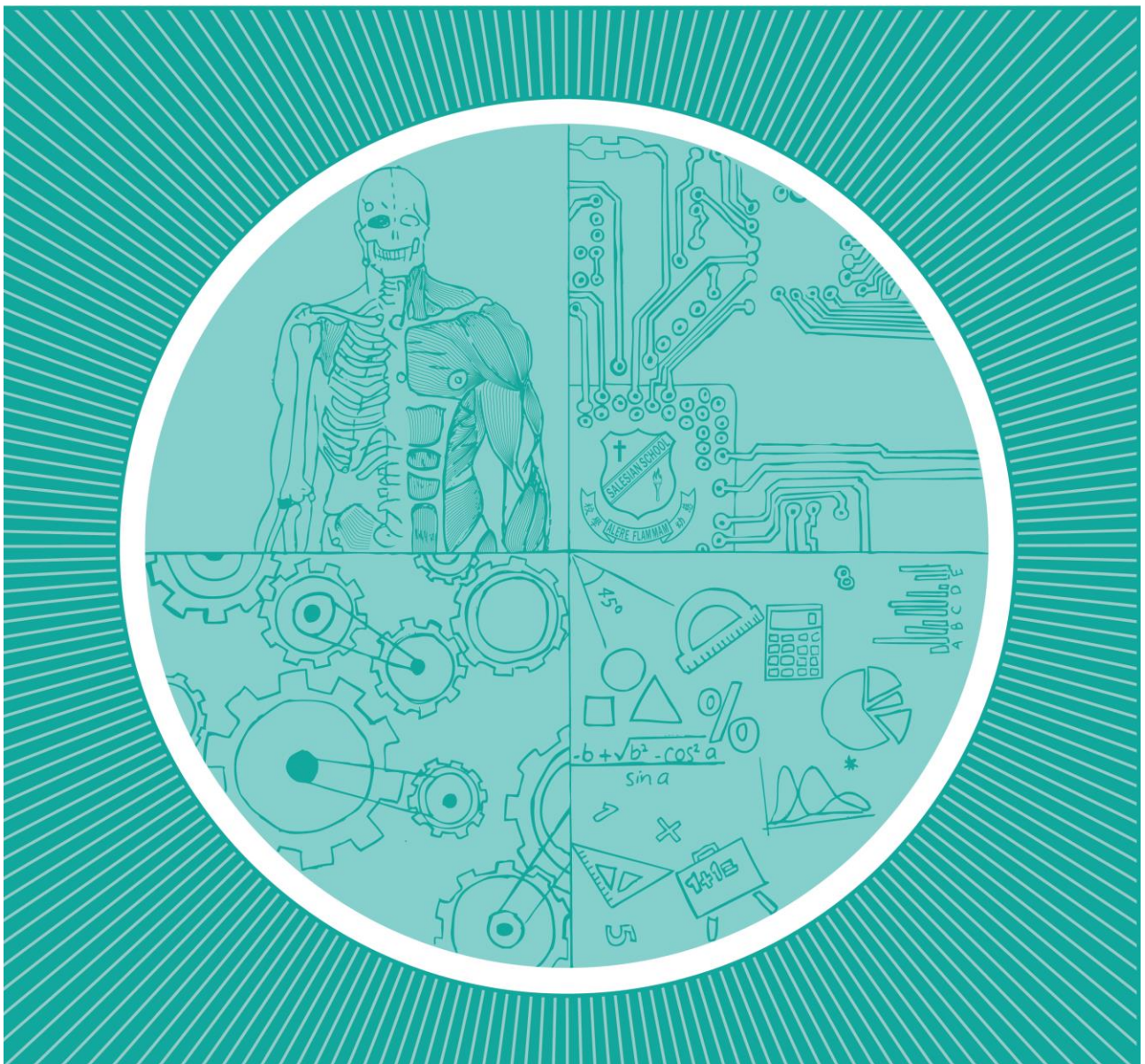


# SCIENCE

@ SALESIAN

Vol.2

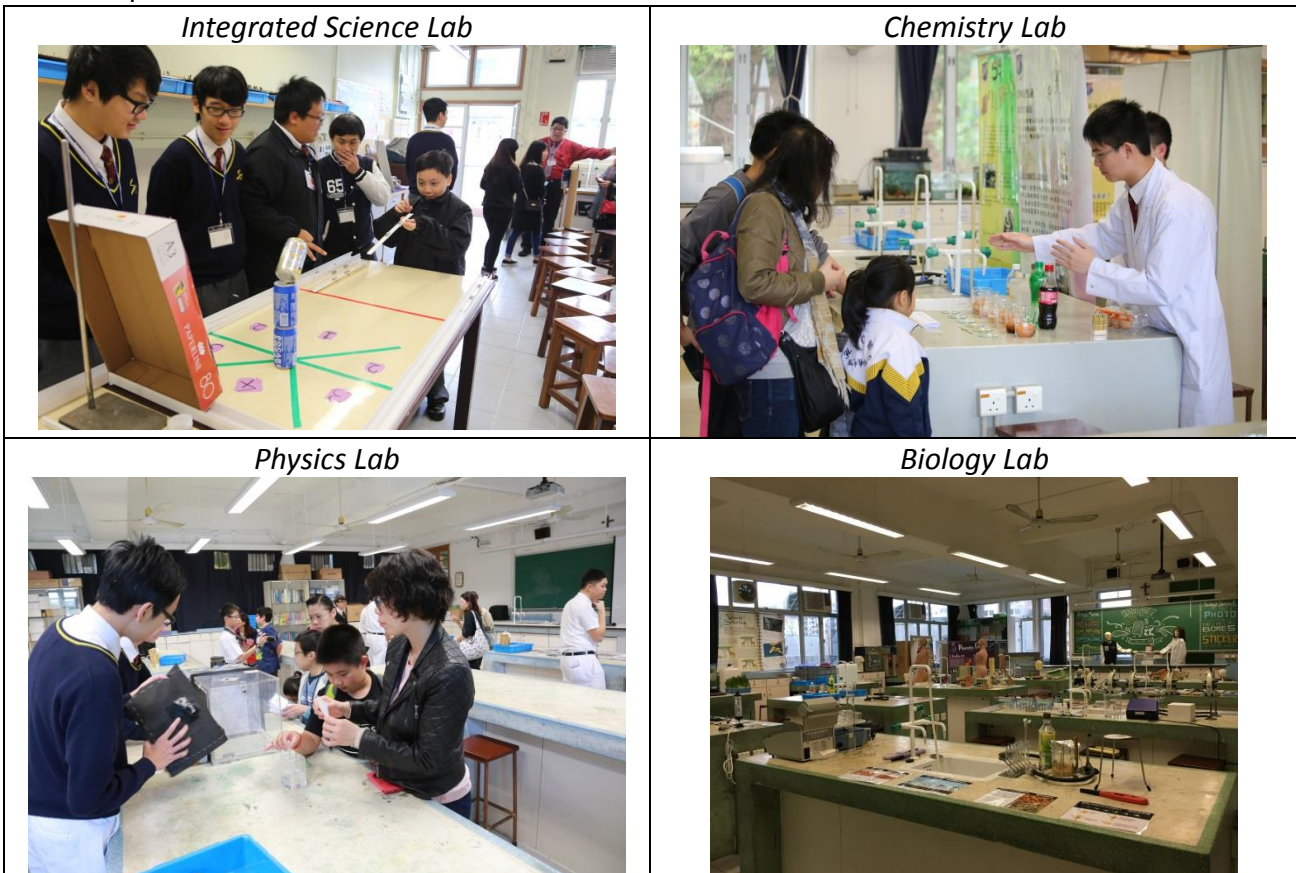


Welcome to Salesian English School! Welcome to the world of science and mathematics! In this issue, we will show you how we inspire and equip our students in the world of **STEM (Science, Technology, Engineering and Mathematics)**! Let us share with you the happy moments of learning science in our school. Enjoy!

## A. The learning environment

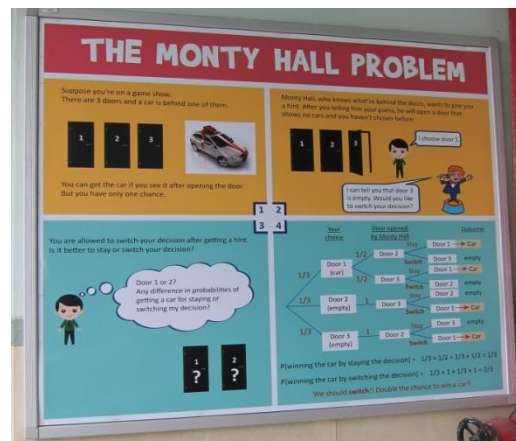
### 1. The Laboratories

Welcome to our laboratories! This is where we do the experiments and some interesting workshops in science.



