Abdullah Alqarni
090026	Philippines	In silico Investigation of Cyclosporine Conjugates as Potential Anti-angiogenic Agents via NFAT Inhibition	Philippine Science High School-Main Campus	Misha Anne R. Lumibao
				Roanne Frances T. Anteza
				Julianne Marie G. Barin
090027	Thailand	EIPCA : Electrocardiogram Interpretation Pattern for Cardiovascular Abnormalities Prediction	The Prince Royal's College	Patcharada Tawaditap
				Khunasin Suksri
				Peerapat Wattanakit
090028	Romania	New Concept of Intelligent Wound Dressing	International Computer High School of Bucharest	Bianca-Mihaela Nemes
				Alexandru Momoiu

Engineering

Project NO.	Country	Project	School	Author
100038	Russia	Numerical Analysis Of A Cansat Picosatellite Energy Consumption	Sakha Junior Science Academy	Artem Mardin
100039	Nepal	AGRO-GUARD: Machine Learning-Driven Plant Real-Time Disease Detection, Clustering and Community Notifications	Brainycube Research Organization	Shashwat Waiba

100040	Saudi Arabia	Fabrication of Highly Efficient and Cost-effective Tandem Dye-sensitized Solar Cells for Building Integrated Photovoltaics	Alanjal International School	Kadi Jamal Alboobaid
100041	Saudi Arabia	Bifunctional Nanostructured TiO ₂ photoelectrocatalyst for Improving Overall Water splitting performance	Manarat Alriyad Schools	Yara Alwadei
100042	Korea	Design a program on identifying Proliferation rate of HABs	Unho-HighSchool	Park Dong Jun
			Haemil-HighSchool	Lee Jun Hyeok
100043	Iran	Beyond Limits: An Intelligent Wheelchair for Inclusive Living	International Avicenna Research center (IARC)	Iliya Haji
				Mehrad Faridi

Behavioral & Social Sciences

Project NO.	Country	Project	School	Author
130009	South Africa	From Human Intelligence to Artificial Intelligence Chatbots: Modern Day Writing	Zinniaville Secondary School	Lethabo Rivonia Molobi
130010	New Zealand	NUDGE TO ZERO. Using on-device, nudge-based interventions to improve road safety equity: Building on and democratising in-vehicle technologies.	Wellington College	Jesse Patrick Rumball Smith
130011	Indonesia	Vitas: Digital Therapy Based on a Combination of Binaural Beats and Autonomous Sensory Meridian Response (ASMR) to Reduce Stress in Gen Z Students	SMA Negeri 8 Bandung	Myiesha Arvie Sulaksana
				Faiz Asmari Ramadhan
130012	Thailand	SVMR: Smart Versatile Medication Robot	Bangkok Christian College	Chatchapol Vassarodkit
				Chawit Atasukwatana
				Nachapon Sukkhum

Physics and Astronomy

Project NO.	Country	Project	School	Author
160044	Singapore	Inclined Sedimentation of Suspensions: Theoretical and Experimental Investigation into the Boycott Effect	Raffles Institution	Yin Yue
160045	Saudi Arabia	Development of Electrical Shielding system for auto dust removal for solar PV modules	University schools ةعم اءلا سرادم .	Ahmed ali Almeer

Earth and Environmental Sciences

Project NO.	Country	Project	School	Author
180016	Turkey	Environmentally Friendly Upcycling Approach To Increase Impact Resistance Of Reinforced Concrete Structures: Use Of Industrial Waste As Conservation Material	Buca Municipality Buca Science and Art Center	Bilal Esmer
180017	Saudi Arabia	Desert to Fertile Land: Developing TEPA-modified montmorillonite clay as an efficient CO2 adsorbent to enhance soil fertility	Prince Abdul Mohsen bin Abdulaziz High School - Masarat	Salem Awaid Al-Saadi
180018	Korea	Climate Change Brings New Novel Virus	Heamil HighSchool Cheongwon HighSchool	Park Kun Hee Lee Ah Jung
180019	United States	Quantitative environmental DNA metabarcoding for the enumeration of Pacific salmon (<i>Oncorhynchus</i> spp.)	Thunder Mountain High School	Elizabeth S. Djajalie
180020	Guam (USA)	First-Ever Study on Groundwater Discharge Zones in Tumon Bay, a Protected Marine Preserve: Novel Insights into Coral Reef Conservation	John F Kennedy High School	Andrew Gio Kang

