

# INTERNATIONAL EXHIBITION FOR YOUNG INVENTORS (IEYI) 2018

ORGANIZED BY



FOUNDATION FOR GLOCAL SCIENCE INITIATIVES (FGSI)

HOSTED BY



MANAV RACHNA
INTERNATIONAL INSTITUTE OF
RESEARCH AND STUDIES





### International Exhibition for Young Inventors (IEYI) 2018

## Organized By

# Foundation for Glocal Science Initiatives (FGSI)

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#### **RULEBOOK**

Event Conceptualized: Japan Institute of Invention and Innovation (JIII), JAPAN

IEYI 2018, Delhi NCR, India

**Competition Date:** 17<sup>th</sup> to 20<sup>th</sup> October, 2018

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#### About IEYI 2018

International Exhibition for Young Inventors (IEYI) was started in 2004 to celebrate the 100<sup>th</sup> anniversary of the founding of Japan Institute of Invention and Innovation (JIII). Since there was the agreement of many countries/areas which participated in IEYI 2004, it has been continuously held in various countries. It was held in India in 2006 at Pragati Maidan and organized by CII in association with Department of Science and Technology (GOI) under Guidance of Er. Anuj Sinha (then functioning as the Head Science Communication and Scientist 'G' at DST). He is currently the Chairman - Foundation for Glocal Science Initiatives (FGSI) - the current Indian partner to IEYI organizing committee for Team India Coordination and participation.

The aim of IEYI is the international exchange to encourage creativity and invention of teenagers, and many teenagers are growing up through participating in this event. In this time, though it's the second time to be held in India as IEYI 2018.

<u>IEYI 2018</u> will be held in the National Capital Region, Delhi NCR, and scheduled from 18<sup>th</sup> October to 20<sup>th</sup> October '2018. Being the region close to one of Modern Seven Wonders of the World – Taj Mahal, Akshardham, Qutab Minar, Lotus Temple and India's most prestigious Industrial City Gurugram – the manufacturers of Suzuki Car and Honda.

At the venue, there are not only the exhibitions of the works of teenagers, but also the exhibition to introduce the Innovative Projects Conceptualized by Under Graduate Students.

We expect that the young participants and the organizations related to encouraging their inventions in each country/area will deepen exchanges through this event.

#### IEYI 2004 - 2017

			8 <sup>th</sup>		
1 <sup>st</sup>	2004	Japan	O	2012	Thailand
2 <sup>nd</sup>	2005	Malaysia	9 <sup>th</sup>	2013	Malaysia
3 <sup>rd</sup>	2006	India	10 <sup>th</sup>	2014	Indonesia
4 <sup>th</sup>	2007	Indonesia	11 <sup>th</sup>	2015	Chinese Taipei
5 <sup>th</sup>	2008	Chinese Taipei	12 <sup>th</sup>	2016	China
6 <sup>th</sup>	2009	Nigeria	13 <sup>th</sup>	2017	Japan
th 7	2010	Vietnam	14 <sup>th</sup>	2018	India

#### 2. Important Dates

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17<sup>th</sup> Oct 2018 – Check in and Stall Set Up
18<sup>th</sup> Oct 2018 – Inauguration and Judging
19<sup>th</sup> Oct 2018 – Judging and Gala Dinner
20<sup>th</sup> Oct 2018 – Local Sign-Seeing and Awards Ceremony
21<sup>st</sup> Oct 2018 – Check out
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#### 3. Contest Contestants and Divisions

The participants can exhibit Inventions or Artworks.

- 3.1 Contest groups: International Exhibition for Young Inventors is divided into 3 divisions.
- 3.1.1 *Junior Group* for students under age of 14.
- 3.1.2 *Senior Group* for students above age of 14.
- 3.1.3 Under Graduates in Maths, Science, Technology and Medicine till age 25
- 3.1.4 Teachers / Guide Only 1 teacher / Guide will be allowed per Team
- 3.1.5 Observers / Parents Observers and Parents are allowed only to the exhibition area on non-judging days and their entry to inauguration and awards ceremony is prohibited
- 32 Invention: Each team can have up to 3 contestants. A school or Country may register multiple teams and in different invention categories.

Artwork: It should be created by one person.