### 2. Our Campus

You can also find some interesting facts about science and maths in our campus. Do you know the answers?





All science activities can be found easily.



An aquarium run by our students in the IS Lab!

### 3. Library and Reading Promotion Team

Last year, the Reading Promotion Team and the Library organised the “Salesian Reading Festival” with a theme on science reading.



Science books promotion in our school library



### 4. SS Discovery Channel

Our science teachers also prepare some video clips on interesting science for self-directed learning. Visit our website: <http://www.sshk.edu.hk/>



or scan the QR code on the right.



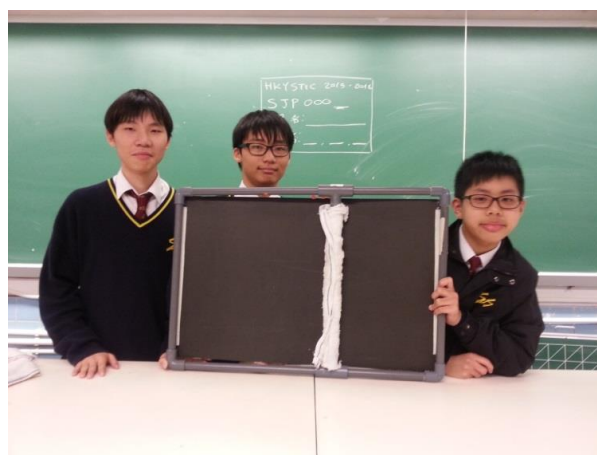
## B. The Activities

### 1. Science

To foster creativity is the key to success in science. We organised different in-house workshops and participated in different competitions to gain experience. Our students enjoy them a lot and they also get good results!

#### a. Young Inventor Nurturing Programme for junior students (初中科學尖子培訓課程 — 「少年發明家培訓課程」)

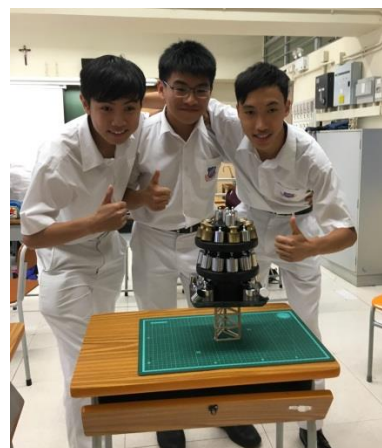
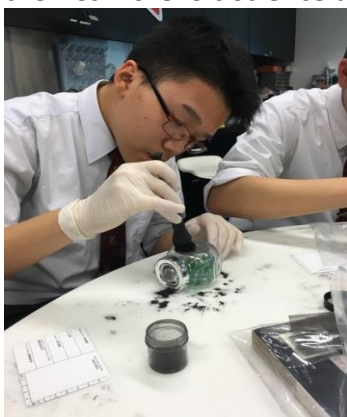
This is a training programme jointly organised by the Gifted Education Team of our school and the HK New Generation Cultural Association (香港新一代文化協會). The workshop aims at equipping our students with the know-how in the making of a new product and how to think creatively to solve daily life problems.