180021	Malaysia	King's Power - The Utilization of Agricultural Waste in the Production of Sustainable Dry Cells	Sekolah Dato' Abdul Razak	Muhammad Danish bin Syahrul
				Nizam Muhammad Afiq Naufal bin Musriano

Computer Science and Information Engineering

Project NO.	Country	Project	School	Author
190033	Luxembourg	Local Positioning System	European School 1	Krzesimir Hyzyk
190034	Hungary	HandExo	Nyíregyházi SzC Bánki Donát Műszaki Technikum	Gabor Prill
190035	Hungary	Wibrazz	Pál Vasvári High School Nyíregyháza	Dalma Kamilla Zsigo
190036	Brazil	Safe Medication - A Study Of Using Artificial Intelligence To Recognise Medication Errors	Fundação Escola Técnica Liberato Salzano Vieira da Cunha	Pedro de Oliveira Trento
190037	South Africa	Breaking a Caesar Cipher / Vigenère Cipher Encryption for Secure Data Communication	High School Jim Fouche	Johannes Jacobus Deysel
190038	Saudi Arabia	Riyadh Smart Parking	Al-tarbia Al-namothajia Schools TNS	Juri Sultan Albosaili
190039	Pakistan	Artificial Intelligence Sensing Technology for Blinds Path Findings	Beaconhouse School System, Valencia Town, Lahore, Pakistan	Zohaib Khan
				Rana Shayan
190040	Mexico	ConalepAsistant	Conalep 338 Córdoba "Heriberto Jara Corona"	Eliana Nasya Gonzalez Perez
190041	Indonesia	Deciphering The Illusion: A Multi Faceted Algorithm in Deepfake Detection	Cita Hati Christian School West Campus	Maxwell Seteono

Environmental Engineering

Project NO.	Country	Project	School	Author
200014	Hong Kong, China	Upcycling of Abandoned Beehives!!	Chinese Foundation Secondary School	Chan Shun Chit
				Tsang Cho Man
200015	Brazil	ReCiPla - Cyclic Soil Microplastic Remover	Colégio Dante Alighieri	Joao Miguel Grossmann Sastre
200016	Macau	Autonomous Ecosystem Surveillance Robot	Macau Pui Ching Middle School	Lao Chit Bryan
				Han Pok Man
				Lei Wang Hei
200017	Hong Kong, China	Anti-forma Chitogel	Carmel Pak U Secondary School	Wu Guojun
				Wong Wai Ki
200018	Saudi Arabia	Design of a new Hydrogen Fueled Hybrid Car Prototype	The fifth high school for girls	Ghala Turki Almoabadi
200019	Saudi Arabia	Silver nanoparticles-loaded titanium dioxide coating towards immobilized photocatalytic reactor for water decontamination and bacterial deactivation under natural sunlight irradiation	Ibn Al-Nafis Secondary School	Abdullah Fahad Alotaibi
200020	Pakistan	Automatic Solar Panel Sprinkler Irrigation System	Scarsdale International School, Lahore, Pakistan	Syed Irtaza Raza Mashhadi
200021	Tunisia	Development of Oil Collecting Submarine using AI and hydrophobic solution	ATAST	Maram Rjeb
				Tesnime Ben Brahim

臺北

國立臺灣師範大學附屬高級中學
 臺北市立中正高級中學
 臺北市立中崙高級中學
 臺北市立內湖高級中學
 臺北市立永春高及中學
 臺北市立成功高級中學
 臺北市立建國高級中學
 臺北市立第一女子高級中學
 臺北市立景美女子高級中學
 臺北市立華江高級中學
 臺北市立麗山高級中學
 臺北市私立泰北高中附設國中部
 臺北市私立復興實驗高級中學
 臺北市私立靜心高級中學
 臺北市私立薇閣高級中學
 臺北市私立薇閣高級中學 (附設國中)
 臺北市政府教育局 - 高中無學籍非學校型態實驗教育
 臺北市數位實驗高級中等學校
 臺北美國學校

