

International Exhibition for Young Inventors (IEYI)

2015 Taiwan International Exhibition for Young Inventors

RULEBOOK

Organizers: New Taipei City Government

Co-Organizers: National Taiwan Normal University

Taiwan Creativity Development Association

Competition Date: 15 November to 20 November, 2015

Chief Executor: Jon-Chao Hong, Executive Secretary of IEYI

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1. About IEYI

International Exhibition for Young Inventors (IEYI) was founded in 1904 by Japan Institute of Invention and Innovation (JIII). The aim of IEYI was to encourage creativity and invention from teenagers. To celebrate the 100th anniversary and to promote invention and innovation around the world, the 1st International Exhibition for Young Inventors (IEYI) was held in Tokyo, Japan in 2004. IEYI has subsequently been hosted by different countries. In addition, the members of International Forum of Invention Promotion (IFIP) agreed that Taiwan would be in charge of the IEYI Secretariat Office, dealing with all affairs of IEYI for 5 years from 2012 to 2017.

As agreed with the IFIP, Taiwan is honored to host the 2015 IEYI (organized by National Taiwan Normal University (NTNU)), and the exhibition will be located at New Taipei City Hall.

The main objectives of IEYI are as follows:

- 1. To encourage innovation and invention and to enhance the concept of originality for the development of invention, innovation and the utility of original idea.
- 2. To strengthen the interchange of cultures to encourage the acculturalization of youth invention.
- 3. To encourage youths' imagination and creativity.

Essentiality of IEYI

It is the intention of educators to provide students with design knowledge and skills needed for their future careers. IEYI is open to elementary, junior high and senior high school level participants internationally; it is designed to trigger scientific thinking and promoting learning of core concepts in science to fuel their understanding of the world around them. In addition, IEYI aims to develop applicable skills such as problem solving, critical thinking, and communication in students. It has become widely recognized that there is need to equip the young generation with the ability to handle problems as well as yield creative and practical solutions to real world obstacles as there is often a disconnect between learning in the classroom and knowledge in application. Students should also feel comfortable with making mistakes and learn from their mistakes, question the information put before them and to inquire about alternative ways of resolving a problem, innovativeness and inventiveness will consequently emanate from the classroom. This atmosphere can only be created if students are able to learn from invention practice. Therefore, we welcome youths from around the world to come to Taiwan to participate in 2015 IEYI, to broaden their international views, and to show the world their creativity and innovation.

2. Important Dates

Dates	Event		
1 August 2015	Start of registration		
15 August 2015	End of registration		
15 November – 20 November	2015 IEYI in Taiwan		
2015	See Appendix A for tentative schedule		

3. Contest Contestants and Divisions

- **3.1 Contest groups**: International Exhibition for Young Inventors is divided into two divisions.
 - **3.1.1** *Junior Group* for students under age of 14.
 - **3.1.2** *Senior Group* for students above age of 14.
- **3.2 Team members:** Each team can have up to 3 contestants. If any incident that would result in the absence of a contestant is to occur, a letter of absence from the corresponding school principle or a supervising educational authority is required. A school may register multiple teams and in different invention categories.

4. Exhibition Information

4.1 Date:

2015 International Exhibition for Young Inventors will be held from <u>15th</u> of November to 20th of November, 2015.

4.2 Location:

The location for 2015 International Exhibition for Young Inventors will be at Auditorium of New Taipei City. Address: 6th floor, Number 161, Section 1, Zhongshan Road, Banquiao District, New Taipei City.

* See **Appendix A** for tentative program schedule.

5. Registration

5.1 The requirements of participation:

- **5.1.1** Contestants must be students between 6 and 19 years old (i.e. students from elementary schools, junior high schools, senior high schools or vocational high schools).
- **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.
- 5.1.3 Each country may send representative attendees to participate in Traditional Children's Toys & Folkgame Fair on 18th of November, 2015 to enhance the international cultural exchange among the participants. Each participating country will have at least one stand for the fair. Each country participating in the Traditional Children's Toys & Folkgame Fair will be entitled to receive a subsidy of around USD\$100. If you wish to participate, please visit our official website http://en.ieyiun.org/ for more information regarding the registration of Traditional Children's Toys & Folkgame Fair.
- 5.2 **Date of registration:** The registration period is from 1st of August, 2015 to 15th of August, 2015.

