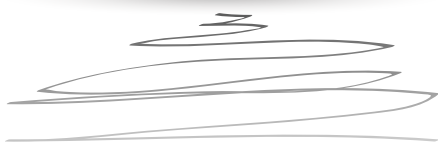




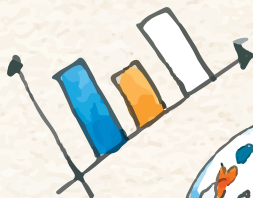
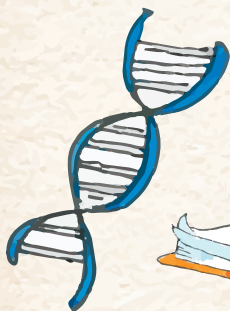
ASSOCIATION OF SCIENCE, TECHNOLOGY & INNOVATION

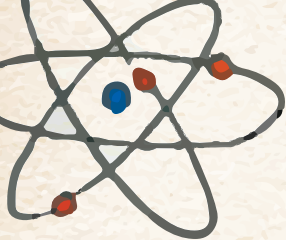




# INTRODUCTION

The Association of Science Technology and Innovation (ASTI) is made up of educators, scientists, industry representatives and individuals who are committed to advancing the role of the scientific community by inspiring the nation's youth to participate in its programs, and excel in the world of science and other related themes.





# OUR VISION



To be the premier association in Malaysia for the promotion of education and understanding of scientific knowledge, technological advancement and innovative projects - both locally and internationally.

$$E = mc^2$$





# OUR MISSION

The Association of Science, Technology and Innovation (ASTI) provides leadership in scientific education and technical support to improve and create greater awareness in all areas of science through generation, dissemination and exchange of information and services.





# OUR PROJECTS

The Association of Science, Technology and Innovation, ASTI is working towards empowering young people through various projects such as:

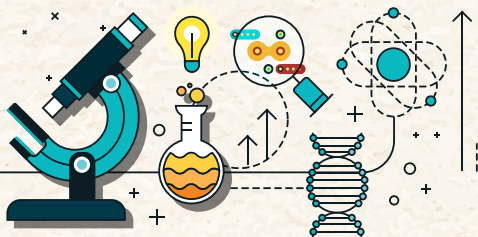
- 1) Science Fair for Young Children (SFYC)
- 2) Science Fair Alumni Initiatives
- 3) Young Inventors Challenge (YIC)
- 4) Creative and Critical Thinking Camps/ Workshops (CCT)
- 5) ASTI Leap Challenge (ALC)
- 6) Young Scientific Explorer (YSE)
- 7) On the Wings of Fire Series
- 8) ASTI Progressively Learning and Understanding Science (A-Plus Programme)
- 9) Young Inventors Journal (YIJ)
- 10) ASTI's Media Engagement
- 11) ASTI's Collaborative Projects





# SCIENCE FAIR FOR YOUNG CHILDREN (SFYC)

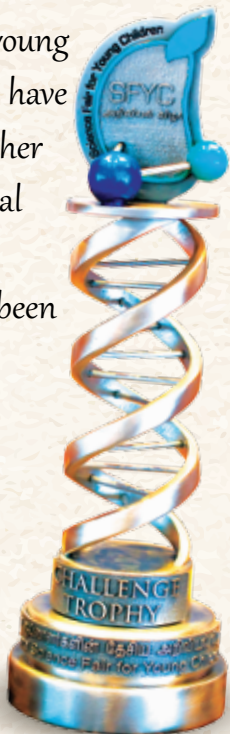
Science Fair for Young Children (SFYC) is a programme held annually among Tamil schools in Malaysia to encourage and strengthen the learning of science among these school children. SFYC is an event that helps enrich and demonstrates Tamil school students' talents from a very young age, and prepare them for future enhanced learning experiences in science. It is conducted at three levels – the school level, zone level and national level.