新北市

康橋學校財團法人新北市康橋高級中學
 新北市立文山國民中學

基隆

基隆市立安樂高級中學

桃園

六和學校財團法人桃園市六和高級中等學校
 桃園市立武陵高級中等學校
 桃園市立桃園高級中等學校
 桃園市私立育達高級中學
 新興學校財團法人桃園市新興高級中等學校

新竹

國立竹北高級中學
 國立新竹女子高級中學
 國立新竹科學園區實驗高級中等學校
 國立新竹高級中學

新竹市立光華國民中學
新竹縣康乃爾美國學校

臺中

馬禮遜美國學校
國立中興大學附屬高級中學
臺中市立大甲高級中等學校
臺中市立臺中第一高級中學
臺中市華盛頓高級中學

彰化

國立彰化高級中學

南投

南投縣立旭光高級中學
南投縣立宏仁國民中學
國立中興高級中學

嘉義

國立嘉義高級中學
嘉義縣私立協同高級中學

臺南

天主教聖功學校財團法人臺南市天主教
聖功女子高級中學
國立臺南女子高級中學
國立臺南第一高級中學
臺南市立建興國民中學
臺南市私立德光高級中學

高雄

高雄市立三民高級中學
高雄市立仁武高級中學
高雄市立高雄女子高級中學
高雄市立高雄高級中學
高雄市立新莊高級中學
高雄市立路竹高級中學
高雄市立福誠高級中學
國立鳳山高級中學

屏東

屏東縣立枋寮高級中學
國立屏東高級中學
國立潮州高級中學

金門

國立金門高級中學

宜蘭

宜蘭縣立國華國民中學
國立宜蘭高級中學

花蓮

慈濟學校財團法人慈濟大學附屬高級中學

Brazil

MOSTRATEC

Fundação Escola Técnica Liberato Salzano Vieira da Cunha

Colégio Dante Alighieri

Guam

Guam Island Wide Science Fair

John F Kennedy High School

Hong Kong, China

The Hong Kong Federation of Youth Groups

Carmel Pak U Secondary School

Chinese Foundation Secondary School

Heep Yunn School

Hungary

TIT Kossuth Klub Association

Nyíregyházi SzC Bánki Donát Műszaki Technikum

Pál Vasvári High School Nyíregyháza

Indonesia

Indonesia Scientific Society

Indonesian Young Scientist Association

Cita Hati Christian School West Campus

Semesta School

SMA Negeri 8 Bandung

SMP Islam Al Azhar 1 Jakarta

Iran

International Avicenna Research center (IARC)

Japan

Grand Contest on Chemistry for High School Students

Ikeda High School

Shizuoka Kita High School

Korea

Korea Science Service

Cheongwon HighSchool

Haemil-HighSchool

Heungdeok Highschool

Unho-HighSchool

Luxembourg

Fondation Jeunes Scientifiques Luxembourg
European School 1
Unviersity of Standford California

Macau

Macao Pui Ching Middle School

Malaysia

Ministry of Education, Malaysia
Sekolah Dato' Abdul Razak

Mexico

Expo Science Mexico RED (RED Nacional de Actividades Juveniles en Ciencia y Tecnologia)
Conalep 338 Córdoba "Heriberto Jara Corona"

Nepal

Brainycube Research Organization

New Zealand

Wellington College

Pakistan

National Science & Engineering Fair Pakistan
Beaconhouse School System, Valencia Town, Lahore, Pakistan
Government Girls High School, Wassanpura, Lahore
Scarsdale International School, Lahore, Pakistan

Philippines

Philippine Science High School-Main Campus

Romania

Cygnus Scientific Society
International Computer High School of Bucharest

Russia

All-Russian Movement of Creative Teachers "Researcher"
Sakha Junior Science Academy
Autonomous non-profit educational organization "Phystech-lyceum" named after. P.L. Kapitsa

Saudi Arabia

Ministry of Education, Saudi Arabia
Alanjal International School
Al-Batool International Schools
Al-tarbia Al-namothajja Schools TNS
Ibn Al-Nafis Secondary School
Manarat Alriyad Schools
Prince Abdul Mohsen bin Abdulaziz High School - Masarat
The fifth high school for girls
University schools . عم اجلا سرادم .

