



2021 IEYI

International Exhibition for Young Inventors

## RULEBOOK

**Organizers:** Executive Secretariat of International Exhibition for Young Inventors

**Important Dates:**

- **Online Registration:** June 1 ~ August 31, 2021
- **Application Forms & Video Submission:** August 31, 2021 at the latest

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## 1. About IEYI

International Exhibition for Young Inventors dates back to 2004. It was first held by the Japanese Institute of Inventions and Innovations (JIII) in Tokyo. As many years pass by, 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.

IEYI's main goal is to encourage creativity and ingenuity among teenagers from all over the world. It gives participants a unique opportunity to present their inventions and share experiences with other participants from different countries. The exhibition is designed to provide a decent level of competition between young talents, in order to help them to apply their knowledge in real world and share creative idea to their peers, as well as to develop cooperation attitude toward innovations between countries.

**Originally, 2021 IEYI is supposed to be held by Russia in Kazan; however, due to the current outbreak of COVID-19 pandemic, 2021 IEYI will be held virtually by Executive Secretariat of International Exhibition for Young Inventors as agreed with all IEYI board members.**

## Essentiality of IEYI

**The main objectives of IEYI are as follows:**

- To provide students with design knowledge and skills needed for their future career.
- To fuel students' understanding of the world around them by triggering scientific thinking and promoting learning of core concepts in science, technology, engineering, arts and math (STEAM).
- To develop students' core competences such as problem-solving, critical thinking, and communication skills..
- To create an atmosphere of freedom of thought for the development of young inventors in the creative environment.
- To strengthen the interchange of innovative cultures and to encourage the acculturation of youth invention.

## 2. Important Dates

Dates	Events
June 1 ~ <b>August 31</b> , 2021	Online Registration
※ Teams should complete the registration, including submitting application forms to IEYI website: <a href="http://www.ieyiun.org">www.ieyiun.org</a>	
<b>Aug.31</b> , 2021 at the latest	Registration Forms Submitting & Video Uploading Deadline
※ Video should be uploaded to an open platform at first, attach video link in the “invention information form” and upload the form to IEYI website: <a href="http://www.ieyiun.org">www.ieyiun.org</a>	
<b>Sep.1 ~ Sep.15</b> , 2021	Registration Forms Review
※ Teams will only receive a letter from IEYI office when the submitted document needs to be modified. ※ List for teams that completed the registration will be announced after Sep.20 at once on the IEYI website: <a href="http://www.ieyiun.org">www.ieyiun.org</a>	
<b>Sep.20</b> , 2021 at the latest	Modification & Deadline of Resubmission
※ Once the submitted forms are uncompleted or need modification, teams will receive a notification letter. Please modify the forms according to the instruction in the letter.	
<b>Oct.1 ~ Oct.27</b> , 2021	Judges Evaluation & Discussion
<b>Nov.1</b> , 2021	Final Results Announcement

※ Taiwan time (GMT+8).

## 3. Contestants

- 3.1 Contest groups:** International Exhibition for Young Inventors is divided into two divisions.
- 3.1.1 *Junior Group*** for students from 6 to 13 years old.
- 3.1.2 *Senior Group*** for students from 14 to 19 years old.
- 3.2 Team members:**
- 3.2.1** Each team can have up to 3 contestants, 3 advisors. (The **third** advisor is optional and only allowed as an English instructor.)
- 3.2.2** Art Technology Category: there can only be 1 contestant, 2 advisors in

each team. (The **second** advisor is optional and only allowed as an English instructor.)

- 33 **Team registration limits:** Each country is allowed to register multiple teams in different invention categories.
- 34 **Inventions limits:** Each contestant is only allowed to participate with one invention or artwork.

## 4. Video Submission

### 4.1 Video Uploading Issues:

4.1.1 Please upload your invention video to an online platform (e.g. YouTube, Google Drive etc..).

4.1.2 Private settings of the video must be set as “public” in order for judges to evaluate during the evaluation period. After the evaluation period, teams can decide whether to open the link to public or not (see appendix A and A-1).

### 4.2 Video format:

4.2.1 **Title:** “Invention Number (given through system when registering online) & Invention Title” (e.g. ERJR001 Smart wallet).

4.2.2 **Length: Within 1~2 minutes.** (Opening and ending of the film should be included).

4.2.3 **Content:** Students should elaborate three main subjects: Creativity, Operability, and Marketability & Benefits in the video.

4.2.4 **Specification:** The video can be shot by any kinds of electronic devices.

#### 4.2.5 Others:

- English caption (i.e. subtitle) is suggested.
- High resolution is suggested.
- Special effects and background music that used in the video will **not** be graded.
- “Invention Number & Invention Name” is recommended to be put on the upper right or left corner of the video in case judges forget.
- Please make sure the sound of each student is clear and loud enough without external interference.
- Please make sure the link provided is accessible. (e.g. if you upload the video to YouTube, make sure you set the private setting to “public”).