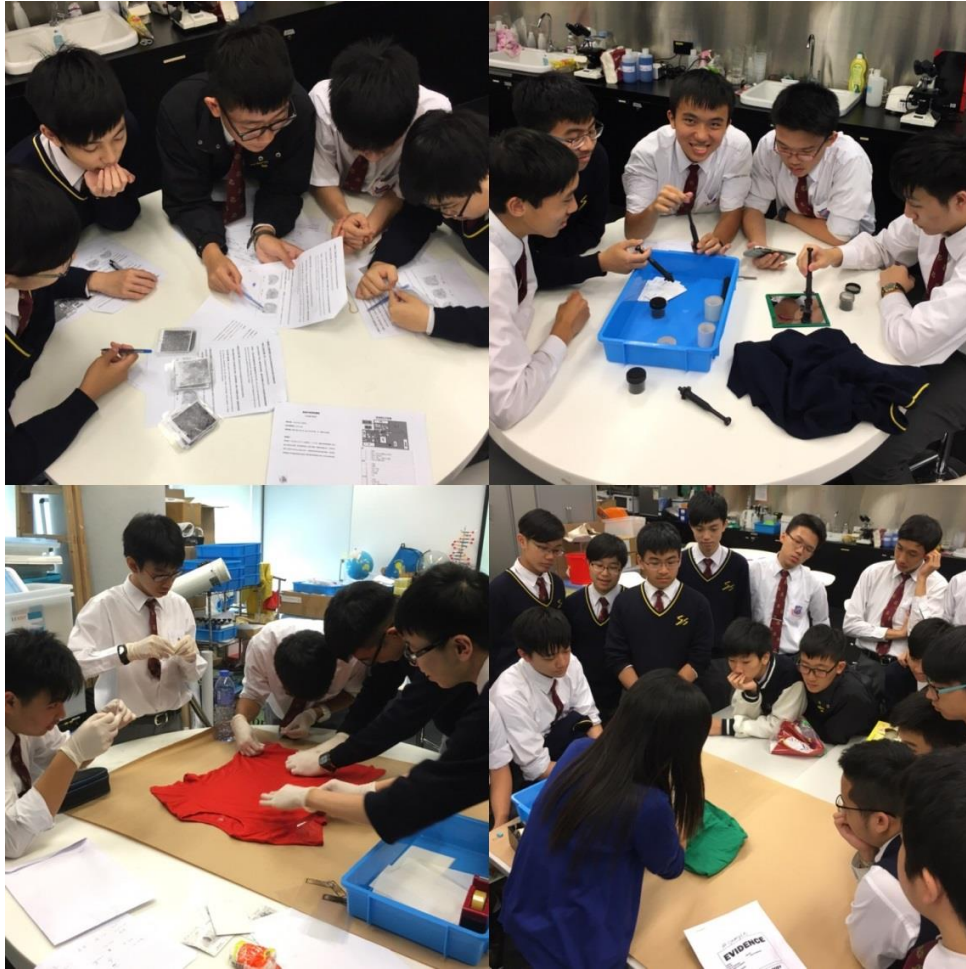


*Our students designed some creative tools to solve their daily life problems*

#### b. Gifted Science Programmes for senior students (高中科學資優課程)

In order to provide a challenging learning environment for our senior form students who love science, this year we organised a series of workshops offered by The Hong Kong Federation of Youth Groups with the use of Diversified Learning Grant. The workshops covered two major themes: **Forensic science and mechanics**.





*Workshops on forensic science.*

### c. 49<sup>th</sup> Joint School Science Exhibition (第 49 屆聯校科學展覽)

Every year, our senior students participated in the JSSE, a platform for all youngsters to explore their imagination and creativity to solve daily life problems with the use of science.

This year, with the theme “**Connection**”, we won **2<sup>nd</sup> runner-up** in the proposal and the **Most Popular Booth** with the product **Tree Sensor**.



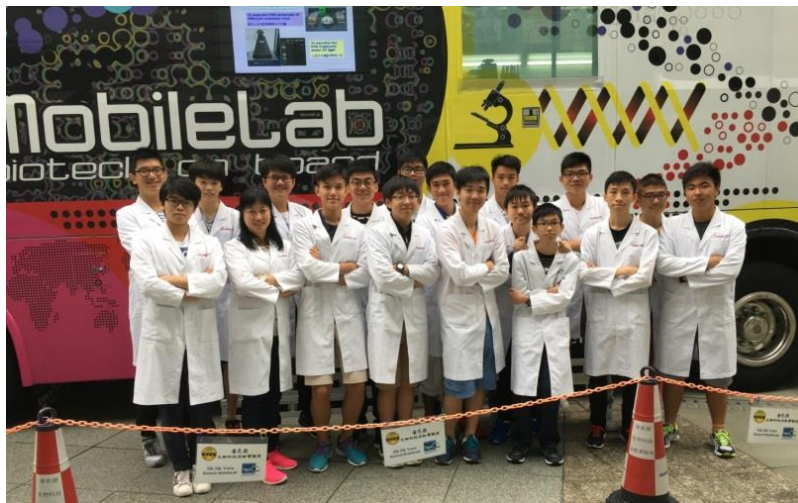
*JSSE is an important yearly science event among secondary schools!*



*Our students explained the concepts of our models patiently to the guests*

#### **d. Science club and talks**

We have science club with different themes (Physics, Chemistry & Biology) for our students to participate after school, such as the making of leaf vein bookmarks, ox eye & frog dissection... etc. Come and see!



