



MINISTRY OF EDUCATION



# INFORMATION BOOKLET





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## IMPORTANT DATES

DATE	ACTION
13 Dec 2023	Info Session 1: <b>Youth for One Health through STEM Innovations</b>
29 January 2024	Info Session 2: Sharing Session on Project Proposal
9 February 2024	<p>Deadline for submission of:</p> <ol style="list-style-type: none"> <li><b>Project Proposal</b> (via email or online link) (*<b>SHOULD STRICTLY</b> follow the format given in <b>Appendix 1</b>)</li> <li>13<sup>th</sup> Regional Congress <b>SSYS Forms</b> (via online link): <ul style="list-style-type: none"> <li>➤ Form A: Registration Form (for Students &amp; Teachers) Link to Form A and Submission of Project Proposal: <a href="https://forms.gle/HcobZPdQH5qMvvr6">https://forms.gle/HcobZPdQH5qMvvr6</a></li> <li>➤ Form B: Students' Confirmation Form Link to Form B: <a href="https://forms.gle/a2vAVQLBT6n3BCiz6">https://forms.gle/a2vAVQLBT6n3BCiz6</a></li> </ul> </li> </ol>
1 March 2024	Notification of successful teams (via email)
15 April 2024	<p>Deadline for:</p> <ol style="list-style-type: none"> <li>Submission of the <b>full written report</b> of the research project (via email or online link) (*<b>SHOULD STRICTLY</b> follow the format given in <b>Appendix 2</b>) Link to submission of the full written report: <a href="https://forms.gle/ULaprnGLZ3pnixZD8">https://forms.gle/ULaprnGLZ3pnixZD8</a></li> <li><b>Early bird payment.</b></li> <li>13<sup>th</sup> Regional Congress <b>SSYS Forms</b> (via online link): <ul style="list-style-type: none"> <li>➤ Form C: Registration Form (for accompanying Teacher, Parent and Observer) Link to Form C: <a href="https://forms.gle/QP7EfAoT3AEi3MJP8">https://forms.gle/QP7EfAoT3AEi3MJP8</a></li> </ul> </li> </ol>
6 May 2024	Deadline for payment and registration is closed.
10-14 June 2024	13 <sup>th</sup> Regional Congress SSYS

***\*(please ensure email ids provided in SSYS Form A are correct and valid)***



## 1. RATIONALE AND BACKGROUND

The Search for SEAMEO Young Scientists (SSYS) is a platform for youths from the SEAMEO member countries to gather and share information about their scientific and mathematical research projects. It was initiated in 1997, and since then, has been held once every two years with a specific theme.

The 13<sup>th</sup> Regional Congress SSYS aims to develop young scientists who are competent in handling community problems for sustainable development. It encourages youths to fully utilise their potential to be inquisitive and creative when dealing with challenges in real life incorporating Sustainable Development Goals (SDGs). Specifically, its main targets include (a) generating strong interest in science and mathematics learning, (b) increasing awareness about the relationship between Science, Technology, Engineering and Mathematics (STEM), (c) increasing awareness about One Health and (d) fostering camaraderie and networking among these youths through science and mathematics congresses, exhibitions and competitions. Hence, the 13<sup>th</sup> Regional Congress SSYS seeks to provide opportunities for youths to optimise their vast potential in conceptualising scientific and mathematical ideas through intellectual teamwork into more tangible research projects and innovative products that will benefit the environment, society and economy.

SEAMEO RECSAM is a prominent centre for Science and Mathematics education. We have actively supported related activities by providing teacher education and capacity building programmes. At our core, we value education as vital to achieving sustainability. As the current generation of young people is often seen as the world's hope for the future, they must play a critical role in fulfilling this mission. The 13<sup>th</sup> Regional Congress SSYS theme is **Youth for One Health through STEM Innovations**. This initiative seeks to empower young individuals to contribute to the One Health field through innovative approaches in STEM. This noble initiative seeks to engage the upcoming generation in the One Health movement, paving the way for a healthier and brighter future for both the environment and humanity. Through practical learning, interdisciplinary teamwork and applying STEM principles, young learners will be equipped to safeguard and promote the well-being of all living beings on our planet.

