總監的話 Message from the Director

香港新一代文化協會科學創意中心自成立已踏入第7年，我們繼續以發掘和培育科學人才為己任，帶領香港優秀的青年科學人才，乘著夢想，橫越南北半球，穿梭東西多個大洲，成就了精彩及收穫豐盛的一年！

回首過去一年，我們帶領香港學生前往世界各地參與一系列的國際科學比賽。在香港教育局的支持下，我們帶領了12位在科研方面有優秀表現的香港學生遠赴美國匹茲堡參加「第63屆英特爾國際科學與工程大獎賽」，當中六位分別來自英皇書院和中華基金中學的學生獲得二等獎。同月，我們在香港創新科技署的支持下，組隊參與另一項國際性科學賽事 —「第五屆國際可持續發展項目奧林匹克競賽」，三隊學生憑著優秀的研究項目，獲得兩項銀獎和一項銅獎。比賽期間，參賽者更參觀了位於休士頓的美國太空總署基地，親身體驗其太空發展計劃；6月下旬，我們帶領兩隊學生前往美國紐約州立大學參與第2屆「世界青少年英才奧林匹克競賽」，他們獲得一金一銀的佳績。透過參與世界著名大型科學比賽，參賽學生不但能發揮他們在科學上的無限潛能，還可與志同道合的學生交流經驗，從而擴闊視野，為科研之路奠下殷實的基礎。

此外，我們帶領兩位學生前往台北參與「2012台灣國際科學展覽會」，與來自全球二十多個國家和地區的學生進行競賽，最終獲得了兩項二等獎。4月，我們帶領四位參與「良師啟導計劃」表現優秀的學生到印尼參與第四屆「亞太未來科學家會議」。這個由亞太經濟貿易合作組織舉辦的青年科學論壇，吸引來自亞洲多國的青年科學人才參與，而四位學生更獲得兩銀兩銅的佳績！在暑假期間，我們分別帶領在本港賽事獲得佳績的學生參與在澳洲墨爾本舉行的「資訊科技挑戰賽2012」、在天津舉行的第12屆「中國青少年機器人競賽」及在寧夏回族自治區銀川市舉行的第27屆「全國青少年科技創新大賽」，並獲得超過100個獎項，滿載而歸！11月，我們帶領6位學生赴北京參加第12屆「明天小小科學家獎勵活動」終評，並獲得2個二等獎及4個三等獎。以上參賽者在比賽期間，還獲安排拜訪考察當地不同科研機構及大專院校，與科研路上的朋友交流分享，這既能豐富他們的科學認知，又可勉勵他們日後再接再厲，追求更卓越的表現。

除了參與國際及全國性的賽事外，我們亦積極舉辦多項本地科學創意比賽讓學生參與，以發揮他們的創作小宇宙，包括：由滙豐銀行慈善基金及周凱旋基金會贊助獎學金，香港特區政府教育局課程發展處資助教育組委託科創中心主辦的「香港青少年科技創新大賽11-12」，大賽收到逾4000件參賽作品，讓香港學生發掘他們的科學創意潛能。為了讓全港市民能分享本港優秀學生的科學創作成果，科技創新大賽在評審後即時作公開展覽，希望公眾能直接與參賽者交流研究及創作的概念。比賽的得獎作品隨後亦於

Since the establishment of the Science Innovation Centre of Hong Kong New Generation Cultural Association seven years ago, we have been dedicated to identifying and nurturing science talents, leading outstanding young science talents in Hong Kong to participate in a wide variety of competitions around the world and reach for their dreams. The year of 2012 has witnessed wonderful and fruitful achievements!

In the previous year, we led Hong Kong students to participate in a series of international science competitions around the world. With the support of the Education Bureau, 12 outstanding Hong Kong students in scientific research participated in the "63rd Intel International Science and Engineering Fair" held in Pittsburgh, the United States. Six students from the King's College and The Chinese Foundation Secondary School respectively won the second prize. During the same month, with the support of the Innovation and Technology Commission, we organized a team to participate in another international science competition - "The 5th International Sustainable World (Energy, Engineering & Environment) Project Olympiad". Students from three groups won two silver medals and one bronze medal for their outstanding research projects. Meanwhile, participants also visited NASA and experienced the aerospace development plan of the US. In late June, we led two groups of Hong Kong students to participate in the 2nd "GENIUS Olympiad - Global Environmental Issues Project Olympiad" held at the State University of New York, the US. They won one gold medal and one silver medal, demonstrating outstanding achievements. Through the participation in world-renowned large science competitions, participating students can not only make full play of their unlimited potential in science, but also share their experience with peers who share the same interests so as to broaden their horizon and lay a solid foundation for their endeavour in scientific research in the future.

In addition, we led two students to participate in the "Taiwan International Science Fair 2012" in Taipei where they competed with students from over 20 countries and territories from the world and finally won two second prizes. In April, we led four students who achieved excellent results from the "Mentorship Program" to participate in the "APEC Future Scientist Conference" in Indonesia. This science conference for young people, organized by the Asia-Pacific Economic Cooperation, attracted a number of young science talents from different countries in Asia. And the four students won two silver medals and two bronze medals, demonstrating outstanding achievements. During the summer vacation, we led students who achieved outstanding results at local competitions in Hong Kong to participate in the "IT Challenge 2012" held in Melbourne of Australia, the 12th "China Adolescent Robotics Competition" held in Tianjin and the 27th "China Adolescents Science and Technology Innovation Contest" held in Yinchuan of Ningxia Hui Autonomous Region respectively. Participants won more than 100 prizes in total, bringing honour to Hong Kong. In November, we led six students to participate in the final judging of the 12th "Awarding Program for Future Scientists" in Beijing and contestants won two second prizes and four third prizes. Meanwhile, they also visited local scientific research institutions and colleges and universities, sharing their opinions with peers who had the same interest in scientific research. Such activities can not only enrich their science knowledge, but also encourage them to continue making new progresses and pursue more outstanding performance.