The Key Achievements of SFYC in the 12 years since our inception include:

- ❁ Having trained at least 700 teachers each year for the past 12 years.
- ❁ Garnered between 60 to 80 thousand participants at SFYC annual events.
- ❁ More than 2000 of past young Science Fair participants, have taken part and won in other national and international competitions yearly.
- ❁ The success of SFYC has been covered by over 30 news publications yearly.

To know more about SFYC,  
please visit  
[www.nsfyc.org](http://www.nsfyc.org).







# SCIENCE FAIR FOR YOUNG CHILDREN ALUMNI INITIATIVES

ASTI will be launching the SFYC Alumni Initiative which aims to create a support network of past SFYC participants. The objectives of this initiative are:

1. To build a framework of scientific-based thinking for students to understand the subject better.
2. To increase the students' ability to understand and absorb our school syllabus for science subjects.
3. To further build the students' self-confidence.

ASTI plans to set up the SFYC Alumni Initiative in each state at various SJKTs, so the students may return to their alma mater and contribute to newer student population as they keep in touch with the teachers.



- It is a non-toxic to our health.
- The gases will go around the desk also in the house. It will refresh the house.
- Easy to bring everywhere because the size is small.
- We put 2000 LEDs so you can turn it on any time a day.
- Easy to install in our dormitory.
- Moreover we use recycled material so it is more saving. And since energy is made of renewable energy.
- It uses renewable energy.
- Besides, it is made of plastic that is more durable and resistant. So, the power is protected and can't break easily. It will be a better solution as light in the hall.

## DIAGRAM

SILAR PUYET

BENEFITS

34



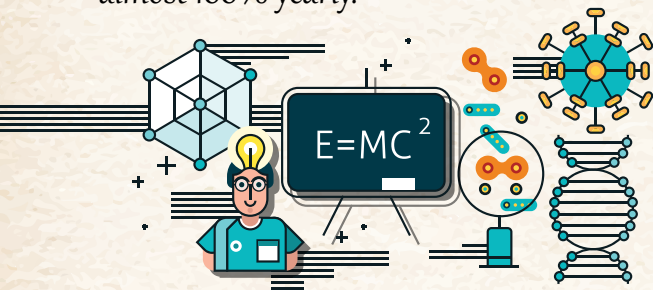


The logo features three green, stylized human figures of varying heights, with their arms raised, positioned to the left of the text.

# Young Inventors Challenge





The Young Inventors Challenge (YIC) aims to encourage secondary school students between 13 to 17 years old to experience the merits of teamwork firsthand, by finding innovative solutions to everyday science-related problems. YIC debuted in 2013 as a pilot program and have had a remarkable response, with a steady participant growth of almost 100% yearly.



Each year, ASTI would invite secondary schools in Malaysia and other countries to submit their proposals on innovative ideas and inventions. The proposals received are reviewed and shortlisted. The shortlisted teams undergo ASTI's in-house online training. The young inventors are then given about four months to develop their projects, after which they are invited to exhibit their works at the Grand Finale.

Among the many achievements of running YIC for the past 6 consecutive years are:

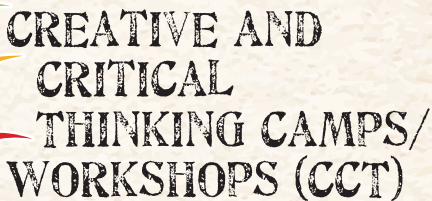
 The phenomenal participation growth which includes international schools from Philippines, Thailand, Indonesia, Singapore and China.

 In 2017 and 2018, YIC received international recognition from the Malaysian Ministry of Education.