#### 4.2 Location:

#### Exhibition Hall; G D Goenka World School, Sohna, Gurugram

#### 5. Registration

- 5.1 The requirements of participation:
- 5.1.1 Contestants must be students between 6 and 25 years old (i.e. students from elementary schools, junior high schools, senior high schools or vocational high schools and the Under Graduates).
- 5.1.2 Contestants and advisors should provide official *Romanized* names (i.e. spelled with English alphabets), as shown on the passport, in their registration documents. The award certificates will be printed in English based on the names provided in the registration documents.
- 5.2 Date of registration: The registration period is from June 1<sup>st</sup>, 2018 to Aug 15<sup>th</sup>, 2018.
- 5.3 Documentation:

5.3.1 Application Form: Please access the online registration page in official IEYI 2017 website.

Just for example, please refer to Appendix B and C. The form must be filled out in English. The registration page is open for editing at any time before the submission deadline.

- 5.3.2 Limitation: The total number of works from all participating countries/areas is 200. The rough indication number of each country is 10 works including Artworks, basically.
- 5.3.3 Document Submission Deadline: Please upload all the required documents of the team to our official website <a href="http://www.fgsi.co.in/registration/">http://www.fgsi.co.in/registration/</a> before August 15, 2018
- 5.4 **Registration Fee & Participation**: There shall be registration fee of \$400 / \$315 only per participant/teacher/guide/parent/observer.

The fees covers below features and facilities:-

- Registration to Event,
- Participation to Event
- Stall Set up with 1 electricity point (no adaptors will be provided)
- Stay at below hotels from 11 am, 17<sup>th</sup> Oct 2018 to 10 am on 21<sup>st</sup> Oct 2018
- Food Breakfast, Lunch and Dinner for above period
- Airport pick up and drop
- Scheduled Bus Pick up and Drop from Hotel to Venue and back on 17<sup>th</sup>, 18<sup>th</sup> 19<sup>th</sup> and 20<sup>th</sup> Oct only

Please note:- Only hotel type is different for the 2 fee types. Rest all remain the same

- 1. For Fees of \$400 the hotel options are
  - a. Hyatt
  - b. Radisson
  - c. Hilton
  - d. Any other hotel of above category

We have only 100 to 120 seats available under \$400 Fees

- 2. For Fees of \$315 the hotel options are
  - a. Lemon Tree Hotel
  - b. Country Inn and Suits
  - c. Red Fox Hotel
  - d. Any other hotel of above category

We have only 120 to 150 seats available under \$315 Fees

#### *Note:*

- 1. The fees do not includes any kind of Air Travel Expense, or VISA Charges or Medical Insurance
- 2. The charges for any other services / usage will be borne by the participant / teacher / user

#### 6. Criteria (Inventions)

#### 6.1 Invention Categories

Creation must adhere to all exhibition specifications. The invention must be safe and not belong to the field of basic scientific research or pure art creations. General criteria are listed below:

- (1) Pure art creations such as poetry, songs, short stories, paintings, sculptures, etc. will NOT be qualified for this exhibition.
- (2) Basic or pure scientific research experiments involving living organisms will NOT be qualified for this exhibition.
- (3) Inventions must be safe. NO explosives, corrosives, poison substances and combustible materials are allowed.

An invention must be registered in one of the following six categories (Theme):

#### (1) Disaster Management

Inventions are useful in detecting, preventing natural disasters or post-disaster management (E.g. technologies/ products/ systems).

#### (2) Education & Recreation

Inventions that show usefulness in classrooms or elsewhere for educative purposes. Invention that improves activities involve in recreational purposes. (E.g. sports, entertainment, & etc.)

#### (3) Foods & Agriculture

Inventions that improve the qualities of agricultural practices or inventions that solve contemporary food issues. This category involves only inventions that belong to system/technology/product but does not include the food item itself.

\* Creation should not involve any living organisms. These are prohibited from entering countries.

#### (4) Green Technology

Inventions that create sustainability, reduce pollution, promote energy efficiency, and environmentally friendliness.

#### (5) Safety & Health

Inventions that contribute to safety and health (e.g. devices, system, practices).

#### (6) Technology for Special Needs

Inventions that contribute the convenience of minorities, people with special needs (e.g. elderly, children, people with disability, pregnant women).

#### 6.1.2 Invention specifications

Summary of specification of inventions is listed in Table 1below.

#### 6.1.2.1 Material

Inventions or devices will be displayed in public. Inventions' materials can be considered and used at one's own desire. However, these materials should be durable or non-fragile and safe. Inventions or devices made of dangerous, rotten materials or living organisms will be disqualified.