The One Health concept is a holistic and integrated approach that recognises the interconnectedness of human, animal, and environmental health. It emphasises that the well-being of humans, animals, and ecosystems are intertwined and that addressing health challenges requires collaborative efforts across disciplines and sectors. The concept recognises that diseases can spread between humans, animals, and the environment, highlighting the importance of understanding these interactions to prevent and control health threats effectively. One Health is closely connected to STEM fields as it necessitates the application of rigorous scientific research, advanced technologies, and multidisciplinary expertise. Professionals from various STEM disciplines work collaboratively to address complex health issues. One Health also involves efforts to promote environmental sustainability. STEM fields like environmental science, ecology, and climate science help identify how human activities impact ecosystems and subsequently influence health outcomes. Addressing issues such as air and water quality, deforestation, and climate change requires collaboration among various STEM disciplines to safeguard human, animal, and environmental health.



## 2. PURPOSE

The 13<sup>th</sup> Regional Congress SSYS is envisioned as a worthy intellectual venture and an effective medium to promote lifelong learning, scientific and mathematical values, interests, skills, attitudes and motivation among the youths. It is hoped that through the 13<sup>th</sup> Regional Congress SSYS which adopts the One Health initiatives, societal well-being will be enhanced by developing better quality science and mathematics education interspersed with technology, environmental, economic and societal awareness.

Specifically, SSYS aims to:

- 2.1 nurture the intellectual curiosity of young scientists within SEAMEO member countries.
- 2.2 encourage research and innovation in science and mathematics among youths.
- 2.3 encourage youth to take part in One Health initiatives.
- 2.4 provide a platform for networking among youths and educators across the region.

## 3. THEME

The 13<sup>th</sup> Regional Congress SSYS theme is **Youth for One Health through STEM Innovations**. This initiative seeks to empower young individuals to contribute to the One Health field through innovative approaches in Science, Technology, Engineering, and Mathematics (STEM). This initiative will engage the upcoming generation in the One Health movement, paving the way for a healthier and brighter future for both the environment and humanity. Through practical learning, interdisciplinary teamwork and applying STEM principles, young learners will be equipped to safeguard and promote the well-being of all living beings on our planet.

All projects submitted should adhere to the congress theme. Research projects that do not match the theme will be disqualified.

## 4. PARTICIPATION

The 13<sup>th</sup> Regional Congress SSYS will be conducted in SEAMEO RECSAM in a friendly atmosphere among youths. Criteria of participation:

- 4.1 Participation is open to all secondary students (excluding pre-university and matriculation levels) from public and private schools in Southeast Asian countries and beyond recognised by the Ministry of Education.
- 4.2 Student(s) may work on the project alone or in a team (maximum of 4 students) and must be guided by at least one teacher advisor.
- 4.3 Each student is only allowed to be registered under one project only.
- 4.4 Cash prizes and certificates will be given only to students and teacher advisors registered in the participating team.
- 4.5 All participating **students** and **teacher advisors** must fill in **SSYS Forms A & B** and submit them to the organiser by **9 February 2024**.
- 4.6 Other accompanying teachers, parents and observers are welcome on a fee-paying basis and need to submit **SSYS Form C** by **15 April 2024**.

- 4.7 By submitting an entry, the entrant grants SEAMEO RECSAM the permission to use the information/ project work submitted including images and other forms of media for any, scholarly and publicity purposes, as deemed appropriate by SEAMEO RECSAM.

## 5. GENERAL GUIDELINES

Each participating team is required to:

1. Submit project proposal for selection purposes.
2. Submit a full written report prior to the congress (only upon obtaining successful notification from the organiser).
3. Showcase their research project through the SEAMEO RECSAM exhibition and present it to the judges, observers, other students and general audience.