## 5. Registration

### 5.1 Requirements of participation:

- 5.1.1 Contestants must be students between 6 to 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.**

5.2 **Date of registration:** Online registration period: from June 1 to August 31, 2021

5.3 **Online registration link:** [www.ieyiun.org](http://www.ieyiun.org)

### 5.4 Steps to register:

- 5.4.1 Please read IEYI Rulebook thoroughly.
- 5.4.2 Please follow the instructions in the registration guideline (URL: <https://pse.is/3hnr2r>) to register online.  
**※Please pick one member in the team as the representative to register.**
- 5.4.3 All the registration information must be filled in in English.
- 5.4.4 **Documentation:** Fill out required documents including registration form, invention introduction form and payment form (Forms can be downloaded through website, see registration guideline “Step.18”. Or use Appendix A, B & C attached at the end of rulebook.), and upload all completed documents when registering.  
**※ Please reconfirm all the information is correct before submitting.**
- 5.4.5 **Registration Deadline:** Please complete all the procedures according to registration guideline before **August 31**, 2021 Taiwan time (GMT+8).

5.5 **Registration fee:** 80 USD per invention.

- 5.6.1 **Payment:** Please remit the registration fee to the following account.  
Beneficiary Bank: E.SUN COMMERCIAL BANK, LTD., Taipei, Taiwan  
Branch: Heping Branch  
Account Name: Taiwan Creativity Development Association  
SWIFT CODE: ESUNTWTP  
Bank Account Number: 0107-441-346429

**Any transaction fees involved in the transfer must be covered by the transferees. (i.e. who issues the transfer).**

After the payment, please paste the receipt or remittance on the PAYMENT FORM (please

see Appendix C).

Please pay the fee before **August 31, 2021 Taiwan time (GMT+8)**. Any entry that does not pay on time will be disqualified.

## 6. Invention Criteria

Inventions must adhere to all exhibition specifications. The inventions must be safe and do not belong to the field of basic scientific research or pure art creations (i.e. there is also a category for Artwork to be registered). General criteria are listed below:

- (1) Pure art creations such as poetry, songs, short stories, 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 ten categories:**

### **(1) Disaster Management**

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

### **(2) Education**

Inventions that show usefulness in classrooms or elsewhere for educative purposes.

### **(3) Recreation**

Invention that improves activities involve in recreational purposes (e.g. sports, entertainment, etc.)

### **(4) 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.*

### **(5) Green Technology & Sustainability**

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

### **(6) Safety & Health**

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

### **(7) Technology for Special Needs**

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

### **(8) Technology for Elderly People**

Inventions that contribute to the convenience of the special needs of elderly people.

### **(9) Industrial Design & Convenience Devices for Daily Life**

Inventions that are useful and improve the convenience of the daily life routine (e.g. cleaning tools, kitchen tools, etc.).

## **6.2 Artwork**

Artwork that could be painted based on imagination in science and technology aspects of the world.



## 6.3 Invention specifications

### 6.2.1 Material

Inventions or devices will be displayed in public. Materials of the invention can be considered and used at one's own desire. Hence, the 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.
- (2) If the invention is a computer program, made of materials which are not durable or does not possess lasting effect, participants should explain the purposes, creation process and model of inventions through means other than actual demonstration (i.e. with Power point and VCR or other media aids).
- (3) Participants can use handouts (A4 size, two-sided) or brochures to exhibit and explain their inventions in the video.(i.e. this regulation is not applicable to 2021 IEYI World Virtual Contest)

## 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. Table 1 below shows the temporary scoring rubrics.

**Table 1: Scoring criteria for each invention**

Scoring Criteria	
Creativity (40%)	<b><i>Innovative Function (13%)</i></b>
	1. High: Newly innovative functions (more prospective than current existing products) (10-13%)
	2. Middle: Refined and better function (6-9%)
	3. Low: Mildly progressive (similar to current existing products) (1-5%)
	<b><i>Innovative Machining (12%)</i></b>
	1. High: High-quality machining process (9-12%)
	2. Middle: Improve some parts of the machining process (5-8%)
	3. Low: Mildly progressive (similar to current existing products or process) (1-4%)
	<b><i>Application of Scientific Nature (13%)</i></b>
	1. High: Various application of scientific nature with high innovation (10-13%)
	2. Middle: Several applications of scientific nature with less innovation (6-9%)
	3. Low: Few application of scientific nature with no innovation (1-5%)
	<b><i>Patentability (2%)</i></b>
	1. High: Invention patents <b>has pended</b> (National or International) (2%)
	2. Middle: Utility patents <b>has pended</b> (National or International) (1%)
	3. Low: No patent (0%)
	<b>※ Patent certificate should show the name of participants.</b>
	<b>Total Creativity _____</b>