*DNA lab @Science Park (1/11/2015). A touch of the high-end technology in DNA*



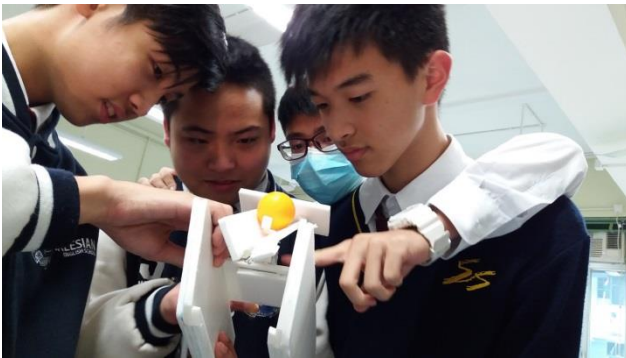
*Talk on two sexes conducted by HKUST lecturer (8/1/2016)*

## 2. Technology

We are now facing an always-changing environment with the advancement of technology, how can our students equip with the skills and minds necessary to cope with this world? One of the ways is to let them try it out. Here are some activities we have explored.

### a. Young Inventor Competition (青少年發明家比賽 2016 – 雷霆救「乒」)

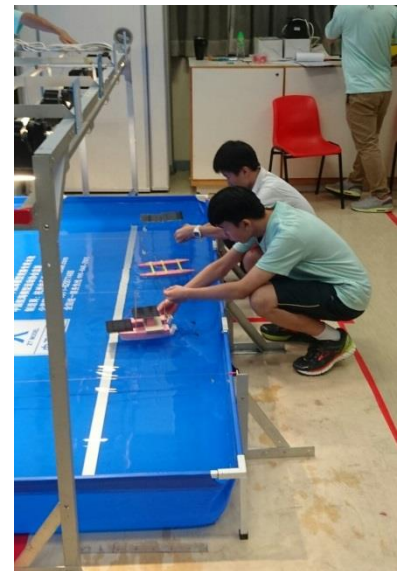
Two teams of our students participated in the Young Inventor Competitor held in the Poly University on 15 Mar 2016. The task is to carry the ping pong using devices.



*Our students tried hard to find out the best solution to complete the task.*

### b. Solar Boat Challenge (「陽」帆之旅太陽能模型船創作大賽) @24/6/2016

Solar energy is a clean and renewable. Why don't we use it in our daily life to drive our boats? Last year we joined the workshop and competition on how to make a boat using solar energy.



### c. Water Rocket workshop (水火箭工作坊) @30/1/2016

How can we make a rocket that can fly the longest distance? Our students host a workshop in making of the water rocket. We would like to share the fun and sense of achievement with some primary students on 30 Jan 2016.



*Our student is teaching a primary student patiently on how to make the water rocket.*

### 3. Engineering

How can we make use of technology to make our lives better? One of the ways is to make the robots to serve us. By using computer languages, we can control them to achieve our desired outcomes.

#### a. Coding (電腦編程及程式設計)

This year, our Program Design Club (程式設計學會) participated in a programme called **CityU Apps Lab Ambassador School Programme** organised by the City University. The Ambassador School Program (ASP) aims to provide support to ambassador secondary schools and primary schools by forming an environment conducive for coding and IT education.



*Our Program Design Club*



*Training programmes provided by the CityU staff on the concept of coding*



*Students received certificates from the City U App Lab*

For more details of the programme, you may visit: <http://appslab.hk/asp/> or scan the QR code on the right.





## b. Robotics Team (機械人小組)

We also have a robotics team in our school. We have regular meetings after school to learn coding and setting the LEGO robots and VEX robots. It is good fun!



*Our Robotics Team members at the WRO.*



*Robotics Team members with teacher advisor, Mr, Chan Kong-wei (centre)*

## c. Mini-robots competition (微型震動機械人接力比賽) @6 Nov 2015

We have a lunch-time competition in our school and select the best students to form two teams for the open round competition organised by the HK New Generation Cultural Association in the Science Park.