Each research project will be judged based on the quality of the written report, presentation of the project exhibit and significance of the project.

### 5.1 Research Project

- 5.1.1 The presentation of the project must be in **English** language.
- 5.1.2 The research project must be the **original work of the students**.
- 5.1.3 Teachers are allowed to play the advisory role only.
- 5.1.4 All research projects should focus on the given theme, be an original work, a result of a current continuing or parallel STEM related research, and **not a duplication** of any previous research.
- 5.1.5 Research projects submitted to this congress must have not participated in any other contest/programme before.
- 5.1.6 Each research project **must**:
  - (a) be aligned with the **One Health concept**;
  - (b) embed at least three elements of STEM; and
  - (c) apply/ integrate STEM to solve real-world problems.
- 5.1.7 Failure to comply with any of the rules may result in disqualification.

### 5.2 Project Proposal

- 5.2.1 All students must first submit a **project proposal** together with the SSYS Forms A and B for **selection purposes**.
- 5.2.2 The format of the project proposal **SHOULD STRICTLY FOLLOW Appendix 1**.
- 5.2.3 The project proposal should **NOT EXCEED** 5 pages (not including Appendix).
- 5.2.4 Submission is to be made **via the online registration link** given below. Documents should reach the organiser by **9 February 2024**.

Link for Online Uploading:

<https://forms.gle/HcobZPdQH5qMvvrs6>



### 5.3 Full Written Report

- 5.3.1 **Upon obtaining successful notification** from the organiser, all students are required to submit a full written report of their research project, in **soft copy**, formatted in **MS Word and PDF**, and addressed to the organiser by **15 April 2024**.
- 5.3.2 **Six (6) hard copies** of the full written reports need to be submitted for the judges during registration at SEAMEO RECSAM.
- 5.3.3 The format of the full written report **SHOULD STRICTLY FOLLOW** the sequence as shown in **Appendix 2**.
- 5.3.4 Submission is to be made **via the online link** given below.  
Link for Online Uploading: <https://forms.gle/ULaprnGLZ3pnixZD8>
- 5.3.5 Written report must **NOT EXCEED** 10 pages (excluding references and appendices).

### 5.4 Presentation of Project Exhibit

All projects will be displayed in an exhibition hall. The details of the research project exhibit:

#### 5.4.1 Display Panel

- fit one panel which consists of two surfaces, each with a dimension of 3'x4';
- be sturdy and strong/durable with parts firmly attached; lightweight, can be easily set up and taken down, transportable and self-supporting;
- be complete with accessories with the panels joined with hinges so that the project can be folded and unfolded easily;
- ensure that any information, pictures, graphs, or other images are held down with masking tape for easy removal or re-arrangement;
- observe safety measures in the case of electrical items or presentations with computers or chemicals; and
- does not contain any live organisms, specimens, poisonous materials or toxic or explosive chemicals.

#### 5.4.2 Accessories or Attachment

- The submission of projects involving the use of information and communication technology or multimedia has to include the relevant accessories or attachments, e.g. computer or video compact discs, CDs, slides, etc.
- During the exhibition of the projects, **NO** LCD projector, computer, OHP, DVD player, or any audio-video equipment will be provided. Should the student researchers require this equipment, they must secure it themselves.
- Common science laboratory apparatus (test tubes, beakers, thermometers, etc.) and mathematics tools (compass, rulers, etc.) will only be provided upon request.
- One display panel with two surfaces (3'x4'), one table, two chairs and one power outlet will be provided for each project.