<b>Marketability &amp; Benefits (30%)</b>	<b><i>Environmental Friendly (10%)</i></b>
	1. High: Recyclable and eco-friendly with less pollution. Meets 4R environmental concepts (7-10%)
	2. Middle: Partially recyclable and eco-friendly with a certain amount of pollution. Meets 4R environmental concepts (4-6%)
	3. Low: Non-recyclable and not eco-friendly with serious pollution. Fail to meet 4R environmental concepts (1-3%)
	<b><i>Market Demand (5%)</i></b>
	1. High: Completely meets market demands (4-5%)
	2. Middle: Partially meets market demands (2-3%)
	3. Low: Fail to meet market demands (1%)
	<b><i>Social Contribution (5%)</i></b>
	1. High: High social contribution (4-5%)
	2. Middle: A certain level of social contribution (2-3%)
	3. Low: Low social contribution, even cause damage to the society (1%)
	<b><i>Appearance (5%) (shapes, colors, and sizes)</i></b>
	1. High: Appearance meets the usage situation (4-5%)
	2. Middle: Special appearance but lack of innovation. (2-3%)
	3. Low: Appearance fail to fit the invention (1%)
	<b><i>Exquisiteness (5%)</i></b>
	1. High: High process of the appearance and dimensional accuracy (4-5%)
	2. Middle: Process of the appearance that fits normal end product (2-3%)
	3. Low: Poor process of the appearance (1%)
	<b>Total Marketability &amp; Benefits _____</b>
<b>Operability (30%)</b>	<b><i>Operation (10%)</i></b>
	1. High: Operational procedure is quick, easy, and labor-saving (7-10%)
	2. Middle: Operational procedure can be known after learning or training (4-6%)
	3. Low: Operational procedure is complex, time-consuming, and laborious (1-3%)
	<b><i>Constitutive Property (10%)</i></b>
	1. High: High stability. Inventions can be used repeatedly. (7-10%)
	2. Middle: Middle stability. Inventions can be used for a while. (4-6%)
	3. Low: Low stability. Inventions can only be used for few times. (1-3%)
	<b><i>Overall Collocation (10%)</i></b>
	1. High: High collocation of elements and design of the invention (7-10%)
	2. Middle: Middle collocation of elements and design of the invention (4-6%)
	3. Low: Low collocation of elements and design of the invention (1-3%)
	<b>Total Operability _____</b>

\* **Note:** The total score from each judge will be ranked. The judge panel will finalize the final score for each invention based on ranking scores rather than on raw scores.

## 8. Awards

**The award allocation:** For the Junior Group and Senior Group respectively, 12±2% of the inventions/artworks will receive golden awards, 25% of the inventions/artworks will receive silver awards, 30% of the inventions/artworks will receive bronze awards, and the rest of the inventions/artworks will receive special awards.

### **Merging awards:**

(1) **Merging groups vertically:** Considering the fairness in getting medals, for categories that have less than 8 inventions/artworks, junior group and senior group will be merged to more than 8 inventions/artworks for the evaluation and the award allocation.

(2) **Merging categories horizontally:** If it is still less than 8 inventions/artworks, merge different categories to form a new group. However, in this case, the medalist will be decided by age group (junior/senior group).

## 9. Contact Information

We welcome any feedback from member institutions regarding the virtual competition format or IEYI 2021. Kindly direct all correspondence or questions to the following email address: [ieyitw@gmail.com](mailto:ieyitw@gmail.com). Your valuable feedback is much appreciated.

## **APPENDIX A: Registration Form (Invention)**

\* Please complete one form per invention.

\*Invention Number will be given through system when registering.

\*Categories can be found at page 8, choose your category according to the description.

<b>Invention Number</b>			
<b>Invention Category</b>			
Country			
Name of Invention			
<b>Inventor's Information</b>			
Name of Inventor (Inventor 1)	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 0 auto;">             PLACE PHOTO HERE           </div>	( As stated in passport )  First Name:   Family Name:	
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Name of School	
Age			
Date of Birth (Year/Month/Date)		Year in School	
Name of Inventor (Inventor 2)	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 0 auto;">             PLACE PHOTO HERE           </div>	( As stated in passport )  First Name:   Family Name:	
Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female	Name of School	
Age			

Date of Birth (Year/Month/Date)		Year in School		
Name of Inventor (Inventor 3)	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 10px; text-align: center; width: 150px;">           PLACE PHOTO HERE         </div> <div style="text-align: right;">           ( As stated in passport )            First Name:             Family Name:         </div> </div>			
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Name of School		
Age				
Date of Birth (Year/Month/Date)		Year in School		
<b>Advisor's Information</b>				
Name of Advisor (Advisor 1)	( As stated in passport ) First Name:                      Family Name:			
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Fax		
Tel & Mobile		Email		
Job Title and School Name				
Name of Advisor (Advisor 2)	( As stated in passport ) First Name:                      Family Name:			
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Fax		
Tel & Mobile		Email		
Job Title and School Name				
The third advisor can only be added in the case that 3 contestants in a team coming from <u>three different schools</u> or there are <u>both junior and senior contestants</u> in a team.				