*Our team won the First-class and Second-class awards in the competition!*

## 4. Mathematics

Our school has a good atmosphere in learning Mathematics. Can you imagine the joy of solving a maths puzzle?

### a. Mathematics Olympiad (奧數訓練)

We have maths team for students who love solving mathematics puzzles. We will participate in different competitions, such as the HKMO (香港數學競賽), IMO-HK pre-lim (國際數學奧林匹克香港選拔賽), Hong Kong Mathematics Creative Problem Solving Competition (香港數學創意解難比賽), etc.



Our students got good results in different maths competition, such as China Cup (華夏盃) · Pan-Asia Pacific International Maths Invitation Competition (環亞太杯) · HK Maths Creative Problem Solving Competition (數學創意解難比賽)。

### b. The Maths week (數學周)

For the fun side, our mathematic society organised the Mathematic Week (數學周), you can try the math puzzles and other booth games there.





*See how our boys trying to solve the maths problems with zeal.*

### **c. Learning maths & science is fun! (奇趣數理天地)**

We organised the fun day on “Learning maths & science is fun” (奇趣數理天地) for primary students as well to promote science and maths.

*28th November 2015@ Salesian English School*



*Our students are explaining to the primary students how to play the maths game*

## 5. Others

### a. STEM Olympiad

Hong Kong STEM Olympiad 2016 was held on 8 July 2016. This is a competition which requires all-round knowledge in the domains of STEM. Eight students from our school participated in the competition in two teams. Wong Kin-Leung from 5C got high distinction in individual competition (Biology). Lee Tsz-Leung and Ng Ka-Ho from 5D got credits in individual competition (physics, chemistry). Both two teams got credits in mathematics team competition as well.



Team 1: 黃健樑 (bio) high distinction 蔡祖彝 (ict) participation 李子良 (phy) credit 吳肇殷 (chem) participation	Team 2: 蕭卓然 (bio) participation 盧旭朗 (ict) participation 申振滔 (phy) participation 吳迦灝 (chem) credit
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### b. Mock autopsy during English-Speaking Day (模擬解剖活動)

Our Biology teacher, Mr. Leung Tsz-chung, held a demonstration in different human organs during an English-Speaking Day activity on a detective case.



Mr. Leung Tsz-chung (with white lab gown) is explaining the human structure and some important organs to the students. Our NET is also with us at the back.

## C. Our Pride

We also nominate students with gifted talents to join the programmes organised by the EDB, the Gifted Academy and also other gifted programmes. We are proud of their achievements.

### a. LEGO WRO Competition (世界奧林匹克機械人挑戰賽)



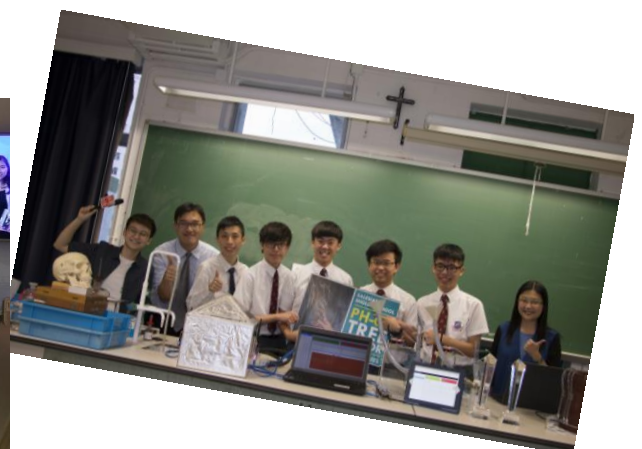
*This year, our robotics team won the champion and the Best teamwork in WRO Speed Challenge*

### b. Joint School Science Exhibition (49 屆聯校科學展覽)

This year, with the theme “**Connection**”, we won the **2<sup>nd</sup> runner-up** in the proposal and the **Most Popular Booth** with the product **Tree Sensor**.