#### 5.4.3 Presentation of Project Exhibit

Every participating team must present their project at their respective booth with/without suitable media support for the panel of judges. The rules for presentation are as follows:

- Any student from the research project team may present. Multiple presenters are also allowed.
- Teacher Advisor(s) are **NOT ALLOWED** to assist the student(s) during the presentation.
- Each project is allocated 30 minutes of question and answer (Q&A) sessions with the judges.
- During the Q&A session, student(s) can answer with/without using a computer, LCD projector, MS PowerPoint or related software, model, or any non-digital means.
- The order of presentation for each project will be determined by drawing lots. The drawing will be done prior to the event and the sequence of presentations will be posted on the SSYS official website.

#### 5.4.4 Public Exhibition

Student(s) must always be on standby during the public exhibition session.

- Student(s) are required to describe their project work to the audience during the visit by the public.
- Teacher Advisor(s) are **ALLOWED** to assist the student(s) during this session.
- Failure to be present at their respective stations throughout this session may lead to disqualifying the team in the congress.

#### 5.5 Removal of Project Exhibits

All project exhibits must not be removed before the closing ceremony.



## 5.6 Judging Components

All projects will be judged based on two main components:

- Full written report.
- Presentation of project exhibit.

The detailed criteria for the projects are shown in Table 1.

Table 1  
Judging Criteria

COMPONENTS	CRITERIA for SCIENCE PROJECTS	Marks
<b>Full Written Report</b>	<ul style="list-style-type: none"><li>• Abstract</li><li>• Background of the project</li><li>• STEM concepts involved</li><li>• One Health concept involved</li><li>• Methodology of the project</li><li>• Results and discussion of the project</li><li>• Significance of Project<ul style="list-style-type: none"><li>▪ Benefit(s) to the community</li><li>▪ Educational contribution</li><li>▪ Commercial potential</li></ul></li><li>• Conclusions</li><li>• References</li></ul>	50
<b>Presentation of Project Exhibit</b>	<ul style="list-style-type: none"><li>• Presentation skills</li><li>• Responsiveness to questions</li><li>• Originality of work</li><li>• Integration of STEM and One Health concepts</li><li>• Creativity and innovativeness of work</li><li>• Quality of display</li><li>• Explanation and justification of the exhibits</li></ul>	50
<b>TOTAL</b>		<b>100</b>

## 5.7 Awards

There are three categories of awards:

- (a) Most Promising Young Scientist Award
- (b) Outstanding Award
- (c) Special Award

Cash prizes and certificates will accompany each award. In addition, every participant will be presented with a certificate of participation. The details of the award are shown in Table 2.



Table 2  
Categories of Awards

AWARDS
<b>Most Promising SEAMEO Young Scientists Award</b>
Outstanding Award for <b>each of the following</b> : <ul style="list-style-type: none"> <li>• Project Report</li> <li>• Presentation</li> <li>• Project Exhibit</li> </ul>
Special Award for <b>each of the following</b> : <ul style="list-style-type: none"> <li>• Benefit(s) to the Community</li> <li>• Educational Contribution</li> <li>• Commercial Potential</li> <li>• Application of STEM and One Health concepts</li> <li>• Creativity and Innovation</li> </ul>

## 6. CONGRESS REGISTRATION FEE (PER PARTICIPANT)

### IMPORTANT

The fees are **WAIVED** for **TWO OFFICIAL PARTICIPATING** teams (**2 students** and **1 teacher per team**) nominated by the Ministry of Education of SEAMEO member countries. However, fees apply to those interested in participating in their own capacity (refer to Table 3).

The congress registration fee includes congress materials, e-certificates, meals, airport transfer (from and to Penang International Airport), Congress Dinner and Penang Island tour. It is recommended that participants stay in RECSAM International House for convenience and comfort.