Name of Advisor (Advisor 3)	( As stated in passport ) First Name: Family Name:		
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Fax	
Tel & Mobile		Email	
Job Title and School Name			
The fourth advisor is optional, but he or she must be an English teacher, who helps students with their English oral presentation skills.			
Name of Advisor (Advisor 4)	( As stated in passport ) First Name: Family Name:		
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Fax	
Tel & Mobile		Email	
Job Title and School Name			

- ☐ 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.
- ☐ (Optional) I confirm that after final result announcement (November 1, 2021), the video of this invention could be open to public.

## **APPENDIX A-1: Registration Form (Artwork)**

\* Please complete one form per artwork.

\*Invention Number will be given through system when registering.

\*Categories can be found at page 8, choose your category according to the description.

<b>Invention Number</b>			
<b>Invention Category</b>		<b>Artwork</b>	
Country			
Name of Painting			
<b>Inventor's Information</b>			
Name of Inventor (Inventor 1)	<div style="display: flex; align-items: center; justify-content: space-between;"> <div style="border: 1px solid black; width: 150px; height: 100px; text-align: center; line-height: 100px;">PLACE PHOTO HERE</div> <div style="text-align: right;"> <p>( As stated in passport )</p> <p>First Name:</p> <p>Family Name:</p> </div> </div>		
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Name of School	
Age			
Date of Birth (Year/Month/Date)		Year in School	
<b>Advisor's Information</b>			
Name of Advisor (Advisor 1)	<div style="display: flex; align-items: center; justify-content: space-between;"> <div style="text-align: right;"> <p>( As stated in passport )</p> <p>First Name:</p> </div> <div style="text-align: right;"> <p>Family Name:</p> </div> </div>		
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Fax	
Tel & Mobile		Email	
Job Title and School Name			



Name of Advisor (Advisor 2)	( As stated in passport ) First Name:                      Family Name:		
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Fax	
Tel & Mobile		Email	
Job Title and School Name			
The third advisor is optional, but he or she must be an English teacher who helps students with their English oral presentation skills.			
Name of Advisor (Advisor 3)	( As stated in passport ) First Name:                      Family Name:		
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female	Fax	
Tel & Mobile		Email	
Job Title and School Name			

- ☐ 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.
- ☐ (Optional) I confirm that after final result announcement (November 1, 2021), the video of this invention could be open to public.

## **APPENDIX B: Invention Introduction Form (Invention)**

\*Invention Number will be given through system when registering.  
\*Categories can be found at page 8, choose your category according to the description.

					<b>Invention Number</b>			
					Invention Category			
Name of Invention					Country			
Name of School								
Size of the Invention	Length		Width		Height		Weight	
<b>Link of the video</b>								
<p>1. Please briefly explain the submission piece. (Please do not exceed 200-300 words in English.)</p>								
<p>2. Outstanding characteristics of the invention or device (what idea it apart from previous creations).</p>								
<p>3. Operation steps and effects of the invention or device.</p>								

4. Other points or aspects that should be considered.

5. Information on patents or other industrial property rights of this invention (if any). Please provide Information in English and patent-related document (e.g. pictures).

Photograph of the exhibition piece

(Please show the internal structure of the work by illustration, if necessary.)

PLACE PHOTO HERE



Photograph of the exhibition piece

PLACE PHOTO HERE

## APPENDIX C: Payment Form

\*One country fills in one form.

Country

NO.	School Names	Invention Number	Invention Name
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

**80 USD per invention/artwork**

Total: \_\_\_\_\_ invention/artwork(s), \_\_\_\_\_ USD

### Account Information:

Beneficiary Bank: E.SUN COMMERCIAL BANK, LTD., Taipei, Taiwan

Branch: Heping Branch

Account Name: Taiwan Creativity Development Association

SWIFT CODE: ESUNTWTP

Bank Account Number: 0107-441-346429

**Any transaction fees involved in the transfer must be covered by the transferees.**

Please pay before the last day of registration, **August 31, 2021**. Any entries that do not pay on time will be disqualified. ✖ **Please paste the payment receipt on the next page.**

## **Payment Receipt**