5.3 Documentation:

5.3.1 Application Form: Teams that wish to participate in the exhibition have to complete the online application form through the official website http://en.ieyiun.org/. For an example of the application form, please refer to **Appendix C and Appendix D**). 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: Each country can submit up to 15 inventions.
- **5.3.3 Document Submission Deadline:** Please upload all the required documents of the team to our official website http://en.ieyiun.org/ before 15th of August, 2015, Taiwan time (GST+8).
- **5.4 Registration Fee:** There is no registration fee for IEYI.

6. Invention Criteria

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.

6.1 Invention Categories

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

(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).

6.2 Invention specifications

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

6.2.1 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.

6.2.2 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 VCR or other aids).
- (3) If the invention requires the use of electricity, the limit of electricity power is up to <u>450 watts / 110 volts</u> per invention.
- (4) Participants can use handouts (A4 size, two-sided) or brochures 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

	Materials should be durable. Materials		
Safe	which are dangerous, rotten or fragile will		
	not be allowed.		
Tashnalagy anianted	No art and basic scientific research will be		
Technology-oriented	allowed.		
NI /TI	If the invention has patent(s), this can be		
Newness/Uniqueness	displayed.		
	Participants must provide clear explanation		
Completeness	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. Table 2 shows the temporary scoring rubrics.

Table 2: Scoring criteria for each invention

Scoring criteria for each invention						
	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%)					
	Innovative Function (25%)					
	1. High: New, not known anywhere in the world prior to filing (21-					
Creativity (35%)	25%)					
Cleativity (33 76)	2. Middle: Refined and better function (11-20%)					
	3. Low: Mildly progressive (0-10%)					
	Innovative Material (5%)					
	1. High: Multiple and transformative (4-5%)					
	2. Middle: Multiple (2-3%)					
	3. Low: Mono-material (0-1%)					
	Total					

	Scoring criteria for each invention
	Look (5%)
	1. High: Look of Invention (4-5%)
	2. Middle: Look of Invention (2-3%)
Appearance (15%)	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
	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%)
Operability (20%)	Stability (10%)
	1. High: Stability (7-10%)
	2. Middle: Stability (4-6%)
	3. Low: Stability (1-3%)
	Total Coordination
	Marketability & Environmental Friendly (15%)
	1. High: Reusability, marketability (11-15%)
	2. Middle: Reusability, marketability (6-10%)
	3. Low: Reusability, marketability (1-5%)
Marketability&	Patent (5%)
Environmental	1. Invention Patent has pended (Domestic) (5%)
Friendly (20%)	2. Utility Model Patent has pended (3%)
	3. Invention Patent pending (2%)
	4. Utility Model Patent pending (1%)
	5. N/A (0%)
	Total Marketability & Environmental Friendly
	1. High: Paper/Oral (4-5%)
D	2. Middle: Paper/Oral (2-3%)
Presentation (5%)	3. Low: Paper/Oral (0-1%)
	Total Presentation

Scoring criteria for each invention						
	1. High: Integration of invention (4-5%)					
O 11 (70/)	2. Middle: Integration of invention (2-3%)					
Overall (5%)	3. Low: Integration of invention (0-1%)					
	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.

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 inventions will receive silver award, 20% of the inventions will receive bronze award, and 35% of the inventions will receive special award.
- **8.2 Award recipient:** Only contestants who attend IEYI 2015 in Taiwan will receive any medal, special awards or certificate.

9. Contact information

We welcome any feedback from member institutions regarding the competition format or IEYI 2015. Kindly direct all correspondence to the following email address: ieyitw@gmail.com. Your valuable feedback is much appreciated.