To learn more about YIC, please visit

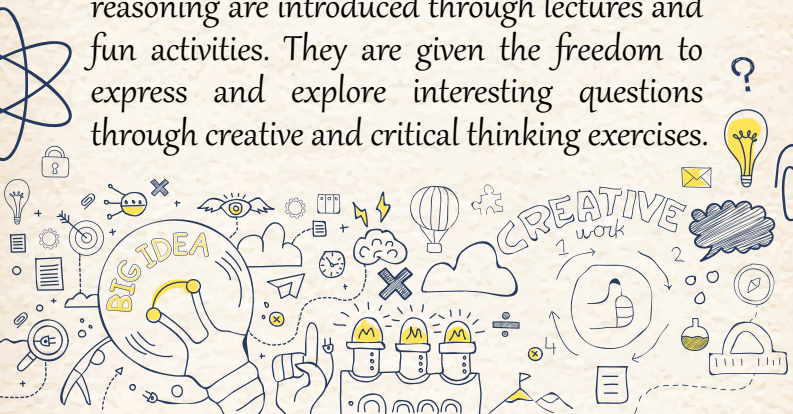
[www.asti.org.my](http://www.asti.org.my)





# Creative & Critical Thinking Camp

Creative and Critical Thinking Camp and Workshops (CCT) was designed to inculcate and introduce the concept of thinking creatively and critically, when making choices in life. Both methods of logic and empirical reasoning are introduced through lectures and fun activities. They are given the freedom to express and explore interesting questions through creative and critical thinking exercises.



The great successes with this program since its inception include:

- 💡 The development of over 30 modules that are effective in training young minds to think creatively and critically.
- 💡 The participation growth of the program that is currently held at four levels - primary, lower secondary, upper secondary and tertiary.







## ASTI LEAP CHALLENGE (ALC)

ASTI Leap Challenge (ALC) aims to expose young people to the world of Science and Logical Thinking, particularly in the areas of invention and innovation. With ALC, the teachers and students from potential schools are trained to conduct their own school level ASTI Leap Challenge (SL-ALC). This project includes three trainings, followed by a competition organised at each participating school. Although this program is fairly new – the pilot debuted in 2016 – ASTI has had participation from a total of 182 students from 37 schools in Penang, Kedah and Johor; and in Phase 2, welcomed 55 schools from the same states, as well as Miri, Sarawak, East Malaysia.



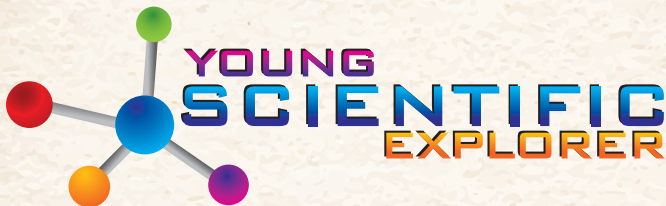


We are especially proud that two schools which participated in the ALC pilot in 2016 (SMK Seri Kota Puteri 2 and SMK Taman Mount Austin), also went home with the Platinum and Bronze awards respectively at our Young Inventors Challenge event in 2017.



Also, many past participants of the ALC have taken part in other National competitions, and won many more accolades and awards.





The Young Scientific Explorer (YSE) aims to introduce science to the young in a fun and creative way - so as to promote and help develop their interest in the subject of science. The Young Scientific Explorer is a program focused on experiential learning; so we make it flexible enough to garner interest from students with varied capabilities, of all levels. ASTI believes, this is the new way to teach science effectively in the future – for a deeper and better understanding of the subject. YSE, to date, has reached out to almost 5,000 young people.







On the Wings of Fire Series is a program created to empower and equip teachers, with the confidence and skills needed, for them to face the requirements of a new generation of students. ASTI's Teachers Conference 2016 is the first initiative under this program. Currently ASTI is in the midst of developing modules and materials for 21st Century Skills to train the teachers on its effective implementation in schools.



(ASTI Progressively Learning and Understanding Science)

The A-PLUS program brings together secondary school students to explore, learn and understand key scientific concepts according to their school syllabus. ASTI provides a venue that offers a safe and fun, yet challenging environment, for the students to learn via the experiential method at the A-PLUS workshops. ASTI aims to help build the foundation of these concepts, so that students understand what they are learning in their own classrooms. This program was developed based on the latest research in brain science, to promote deeper learning abilities.



The Young Inventors Journal (YIJ) is a scholarly publication hosted by ASTI which consists of full length original research papers, conference papers, short communications, review papers, and perspectives. YIJ is a free online research journal that is earmarked towards younger generation to increase their interest, get involved and immersed in learning in science, technology and innovation. Accordingly, our journal hopes to expose young generation to new ideas and inventions.