Singapore

Ministry of Education, Singapore
NUS High School of Mathematics and Science
Raffles Institution

South Africa

Eskom Expo for Young Scientists
High School Jim Fouche
Zinniaville Secondary School

Switzerland

Swiss Youth in Science
Bündner Kantonsschule Chur
Collège St-Michel

Thailand

The Science Society of Thailand
Bangkok Christian College
The Prince Royal's College

Tunisia

ATAST

Turkey

BUCA IMSEF (International Music, Science, Energy, Engineering Fair)
Buca Municipality Buca Science and Art Center

United States

Society for Science
Princeton High School
Thunder Mountain High School

日期	時間	放映內容	Title
1/28	11:30-12:00	小藍點幻想曲 (沉浸式多影音互動節目)	Our Blue Planet in Fantasy (Immersive experience with merges sounds and visual)
	15:30-16:00	小藍點幻想曲 (沉浸式多影音互動節目)	Our Blue Planet in Fantasy (Immersive experience with merges sounds and visual)
	16:30-17:00	小藍點幻想曲 (沉浸式多影音互動節目)	Our Blue Planet in Fantasy (Immersive experience with merges sounds and visual)
	17:30-18:00	小藍點幻想曲 (沉浸式多影音互動節目)	Our Blue Planet in Fantasy (Immersive experience with merges sounds and visual)
1/29	16:30-17:00	猜猜我是誰	Guess Who I AM
	17:00-17:30	猜猜我是誰	Guess Who I AM
	17:30-18:00	猜猜我是誰	Guess Who I AM
1/30	11:30-13:00	科技大突破：大腦解碼	Breakthrough : Decoding the Brain
	15:30-17:00	下一步，AI。NEXT，愛 (一)	The Next Step of AI : Episode 1
1/31	11:30-13:00	科技大突破：半機械人	Breakthrough: More than Human
	15:30-17:00	下一步，AI。NEXT，愛 (二)	The Next Step of AI : Episode 2
2/1	11:30-12:30	電子垃圾	Blame game
	15:30-17:00	下一步，AI。NEXT，愛 (三)	The Next Step of AI : Episode 3

小藍點幻想曲 (沉浸式多影音互動節目)

科學家透過太空任務，發現地球是太陽系中一個獨特的藍色小點。在這個節目中，你將體驗藝術家與設計師從萬物生命的律動與多樣性裡擷取靈感，帶領你沉浸在奇幻的影像與聲音體驗中。

從宇宙、夜晚、日出、萬物甦醒的變換場景中，山巒、雲起、下雨、河流、大海與各種奇幻的動、植物將展現在你的面前，你將有機會透過互動，改變即時運算的聲音與影像，參與在這場大型投影與聲音創作中，也可以自由讓大腦暫

時休息放空，參加這場療癒的影音體驗。

Our Blue Planet in Fantasy (Immersive experience with merges sounds and visual)

Through space missions, scientists have discovered that Earth is a unique blue dot in the solar system. Let's experience the inspiration drawn by artists and designers from the rich diversity of the species that call the blue planet home, immersing oneself in a fantastical audiovisual journey.

Participants are going to have opportunity to interact with dynamic scenes, diverse landscapes and a myriad of plants and animals that contribute to a vibrant display. Moreover, engaging in this large-scale immersive projection space and sound creation can be akin to a therapeutic and healing process.

猜猜我是誰

以 8K 攝影機，實際拍攝本館 4F 常設展「找家 - 回到人與萬物共存的希望星球」中「藍星聚樂部」單元中精采的動物標本，影像視角以凝視標本特寫、細節與全貌的進行拍攝，投影在高解析度的大螢幕畫面中，配合生動幽默的設計對白與音樂創作，帶領你從全新視角認識地球上這些有趣的家人。

Let's Guess

Filmed using an 8K camera, it captures the extraordinary animal specimens featured in the permanent exhibition "Homing: A Planet of Hope, A Planet for All" on the fourth floor of NTSEC. The footage provides close-ups, details and overall views of the specimens. These images are projected onto high-resolution screens, accompanied by lively and humorous scripted dialogues and musical composition. Let's discover Earth our family members from a distinctive perspective.