APPENDIX A: Tentative Program of IEYI 2015

	11/15 (Sun)	11/16 (Mon)	11/17 (Tues)	11/18 (Wed)	11/19 (Thur)	11/20 (Fri)
	Arrival	Day 1	Day 2	Day 3	Day 4	Day 5
09:00 10:00 11:00	Teams arrive in Taiwan	Opening ceremony (Multi-Purpose Auditorium) (9:00-10:00) Exhibition & judging (Auditorium) (10:05-12:00)	Exhibition & judging (Auditorium) (9:00-17:00)	Exhibition (Auditorium) & Traditional Children's Toys & Folkgame Fair (Lobby 1st Floor) (9:00- 14:00)	Cultural trip (Optional)	Cultural trip (Optional)
12:00		Lunch (12:00-13:30)	Lunch (12:00-13:30)			
13:30		Exhibition & judging	Exhibition & judging			
14:00	Team registration & booth	(Auditorium) (13:30-17:00)	(Auditorium) (9:00-17:00)	Place restoration & free time		
15:00	installation (Auditorium)			(14:00-17:00)		
16:00	(14:00-17:00) Delegation leaders meeting (Round Table Conference Room 403) (14:00-17:00)					
17:00	Free time	Welcome	Judges meeting &			
18:00		Dinner (New Taipei Municipal Zhong Xiao	Dinner (Round Table Conference Room 403)	Farewell Dinner (Auditorium) (17:00- 18:30) Award ceremony &		
~		Junior High School) (17:00-20:00)	(17:00- 19:00)	cultural night (Auditorium) (18:30- 21:00)		

- * **Note 1:** Open ceremony: To welcome country representatives to Taiwan with traditional performances.
 - Closing Ceremony (cultural night): Award ceremony for the excellent inventions and culture exchange. Each country can wear their own traditional costume for a short traditional dance/performance to celebrate their culture.
- * Note 2: After the judging is completed, the organizer will invite students from New Taipei City and nearby cities to visit the exhibition and participate in cultural exchange.

APPENDIX B: IFIP CONTACT LIST

NO	COUNTRY	ORGANISATION	NAME	
1	Argentina	The Ministry of Science, Technology and Innovation (Ministerio de Ciencia, Tecnología e Innovación Productiva-MINCYT)	Dr. Lino Barañao	
2	Australia	CSIRO	Dr Larry Marshall	
3	Austria	Corporate Communications (Innovations Agency)	Mr. Matthias Bischof	
4	Brazil	Centro Federal de Educacao Tecnologica Celso Suckow da Fonseca (CEFET/RJ)	Prof. Carlos Henrique Figueiredo Alves	
5	Chile	Chilean National Commission for Scientific and Technological Research (CONICYT)	Francisco Brieva Rodríguez	
6	Cuba	The Cuban Industrial Property Office	Francis Gurry	
7	Denmark	The Danish Agency for Science, Technology and Innovation (DASTI)	Kåre Nordahl Larsen	
8	Egypt	Academy of Scientific Research & Technology President Office	Dr. Peter McGrath	
9	England	Young Engineers	Rod Edwards	
10	France	Federation Nationale des Associations Françaises d'Inventeurs	Bernard GUTFRIND	
11	Germany	Stiftung Jugend Forscht e.V	Dr. Sven Baszio	
12	Greece	Hellenic Industrial Property Organization	Polyzogopoulos Konstantinos	
13	Hungary	Hungarian Association for Innovation	Dr. János PAKUCS (Honorary President) Dr. Gábor SZABÓ (President)	
14	India	Foundation for Glocal Science Initiatives	Dr. Anuj Sinha (Director)	
15	Indonesia Institute of Science		Ms. Nur Tri Aries Suestiningtyas	

NO	COUNTRY	ORGANISATION	NAME
16	Italy	Italian Institute of Technology	Gabriele Galateri di
10		italiali histitute of Technology	Genola
17	Malaysia	Malaysian Invention and Design	NADIRA BINTI
1 /	Maiaysia	Society (MINDS)	ISMAIL
18	Mexico	National Polytechnic Institute	Yoloxóchitl
10	MEXICO	Ivational I orytechnic institute	Bustamante Díez
19	Mongolia	Mongolian Association for Technology and	Jargalsaikhan,
1)	Mongona	Innovation of Young Researchers	Khishigsaikhan
20	Morocco	Scientific Institute of RABAT	Dr. Faiq Billal
21	New	New Zealand Technology Industry	Frances Valintine
21	Zealand	Association	Frances vannune
22	Nigeria	The Nigeria Association of inventors (NAI)	Prince J. S. Momodu
22	Norway	National Youth Science Foundation	Andrew N. Blackwood
23		Ivational Touth Science Foundation	(Executive Director)
24	Philippines	Department of Science and Technology	Usec. CAROL M.
Z 4		Department of Science and Technology	YOROBE
	Poland	Association of Polish Inventors and	AGNIESZKA
25		Rationalizers (The Polish Union of	MIKOLAJSKA (DIRECTOR OF THE
		Associations of Inventors and Innovators)	OFFICE SPWIR)
	Russia	Department of Science, Industrial Policy	Mr. Oleg Bocharov
26		and Entrepreneurship of Moscow	(Head)
		(abbreviated DSIPE of Moscow)	Lim Chuan Poh
27	Singapore	Agency for Science, Technology and Research	(chairman)
		The Secretary of State of Research,	M.Luisa Poncela
28	Spain	Development and Innovation (SEIDI)	Garcia
		bevelopment and innovation (SEIST)	Mr.Deepal
29	Sri Lanka	Sri Lanka Inventors Commission	Sooriyaarachchi
	DII Lanka	Sir Lunka inventors Commission	(commissioner)
30	Sweden	The Swedish Inventors' Association	Ingrid Hernvall
		National Taiwan Normal University	<i>G</i>
31	Taiwan	Taiwan Creativity Development	Mr. Jon-Chao Hong
		Association (TCDA)	