[www.younginventorsjournal.com](http://www.younginventorsjournal.com)





ASTI in collaboration with various media outlets has produced many regular articles for the public. Among them are:

**The Arivan Anggam** – a collaboration between ASTI and Uma Publications, in which we publish fun experiments and quizzes regularly for Sutti Mayil, a monthly Tamil magazine for school children.

**The Ariviyal Ulagam** – Also with Uma Publications ASTI produces articles for a monthly magazine called Mayil Magazine for the masses. The human interest or topical articles are aimed at raising awareness of Science, Technology and Innovation to the general public.

**Stories of Science Fair** – ASTI, in collaboration with Tamil Malar daily newspaper, plans to publish success stories from the Science Fair for Young Children (SFYC) events; and also produce articles related to Science, Technology and Innovation.





ASTI advocates for teamwork and lead by example. We collaborate tirelessly with various organisations on projects that are related to science, technology and innovation. Among them are:-

- The Science Film Festival in collaboration with Goethe Institute
- The Science Drama Competition with Petrosains
- EDUKATE online learning with Learning Orchard
- Klang Valley City Nature Challenge with The Rimba Project (RIMBA) also known as University Malaya's Rimba Ilmu Botanic Garden
- Learning English using conservation in Sarawak with the World Conservation Society
- Science Immersion Camp with various partners both locally and internationally

Our lists of collaborations are exhaustive. We are committed to continuously promote the education of science through interesting, thoughtful and genuine methodologies.

# MONTHLY NEWSLETTER

ASTI produces monthly newsletters to constantly update its members, stakeholders and friends with recent activities and project progress. The newsletter is simple and designed for quick reading of five minutes or less.

## September 2018 Newsletter

### HEADLINES:

#### ASTI hosted a Meeting with Thammasat University

ASTI hosted a meeting in ASTI Office between Thailand delegates, from school or Global Studies, Thammasat University and other representatives. Ron Mahabina to discuss about a research project on 7th August 2018. ASTI is proud to be associated with the esteemed Thammasat University.



Young Inventors Challenge (YIC) 2018



#### In This Issue

- ASTI hosted a Meeting with Thammasat University
- Young Inventors Challenge (YIC) 2018
- International Research Innovation Invention & Solution Exposition 2018
- Popping State Level STEM Competition
- Transformation 4.0: Digital Leadership, Disruptive Innovation & Design Thinking
- RCE Indonesia Sustainable & Low Carbon Schools Exhibition 2018
- 3rd International Invention Innovation Competition (ICAN 2018)

## October 2018 Newsletter

### HEADLINES:

#### Science Fair for Young Children 2018

#### Hallstatt Science Fair for Young Children 2018 Results

##### PLATINUM

S.K.T.T.H. ANJAN

GOLD

S.K.T. PAIR GUANG

S.K.T. LIG LANCHANG

SILVER

S.K.T. LIG CHANGKAT

S.K.T. LIGAL

S.K.T. TANJA AWAL

BRONZE

S.K.T. MENJANG

S.K.T. TAMAN PERMATA

S.K.T. PERMAS JAYA

S.K.T. PUCHONG



Platform Winner

Gold Winner



Silver Winner



Bronze Winner



#### In This Issue

- Science Fair for Young Children 2018
- Young Inventors Challenge (YIC) 2018
- 5th International Invention Award
- Index 2018
- The Next 100 Workshop
- Journal Writing Competition - science Innovation Program 2018



## CONTRIBUTION FORM

- ☐ Science Fair for Young Children (SFYC)  
☐ Young Inventors Challenge (YIC)  
☐ Creative & Critical Thinking Camp (CCT)  
☐ ASTI LEAP Challenge (ALC)  
☐ Young Inventors Journal (YIJ)

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☐ RM 5,000    ☐ RM 10,000    ☐ RM 15,000    ☐ RM 20,000

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Signature

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Date





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