下一步，AI。NEXT，愛

由科技部補助製作的一步科普影片，將人工智慧知識融入愛情故事的劇情片，藉由劇情穿針引線，帶出臺灣 AI 人工智慧發展，讓民眾在觀賞時，就可以輕鬆瞭解科學與科技知識。

The Next Step of AI

A science popularization film, supported by the Ministry of Science and Technology, integrates artificial intelligence (AI) knowledge into the storyline of a romantic narrative. Through this film, the development of AI in Taiwan is intricately woven into the plot, providing the audience is able to understand scientific and technological knowledge easily while watching.

科技大突破：大腦解碼

由國家地理頻道製播：人類大腦是寰宇最複雜的物體：這 3 磅重的組織莫名牽引著人類所有的歡欣與悲傷。關於腦袋裡種種峰迴路轉，經過數千年的思忖，現在我們總算有工具可以探索它最幽深的地帶。這些工具導出重大的發現：科技上的突破也許能揭開意識的奧秘，拯救成千上萬飽受昏迷和不適折磨的人，例如癲癇患者；並為嚴重創傷者提供緩解痛苦的方法。

Breakthrough: Decoding the Brain

This film was produced by National Geographic Channel. The human brain is the most complex object in the universe: this three-pound organ drives all of human happiness and sadness mysteriously. After millennia of thinking about the twists and turns within our heads, we are able to explore its deepest realm with tools. Those have led to significant discoveries: technological breakthroughs may unravel the mysteries of consciousness, offer relief to thousands suffering from conditions like epilepsy, and provide methods to alleviate pain for those who have experienced trauma.

科技大突破：半機械人

由國家地理頻道製播：偶然中你可能得知某人已經宛如半機械人：一個經由嵌入技術如義肢或心臟節律器來輔助或增強功能的人。但科學的進步使我們超越了「更換零件」的層次，邁入一個新領域；逐步擴大我們的感官範圍並改變人類身心的本質。生物學與技術的突破性融合使我們更強壯、更敏捷，也更聰明。但是當天然與人造的世界合為一體，我們將變得超人一等？或變得...不再是人？

Breakthrough: More than Human

This film was produced by National Geographic Channel. Each individual might somehow have heard of someone becoming like a cyborg. The scientific advancements have taken people beyond “replacing parts” to a new realm, where human sensory perceptions are expanded and our physical and mental faculties are evolving. This revolutionary integration of biology and technology is making each individual stronger, more agile, and wiser. Yet, as the natural and artificial worlds merge, will we evolve into a form of superman or become something that transcends humanity as we know it?

電子垃圾

XS、Plus...電子垃圾排山倒海而來數位科技日新月異，越來越多電子垃圾隨之產生，製造業在量產的同時卻無法找到解決之道。西非迦納的垃圾場裡堆滿了來自世界各地的電子廢棄物，當地居民竭盡所能從中打撈出最後一點利潤。電子垃圾的黑暗真相，其實就是人們對於電子用品的成癮，加上大財團以政治力量操弄法律灰色地帶 - - 因此迦納的阿博布羅西地區居民，不僅要忍受在充滿危險的環境中進行回收工作，更需承擔放射物質帶來的高致癌風險。但是如果這些垃圾場不復存在，卻會使大量居民失業，數以萬計的廢棄物也將無處可去...本片探索地球正面臨的巨大挑戰，期盼找到成功緩和貧窮趨勢、同時拯救環境的方法。

Blame Game

Digital technology, with products like XS and Plus, has been a major contributor to the ever-growing issue of electronic waste; nevertheless, finding a solution to this problem remains elusive, despite the ongoing mass-production in the manufacturing industry. The landfill in Ghana, West Africa, is full of electronic waste from around the world. The dark reality behind the issue is electronic product addiction and the consortium with political powers manipulating laws. As a result, residents in the Agbogbloshie area of Ghana not only endure recycling work in the extremely dangerous environment but also face the heightened carcinogenic risks with radioactive materials. It is evident that without these landfills, a significant number of local residents would be unemployed, and tens of thousands of tons of waste would have no designated destination. This film explores the enormous challenges the Earth is confronting, aiming to discover successful methods to alleviate poverty trends and solutions to environment conservation.



2025 年臺灣國際科學展覽會預定日期 114 年 2 月 3-8 日

The tentative date of 2025 Taiwan International Science Fair is from Feb 3 to Feb 8, 2025.