NO	COUNTRY	ORGANISATION	NAME
32	Thailand	Thai Invention Association	Darakorn Phensiri
33	China	International Teenager Competition and Communication Center (ITCCC)	Dr. Yong Mao
34	The Republic of Korea	Korean Invention Promotion Association	Kim Gwang-lim
35	Turkey	Scientific and Technological Research Council of Turkey	Prof. Altunbaşak
36	USA	International Association of Organizational Innovation	Dr. Frederick Dembowski
37	Vietnam	Vietnam Union of Science and Technology Associations (VUSTA)	Dr. Hồ Uy Liêm
38	Japan	Japan Institute of Invention and Innovation	Shoichiro Toyoda
39	Hong Kong	Hong Kong Invention Association Ltd.	Mr. Cheung King Fung

APPENDIX C:REGISTRATION FORM

* Please complete one invention per form.

				;	Submission Number	·
					Invention Category	
Name of			(Country		-
Organization						
Name of			1			
Invention						
Name of	(As stated i	n passport)				
Inventor	Family N	ame:	First 1	Name:		
	(In case of m	ultiple inventors, please	give additional names be	elow.)		
Sex (Please	Male	Age	Name of	f	Year in	
circle one)	e) Female		School		School	1
		Date of				
		Birth				
		(Year/Month/Date)				
Name of	(As stated i	n passport)	<u> </u>	•		
Inventor	Family N	Name:		First Naı	me:	
Sex (Please	Male	Age	Name		Year in	
circle one)	Female		of		School	
encie one)	Temate	Date of	School		School	
		Birth	School			
		(Year/Month/Date)				
Name of	(As stated i	n passport)				
Inventor	Family N	Vame:		First Naı	me:	
			<u> </u>			
Sex (Please	Male	Age	Name		Year in	
circle one)	Female	Date of	of		School	
		Birth	School			
		(Year/Month/Date)				

How many advisors/parents will come to the IEYI event? Advisors Parents								
Name of	(As stated in	(As stated in passport)						
Advisor	Family N	lame:		I	First Name:			
Sex (Please	Male	Tel &		Fax		Email		
circle one)	Female Mobile							
Address								
Name of	(As stated in	n passport)						
Advisor	Family N	lame:		I	First Name:			
Sex (Please	Male	Tel &		Fax		Email		
circle one)	Female	Mobile						
Address								

☐ I confirm the above submission details are true and correct. All information will be processed as per the entry form submitted and the information will not be able to be changed after the registration period.

APPENDIX D:INVENTION INFORMATION FORM

	Submission Number									
			Invention Category							
Name of					Countr	У				
Invention										
Name of										
School										
Size of the	Length			Width	Dep		epth		Weight	
Invention										
Photograph of	I	nven	tor 1		Inventor 2		Inventor 3		-	
Inventors										
(Passport Style		P	lace Photo		Place P	hoto	5		Place Photo	
Photo3×3cm)			here		here				here	
	Name		: :		Name:			Name:		
1. Please briefly 6	explain th	he sub	omission piece	e.						
(Your explanation will be included in our exhibition catalog. Please do not exceed 200-300 words in English.)										
2. Outstanding characteristics of the invention or device (what sets it apart from previous creations).										
2. Outstanding characteristics of the invention of device (what sets it apart from previous creations).										

3. Operation and effects of the invention or device.									
4. Other points or aspects that should be considered.									
5. Information on patents or other									
industrial property rights of this									
submission (if any). Please provide									
information in English.									
Photograph of the exhibition piece									
(Please show the internal structure of the work by illustration, if necessary.)									
Place Photo here									