### c. Interview with RTHK (Putonghua channel)



*RTHK invited us for an interview on 12/9 and also had a school visit on 4/10 to know more about our science project. Try this QR code to listen to the interview!*



## Awards in science and mathematics of the Salesians

Items 項目	Achievements 成就	Students 得獎學生
World Robot Olympiad 2016 世界奧林匹克機械人挑戰賽	<b>極速循線</b> 1. 中學組最佳表現獎(冠軍) 2. 金樂高獎	潘偉豪(5B)、丁柏希(3A) 呂綽軒 (3B)
	<b>太空任務</b> 銀樂高獎	黃俊熹(3B)、陳志壘(3A) 黃智言 (3A)
Vibrating Robot Relay Race 微型震動機械人接力賽	一等獎	陳偉賢(3D)、朱世研(3D) 盧進濠(3D)、蔡宗霖(3D) 李昊璋(3B)、湯健朗(3D) 吳明橋(3B)、呂綽軒(3B)
	二等獎	徐偉倬(1B)、郭仲民(1B) 阮若德(1A)、何璟靈(1A) 楊毅恒(2A)、鄧穎勳(2A) 何旨行(2B)、石永銘(2B) 李昊霖(2E)
49 <sup>th</sup> Joint School Science Exhibition 第 49 屆聯校科學展覽	1. 最受歡迎攤位 2. 計劃書季軍	黎浩川(5D)、方漢涼(5D) 申振滔(5D)、莫凱竣(5D)
Robotics Intelligence and Digital Media DIY 2016 智能機械及數碼媒體由我創 2016	智能機械由我創-二等獎	丁柏希(3A)、王銘俊(3A) 何紀樂(3B)、何栢曦(3B) 呂綽軒(3B)、黃俊熹(3B)
5 <sup>th</sup> Model Solar Boat Design Competition 第五屆「陽」帆之旅太陽能模型 船創作大賽	---	郭仲民(1B)、何旨行(2B) 何偉業(2B)、石永銘(2B)
Hong Kong STEM Olympiad 2016	High Distinction	黃健樑(5C) (Biology)
	Credit	李子良(5D) (Physics) 吳迦灝(5D) (Chemistry)
	Certificate of participation	蔡祖彝(5C)、吳肇殷(5D) 蕭卓然(5C)、盧旭朗(5C) 申振滔(5D)
Hong Kong Biology Olympiad for Secondary Schools 香港生物奧林匹克比賽	First Class Honours	Wong Kin Long (6E)
	Merit	Chan Ka Kwan Michael (6E) Lau Kwan Kin Kenneth (6E)
	Active Participation	Wong Pui Yui (6E) Tam Kit Yan Jack (6E) Law Marco Ho Yin (6E) Suriyaseang Patipan (6E)

項目	成就	得獎學生
Pan-Asia Pacific International Mathematics Invitation Competition 環亞太杯國際數學邀請賽初賽	一等獎	洪家棟(2B)
	二等獎	卓銳恩(2C)、潘振昌(3A) 林子軒(3B)、倪海峻(3B)
	三等獎	施楓茗(1A)、莫子滔(2A) 陳穎鋒(2C)、陳曜嘉(3A) 方浚豪(3A)、黃智言(3A)
Pan-Asia Pacific International Mathematics Invitation Competition 環亞太杯國際數學邀請賽進階賽	二等獎	施楓茗(1A)、潘振昌(3A)
	三等獎	洪家棟(2B)、方浚豪(3A) 陳曜嘉(3A)、黃智言(3A)
The Hong Kong Mathematics Creative Problem Solving Competition 香港數學創意解難比賽	銀獎	林梓恆(1A)、施楓茗(1A) 陳穎鋒(2C)、卓銳恩(2C)
Huaxiabei National Mathematics Olympic Invitation Competition 2016 (Hong Kong District) 「華夏盃」全國數學奧林匹克邀請賽 2016 (華南賽區) 晉級賽	三等獎	馮煜榮(1A)
Web-based Learning Courses for Gifted/More Able Students 教育局資優教育組網上學習課程	第一級別	潘御生(2C)、周智宏(2A)

### Acknowledgements:

- Program Design Club
- Robotic Team
- Gifted Education Team & JSSE sub-committee
- Science promotion team
- Physics, Chemistry, Biology, Integrated Science and Mathematics Panels
- Academic Affairs Committee



**For further information:**

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or visit our school website: [www.sshk.edu.hk](http://www.sshk.edu.hk)

Cover illustration: Daniel Ng Ka Lung (F.4D)