Table 3  
Congress Registration Fees for **per participant**

Student & Teacher Advisor			Accompanying Teacher(s) / Observer(s) / Parents			
			1 – 2 Pax		> 2 Pax	
Fee	International Participant	Malaysian Participant	International Participant	Malaysian Participant	International Participant	Malaysian Participant
Normal Rate	USD 110.00	MYR 499	USD 100.00	MYR 449	USD 90.00	MYR 399
<b>Early bird</b>	<b>USD 90.00</b>	<b>MYR 399</b>	<b>USD 80.00</b>	<b>MYR 349</b>	<b>USD 70.00</b>	<b>MYR 299</b>

Early bird rate: Pay by **15 April 2024**

\*Malaysia currency rate applied for Malaysians only



For booking accommodation with **special rates** at SEAMEO RECSAM International House, you may click the following link for further information:  
[http://www.recsam.edu.my/sub\\_InternationalHouse/](http://www.recsam.edu.my/sub_InternationalHouse/)

## 7. PAYMENT DETAILS

All payments must be made by **15 April 2024 (Early Bird)** or **6 May 2024 (Normal Rate)**. The following are the account details for remittance:

Account Name: **SEAMEO RECSAM**

Account Number: **5571-5700-0647**

Account Type: **Current**

Swift Code: **MBBEMYKL**

Bank Name: **Malayan Banking Berhad**

Bank Address: **345-H, Bangunan Kelab Gelugor, 11700 Pulau Pinang, Malaysia.**

*\*Note: A copy of your payment slip can either be attached to the registration form online OR sent to us via email at [ssys@recsam.edu.my](mailto:ssys@recsam.edu.my). Please indicate the paper code you received from the secretariat.*

For more information about the payment method, please visit our website:

[http://www.recsam.edu.my/sub\\_SSYS/index.php](http://www.recsam.edu.my/sub_SSYS/index.php)

## 8. CONTACT US

For further information, please contact:

SSYS Secretariat

SEAMEO RECSAM

Jalan Sultan Azlan Shah

11700 Gelugor

Pulau Pinang, Malaysia.

Tel: +604 6522 700 ☎ Fax: +604 6522 737

Email: [ssys@recsam.edu.my](mailto:ssys@recsam.edu.my)

Website: [http://www.recsam.edu.my/sub\\_SSYS/index.php](http://www.recsam.edu.my/sub_SSYS/index.php)

Officers in-charge:

Ms. Shalaneeswary	Programme Manager	+604 – 6522 749
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Dr. Bala Murali Tanimale	Assistant Executive Secretary SSYS 2024	+604 – 6522 750



**13<sup>th</sup> REGIONAL CONGRESS SEARCH FOR SEAMEO YOUNG SCIENTISTS (SSYS)**  
**10-14 JUNE 2024**  
**TENTATIVE PROGRAMME**

DAY/TIME	8:30 AM	10:30 AM	11:00 AM	1:00 PM	2:30 PM	4:30 PM	EVENING*
10 June 2024 (Monday)	8:00 – 9:30 AM Registration  9:30 – 10:00 AM Opening Ceremony  10:00 – 10:30 AM Science Show	Group Photo & TEA BREAK	Briefing & Setup of Project Exhibits	LUNCH	Setup of Project Exhibits	TEA BREAK	FREE
11 June 2024 (Tuesday)	Judging of Project Exhibits I	TEA BREAK	Judging of Project Exhibits II	LUNCH	STEM Workshops	TEA BREAK	FREE
12 June 2024 (Wednesday)	Judging of Project Exhibits III	TEA BREAK	Judging of Project Exhibits IV	LUNCH	STEM Workshops	TEA BREAK	CONGRESS DINNER
13 June 2024 (Thursday)	Public Exhibition	TEA BREAK	Public Exhibition	LUNCH	2:00 – 5:30 PM Penang Island Tour		
14 June 2024 (Friday)	STEM Educational Games	TEA BREAK	Award Presentation Ceremony	12:15 PM LUNCH	Home Sweet Home		

\* The organiser reserves the right to make changes to this programme.



