

Project Code:

# SINGAPORE SCIENCE & ENGINEERING FAIR 2022

## (MAIN CATEGORY)

### ENTRY FORM

Please refer to the SSEF 2022 website (<http://www.science.edu.sg/ssef>) for details on the application process and all the submission requirements.

All project documents must be received **Friday, 21 January 2022, 17:00hrs.**

PROJECT INFORMATION		
Type of Participation: <input type="checkbox"/> Individual <input type="checkbox"/> Team	Project Category*:	Project Sub-Category*:
Title of Research Project:		

\* Please refer to Annex A for the list of categories and sub-categories. Selecting the appropriate category and sub-category is important to ensure that the assigned judges are familiar with your research topic.

DECLARATION BY PARTICIPANT(S) <sup>§</sup>		
I / We hereby certify that all the information provided to SSEF organisers is correct. I / We did not plagiarise material, forge or fabricate data, use or present other researcher's work as our own in my / our research project. I / We consent to the use of the information / project I / we submit to the organisers for publicity purpose. I / We understand that all the materials I / we submit will not be returned to me / us.		
<b>Individual / Team Leader (i.e. team member 1)</b>		
Full name:		School Level (e.g. Sec 3, IP4)
Signature:	School:	Date: (MM/DD/YY)
<b>For Team Projects:</b>		
<b>Team Member 2</b>		
Full name:		School Level (e.g. Sec 3, IP4)
Signature:	School:	Date: (MM/DD/YY)
<b>Team Member 3</b>		
Full name:		School Level (e.g. Sec 3, IP4)
Signature:	School:	Date: (MM/DD/YY)

<sup>§</sup> Note that participant(s) of SSEF may be contacted through e-mail for future STEM-related activities or surveys.

**SCHOOL'S ENDORSEMENT**For individual project / team projects with members from the same school

Teacher-in-charge's full name:	Teacher-in-charge's email address:
Teacher-in-charge's signature:	Date: (MM/DD/YY)

**SCHOOL'S ENDORSEMENT**For team projects with members from different schools

<b>For team member 1</b>	
Teacher-in-charge's full name:	Teacher-in-charge's email address:
Teacher-in-charge's signature:	Date: (MM/DD/YY)
<b>For team member 2</b>	
Teacher-in-charge's full name:	Teacher-in-charge's email address:
Teacher-in-charge's signature:	Date: (MM/DD/YY)
<b>For team member 3</b>	
Teacher-in-charge's full name:	Teacher-in-charge's email address:
Teacher-in-charge's signature:	Date: (MM/DD/YY)

## SSEF MAIN CATEGORY 2022

### PARENT/GUARDIAN CONSENT FORM (INDIVIDUAL/TEAM MEMBER 1) FOR SSEF 2022

In participating in SSEF 2022, the following may be shared on MOE and SSEF's social media platforms (Website, Facebook and Instagram pages) which are accessible to the general public:

1. Images and videos of my child/ward\* participating in SSEF 2022 and ISEF 2022, if applicable;
2. Materials my child/ward\* used during participation in SSEF 2022 and ISEF 2022, if applicable;
3. My child/ward\*'s learning experience at SSEF 2022 and ISEF 2022, if applicable.

**If you agree to your child / ward participating in the SSEF 2022, please fill in the blanks and sign below.**

I, \_\_\_\_\_ (name of parent / guardian), acknowledge that I have read and understood the information above.

I hereby give permission for any image or video of my child / ward, \_\_\_\_\_, (name of child / ward) captured during SSEF 2022 and ISEF 2022, if applicable, to be used for the activities listed above.

I declare that I have the authority to sign this release and that I have read and understood this agreement prior to signing it.

PARENT'S/GUARDIAN'S SIGNATURE:

Date:

**SSEF MAIN CATEGORY 2022**

**PARENT/GUARDIAN CONSENT FORM (TEAM MEMBER 2) FOR SSEF 2022**

In participating in SSEF 2022, the following may be shared on MOE and SSEF’s social media platforms (Website, Facebook and Instagram pages) which are accessible to the general public:

- 1. Images and videos of my child/ward\* participating in SSEF 2022 and ISEF 2022, if applicable;
- 2. Materials my child/ward\* used during participation in SSEF 2022 and ISEF 2022, if applicable;
- 3. My child/ward\*’s learning experience at SSEF 2022 and ISEF 2022, if applicable.

**If you agree to your child / ward participating in the SSEF 2022, please fill in the blanks and sign below.**

I, \_\_\_\_\_ (name of parent / guardian), acknowledge that I have read and understood the information above.

I hereby give permission for any image or video of my child / ward, \_\_\_\_\_, (name of child / ward) captured during SSEF 2022 and ISEF 2022, if applicable, to be used for the activities listed above.

I declare that I have the authority to sign this release and that I have read and understood this agreement prior to signing it.

PARENT’S/GUARDIAN’S SIGNATURE:

Date:

**SSEF MAIN CATEGORY 2022**

**PARENT/GUARDIAN CONSENT FORM (TEAM MEMBER 3) FOR SSEF 2022**

In participating in SSEF 2022, the following may be shared on MOE and SSEF’s social media platforms (Website, Facebook and Instagram pages) which are accessible to the general public:

1. Images and videos of my child/ward\* participating in SSEF 2022 and ISEF 2022, if applicable;
2. Materials my child/ward\* used during participation in SSEF 2022 and ISEF 2022, if applicable;
3. My child/ward\*’s learning experience at SSEF 2022 and ISEF 2022, if applicable.