#### 6.1.2.2 Specification

- (1) Inventions should be *less than* 10 kilograms. The size of inventions should not exceed 1 meter in width, length and height.
- \*Note 1: If invention size is over the specified size, participants are suggested to exhibit using a miniature model to explain purposes and functions of invention.
- (2) If the invention is a computer program, or made of materials which are not durable or will not lead to lasting effect, participants should explain the purposes, creation process and model of inventions through other means other than actual demonstration (i.e. with power point and movie or other aids).
- (3) If the invention requires the use of electricity, the limit of electricity power is up to 1,500 watts / 100 volts per invention. (Please bring an electric transformer and plug
- (4) Participants can use handouts, brochures or Poster (B1 [width 70.7cm\*length 100cm], or smaller than B1) to exhibit and explain their inventions.
- (5) To facilitate/introduce culture exchange among young inventors from different participated countries, postcards or culture related souvenirs are welcomed to be displayed around the booth.

Table 1: Summary of Display Specification

Safe	Materials should be durable. Materials which are poisonous or dangerous or rotten or fragile will not be allowed.
Technology-oriented	No art, living organism and basic scientific research will be allowed.
Newness/Uniqueness	If the invention has patent(s), this can be displayed.
Completeness	Participants must provide clear explanation of the purposes, developing processes and operation about the invention.

#### 7. Judging Criteria

The judging panel will be primarily comprised of delegates from the member institutions/countries. The accumulated scores of each invention from all the judges will form the basis for most of the awards. The invention is judged from multiple aspects by experts in related fields. Each judge will judge each team for a maximum of 3 minutes. Regarding the inventions, Table 2 shows the temporary scoring rubrics. As for the artworks, Table 3 shows the scoring rubrics.

Table 2: Scoring criteria for each invention

Scoring crite	eria for each invention				
	Category / Theme (5%) 1. High: Completely matched with the theme (4-5%) 2. Middle: Mostly matched with the theme (2-3%) 3. Low: Hardly matched with the theme (0-1%)				
	<ul> <li>Innovative Function (25%)</li> <li>1. High: New, not known anywhere in the world prior to filing (21- 25%)</li> <li>2. Middle: Refined and better function (11-20%)</li> <li>3. Low: Mildly progressive (0-10%)</li> </ul>				
	Innovative Material (5%)  1. High: Multiple and transformative (4-5%)  2. Middle: Multiple (2-3%)				
Creativity (35%)	3. Low: Mono-material (0-1%)				
	Total				
	Look (5%)  1. High: Look of Invention (4-5%)  2. Middle: Look of Invention (2-3%)  3. Low: Look of Invention (0-1%)  Detail (10%)  1. High: Detail (8-10%)  2. Middle: Detail (4-7%)  3. Low: Detail (1-3%)				
	Total Appearance				

Appearance (15%)	Operation (person vs. object or object vs. object) (10%)  1. High: Smooth of Operation (7-10%)  2. Middle: Smooth of Operation (4-6%)  3. Low: Smooth of Operation (1-3%)  Stability (10%)  1. High: Stability (7-10%)  2. Middle: Stability (4-6%)  3. Low: Stability (1-3%)  Total Coordination
Market ability& Environ mental Friendly Y (20%)	<ul> <li>Marketability &amp; Environmental Friendly (15%)</li> <li>High: Reusability, marketability (11-15%)</li> <li>Middle: Reusability, marketability (6-10%)</li> <li>Low: Reusability, marketability (1-5%)</li> <li>Patent (5%)</li> <li>Invention Patent has pended (Domestic) (5%)</li> <li>Utility Model Patent has pended (3%)</li> <li>Invention Patent pending (2%)</li> <li>Utility Model Patent pending (1%)</li> <li>N/A (0%)</li> <li>Total Marketability &amp; Environmental Friendly</li> <li>High: Paper/Oral (4-5%)</li> <li>Middle: Paper/Oral (2-3%)</li> <li>Low: Paper/Oral (0-1%) Total</li> </ul>
Presentation (5%)	Presentation  1. High: Integration of invention (7-10%)  2. Middle: Integration of invention (4-6%)  3. Low: Integration of invention (1-3%)
	Total Integration

\*Note 1: The total scores from each judge will be ranked. The final score for each invention will be transformed based on ranking scores rather than on raw scores. Table 3: Scoring criteria for each Artwork

#### 8. Awards

- 8.1 The temporary award scheme: For the Junior Group and Senior Group respectively, 10% of the inventions will receive gold award, 15 % of the invention will receive silver award, 20% of the inventions will receive bronze award.
- 8.2 Special Award: Participating countries can award their selected inventions.
- 8.3 Award recipient: Only contestants who attend IEYI 2018 will receive any medal, special awards or certificate. Inventions/artworks which inventors or authors are not in the booth during the exhibition, it will not be judged.

#### 9. Contact Information

We welcome any feedback from member institutions regarding the competition format or IEYI 2018. Kindly direct all correspondence to the following email address: director@fgsi.co.in