In addition to participating in international and national competitions, we also took the initiative to organize a number of local science innovation competitions for students so as to enable them to make full play of their potential for creation, including the "Hong Kong Youth Science and Technology Innovation Competition 11-12" funded by The Hongkong Bank Foundation and H.S. Chau Foundation and entrusted by the Chief Curriculum Development office (Gifted Education) of the Education Bureau of the HKSAR. More than 4000 entries were received for the competition, which enabled students in Hong Kong to explore their potential in science innovation. In order to enable the public in Hong Kong to share the achievements of science creation of outstanding students in Hong Kong, entries of the Science and Technology Innovation Competition were exhibited to the public immediately after the judgment

港、九及新界多個公眾地方作巡迴展覽，以提倡科學普及。同時，我們聯同香港數碼港管理有限公司舉辦的「香港青少年3D動畫創作大賽2012」，繼續為熱愛動畫創作的學生提供培訓和實踐的平台，讓他們一展所長之餘，亦提升他們的創意、設計和科技技能。我們還邀請了香港科學創意學會、香港科幻會及香港中央圖書館協辦「香港青少年科幻小說創作大賽2012」，讓來自超過80間中小學的學生參加，合共400多篇參賽文章，成功推動更多學生參與到科學和文化的聯合創作當中。

在發掘和培育具科學潛能、對科學有濃厚興趣和熱誠的學生方面，我們亦不遺餘力，積極帶領學員參與學習交流活動，包括到美國紐約市城市大學及哥倫比亞大學參加「國際師生學習交流計劃」及舉辦「新加坡創意科技考察團」。在科學培訓計劃方面，我們連續第三年獲香港賽馬會慈善信託基金捐助舉辦「未來發明家培育計劃」和「良師啟導計劃」。經過甄選後，被取錄的學員參與了一系列精心設計的活動，包括拜訪參觀香港多間大學的科學實驗室，親身認識科研工作；聆聽科普講座，增進科學知識；安排專業導師指導學員的科學創作，讓學員在創作上得到更多啟發。經過培訓後，本會給予表現出色的學員發揮所長的機會一帶領他們參與本港或國際不同的賽事，實踐他們的科學夢想。此外，我們全年共舉辦了近100場不同類型的工作坊，讓學生、家長和老師都可以投入科學創意的學習中，以提升學生對科學的興趣；並為教師提供更多關於科學創意的教材和教學方法，以幫助他們掌握及實踐創意教學的技巧。

培育科學人才是一條漫長的道路，並非一朝一夕可以成就的。我們希望政府及社會日後能投放更多資源在培育本港的科研人才上，只有在社會大眾的大力支持和重視下，香港的科學創意產業方可更上一層樓，並與韓國與新加坡等地並駕齊驅。我們在往後的日子定必懷着鍥而不捨的精神，齊心協力，幫助香港學生發揮科學創意，引領他們在科學領域的天際中展翅，翱翔高飛！

科創中心總監 黃金耀博士
二零一三年二月

was made in the hope that the public can directly communicate with contestants on the concepts of their research and creation. Winning entries were also subsequently exhibited in various public places in Hong Kong Island, Kowloon and the New Territories to arouse public's attention on science popularization. Meanwhile, we organized the "Hong Kong Youth 3D Animation Competition 2012" jointly with Hong Kong Cyberport Management Company Limited, which continued to serve as a platform of training and practice for students interested in animation creation. In addition to demonstrating their achievements in animation creation, students also improved their skills in innovation, design and technology. We also invited HK Science and Creativity Society, Hong Kong Science Fiction Club and Hong Kong Central Library to jointly organize the "Hong Kong Youth Science Fiction Writing Competition 2012". The competition attracted more than 400 entries from over 80 primary and secondary schools, which successfully promoted students' participation in the joint creation of science and culture.

In respect of exploring and nurturing students with science potential and strong interests in and enthusiasm for science, we have also been committed to proactively leading students to participate in study and exchange activities, including the "International Student and Teacher Exchange Programme" held at the City University of New York and New York Columbia University, the US. and the "Singapore Innovative Science and Technology Study Tour". As for science training programmes, we organized the "Future Inventor Workshop" and "Mentorship Program" funded by The Hong Kong Jockey Club Charities Trust three times in a row. After the screening process, students admitted participated in a series of carefully designed activities, including visiting to a number of science laboratories of universities in Hong Kong so as to experience scientific research work; attending popular science lectures so as to learn more knowledge about science; and organizing mentors with expertise in science to guide students' science creations so as to inspire them on creation. After the training programme, the Association also provided the opportunity to outstanding participates to demonstrate their skills by leading them to participate in various local and international competitions, reaching for their dreams in science. On top of that, we organised nearly 100 workshops in total during the year covering different topics, which enabled students, parents and teachers to participate in scientific creation study and increase students' interests in science. We also provided teachers with more teaching materials and methodologies on science in a bid to help them master the skill in creative teaching and put the same into practice.

It is a long way to nurture scientific talents, which cannot be achieved in a short period of time. We hope that the government and the society would contribute more resources to the nurturing of scientific talents of Hong Kong. Only with the support and attention of the whole society can the science innovation industry in Hong Kong make more progresses and keep pace of that in South Korea and Singapore. In the future, we are determined to make unremitting and concerted efforts to help students in Hong Kong make full play of their potential in science creation and guide them to scale new heights in the vast skyline of science.

Dr. Jimmy Wong Kam-yiu
Centre Director of HKNGCA Science Innovation Centre
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