**If you agree to your child / ward participating in the SSEF 2022, please fill in the blanks and sign below.**

I, \_\_\_\_\_ (name of parent / guardian), acknowledge that I have read and understood the information above.

I hereby give permission for any image or video of my child / ward, \_\_\_\_\_, (name of child / ward) captured during SSEF 2022 and ISEF 2022, if applicable, to be used for the activities listed above.

I declare that I have the authority to sign this release and that I have read and understood this agreement prior to signing it.

PARENT’S/GUARDIAN’S SIGNATURE:

Date:

## ANNEX A – SSEF 2022 CATEGORIES (STATED IN BOLD AND CAPTIALISED) AND THE CORRESPONDING SUB-CATEGORIES

Please visit the website at <https://www.societyforscience.org/isef/categories-and-subcategories/all-categories/> for a full description and definition of the categories and sub-categories.

### **ANIMAL SCIENCES (AS)**

- Animal Behavior
- Cellular Studies
- Development
- Ecology
- Genetics
- Nutrition and Growth
- Physiology
- Systematics and Evolution

### **BEHAVIORAL AND SOCIAL SCIENCES (BH)**

- Clinical and Developmental Psychology
- Cognitive Psychology
- Neuroscience
- Physiological Psychology
- Sociology and Social Psychology

### **BIOCHEMISTRY (BI)**

- Analytical Biochemistry
- General Biochemistry
- Medicinal Biochemistry
- Structural Biochemistry

### **BIOMEDICAL AND HEALTH SCIENCES (BM)**

- Cell, Organ, and Systems Physiology
- Genetics and Molecular Biology of Disease
- Immunology
- Nutrition and Natural Products
- Pathophysiology

### **BIOMEDICAL ENGINEERING (BE)**

- Biomaterials and Regenerative Medicine
- Biomechanics
- Biomedical Devices
- Biomedical Sensors and Imaging
- Cell and Tissue Engineering
- Synthetic Biology

### **CELLULAR AND MOLECULAR BIOLOGY (CB)**

- Cell Physiology
- Cellular Immunology
- Genetics
- Molecular Biology
- Neurobiology

### **CHEMISTRY (CH)**

- Analytical Chemistry
- Computational Chemistry
- Environmental Chemistry
- Inorganic Chemistry
- Materials Chemistry
- Organic Chemistry
- Physical Chemistry

### **COMPUTATIONAL BIOLOGY AND BIOINFORMATICS (CO)**

- Computational Biomodeling
- Computational Epidemiology
- Computational Evolutionary Biology
- Computational Neuroscience
- Computational Pharmacology
- Genomics

### **EARTH AND ENVIRONMENTAL SCIENCES (EA)**

- Atmospheric Science
- Climate Science
- Environmental Effects on Ecosystems
- Geosciences
- Water Science

### **EMBEDDED SYSTEMS (ES)**

- Circuits
- Internet of Things
- Microcontrollers
- Networking and Data Communications
- Optics
- Sensors
- Signal Processing

### **ENERGY: SUSTAINABLE MATERIALS & DESIGN (EY)**

- Biological Process and Design
- Solar Process, Materials, and Design
- Energy Storage
- Wind and Water Movement Power Generation
- Hydrogen Generation and Storage
- Thermal Generation and Design
- Triboelectricity and Electrolysis

### **ENGINEERING MECHANICS (EM)**

- Aerospace and Aeronautical Engineering
- Civil Engineering
- Computational Mechanics
- Control Theory
- Ground Vehicle Systems
- Industrial Engineering-Processing
- Mechanical Engineering
- Naval Systems

### **ENVIRONMENTAL ENGINEERING (EE)**

- Bioremediation
- Land Reclamation
- Pollution Control
- Recycling and Waste Management
- Water Resources Management

### **MATERIALS SCIENCE (MS)**

- Biomaterials
- Ceramic and Glasses
- Composite Materials
- Computation and Theory
- Electronic, Optical, and Magnetic Materials
- Nanomaterials
- Polymers

### **MATHEMATICS (MA)**

- Algebra
- Analysis
- Combinatorics, Graph Theory, and Game Theory
- Geometry and Topology
- Number Theory
- Probability and Statistics

### **MICROBIOLOGY (MI)**

- Antimicrobial and Antibiotics
- Applied Microbiology
- Bacteriology
- Environmental Microbiology
- Microbial Genetics
- Virology

### **PHYSICS AND ASTRONOMY (PH)**

- Atomic, Molecular, and Optical Physics
- Astronomy and Cosmology
- Biological Physics
- Condensed Matter and Materials
- Mechanics
- Nuclear and Particle Physics
- Theoretical, Computational, and Quantum Physics

### **PLANT SCIENCES (PS)**

- Agriculture and Agronomy
- Ecology
- Genetics and Breeding
- Growth and Development
- Pathology
- Plant Physiology
- Systematics and Evolution

### **ROBOTICS AND INTELLIGENT MACHINES (RO)**

- Biomechanics
- Cognitive Systems
- Control Theory
- Machine Learning
- Robot Kinematics

### **SYSTEMS SOFTWARE (SS)**

- Algorithms
- Cybersecurity
- Databases
- Human/Machine Interface
- Languages and Operating Systems
- Mobile Apps
- Online Learning

### **TRANSLATIONAL MEDICAL SCIENCE (TM)**

- Disease Detection and Diagnosis
- Disease Prevention
- Disease Treatment and Therapies
- Drug Identification and Testing
- Pre-Clinical Studies