## SSYS FORM A

### REGISTRATION FORM (for STUDENTS and TEACHER ADVISORS)

Please fill in SSYS Form A no later than **9 February 2024** via the following LINK:  
<https://forms.gle/HcobZPdGHSqMvvrS6>

## SSYS FORM B

### STUDENTS' CONFIRMATION FORM

Please fill in SSYS Form B no later than **9 February 2024** via the following LINK:  
<https://forms.gle/a2vAVQLBT6n3BCiz6>

## SSYS FORM C

### REGISTRATION FORM (for ACCOMPANYING TEACHER / PARENT / OBSERVER)

Please fill in SSYS Form C no later than **15 April 2024** via the following LINK:  
<https://forms.gle/QP7EfAoT3AEi3MJP8>



## APPENDICES

### APPENDIX 1: PROJECT PROPOSAL FORMAT

#### PROJECT PROPOSAL FORMAT

Title of Project: .....

Team Member(s): ..... (Student 1)

Team Member: ..... (\*Student 2)

Team Member: ..... (\*Student 3)

Team Member: ..... (\*Student 4)

Team Member: ..... (Teacher Advisor)

..... (\*Teacher Advisor)

\*If any

#### TABLE OF CONTENT

1.0 Background of the Project

2.0 STEM Concepts Involved

3.0 One Health Concept Involved

4.0 Proposed Methods and Process of the Project

5.0 Expected Results of the Project

6.0 Conclusions

References

Kindly use the following format:

- Font: Time New Roman / Font size: 12
- Spacing: 1.5 / Alignment: Justified
- Page Size: A4 / Indent (Left: 2.5 cm / Right: 2.0 cm/ Top: 2.0 cm/ Bottom: 2.0 cm)
- APA format for references / Save in doc/docx format. Unlock (enable editing)
- Must not **NOT EXCEED** 5 pages (not including Appendix).

## FULL REPORT FORMAT

Title of Project: .....

Team Member(s): ..... (Student 1)

Team Member: ..... (\*Student 2)

Team Member: ..... (\*Student 3)

Team Member: ..... (\*Student 4)

Team Member: ..... (Teacher Advisor)

..... (\*Teacher Advisor)

\*If any

### TABLE OF CONTENT

1.0 Abstract

2.0 Background of the Project

3.0 STEM Concepts Involved

4.0 One Health Concept Involved

5.0 Methodology of the Project

6.0 Results and Discussion of the Project

7.0 Significance of Project

    7.1 Benefit(s) to the Community

    7.2 Educational Contribution

    7.3 Commercial Potential

8.0 Conclusions

References

PAGE	DESCRIPTION
Cover Page/Title Page	The cover page contains the project's title, student researchers' names, schools / institutions, and advisers. The title should be written in bold, easy-to-read letters.
Abstract	The abstract is a synopsis of the general topic and should provide information about the overall content of the project. Limit to 300 words.
Table of Contents	List all the content areas with the numbering of pages. The number of each page of the report should also be given at the centre or bottom right hand corner of the page.
Background of the Project	Description of the background and purpose of the project.
STEM Concepts Involved	Description of the STEM concepts involved in the project.
One Health Concept Involved	Description of the One Health concept involved in the project.
Methodology of the Project	Design and details of the project Materials and equipment Process.
Results and Discussion of the Project	Analysis of data Interpretation of results and findings



PAGE	DESCRIPTION
Significance of Project	Description of the benefit(s) to the community, educational contribution and commercial potential of the project
Conclusion	Concluding remarks
References	A list of books, journals and other references used
Appendices	Diagrams, pictures, photos, graphs and other visual images that present the written information accurately or the display of experimental results.

### Notes.

- The written report must adhere to the following format requirements:
  - Font type: Time New Roman / Font size: 12
  - Spacing: 1.5 / Alignment: Justified
  - Page Size: A4 / Indent (Left: 2.5 cm / Right: 2.0 cm/ Top: 2.0 cm/ Bottom: 2.0 cm)
  - APA format / Save in doc/docx format. Unlock (enable editing)
- The written report must not exceed 10 pages (excluding references and appendices).



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