Space Education
Working Group Report

Mr. Krishna Raj Adhikary (NESARC, Nepal)
Ms. SASAKI Kaori (JAXA, Japan)
APRSAF-26 Space Education Working Group (SEWG) Session

• SEWG objectives
  I. Effectively using space education materials to enhance education for young people;
  II. Providing education and training opportunities for young people in space science and technology;
  III. Helping enhance mutual understanding among countries in the region through exchange opportunities for young people.

• Major collaborative activities
  – Annual session at APRSAF
  – Educator seminar
  – Water Rocket Event and Poster Contest
Main focuses of this year’s session

**Advancing Diverse Human Resource Development Toward a New Space Era**
- Share each country’s achievements and challenges
- Discuss how to fill in the gap between exiting activity base for K-12 and higher education
- Joint session with Space Environment Utilization Working Group (SEUWG)

**Supporting Teacher and Educators to Nurture the Next Generation**
- Introductory session of the APRSAF Educator Seminar
  Hands-on educational experience to get an idea to introduce space to the classroom in order to foster a spirit of innovation
- Educator session at Water Rocket Event
  Information exchange on each country’s space education including endeavor to national representative selection for Water Rocket Event (WRE)

Viewpoint of SDGs
- Quality Education
- Gender Equality
- Industry, Innovation and Infrastructure
- Partnerships for the goals
SEWG’s Major Activities in 2019

- Water Rocket Event
- Poster Contest
- Annual WG meeting

Overall Participation:

<table>
<thead>
<tr>
<th>Event</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Rocket Event</td>
<td>121 participants (13 countries)</td>
</tr>
<tr>
<td>Poster Contest</td>
<td>29 entries (10 countries)</td>
</tr>
<tr>
<td>Annual Session</td>
<td>46 (Nov. 26) and 52 (Nov. 27)</td>
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</tbody>
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APRSAF-26
Water Rocket Event

Organized by
Space Education Working Group (SEWG)
APRSAF Water Rocket Event is:

• An ideal way to study the principles of rocketry as well as engineering

• A great deal can be learned through the process of designing, building, and launching

• An opportunity to interact with different cultures and further understand their own background
15th APRSAF Water Rocket Event (WRE)

November 22-24, 2019
Sagamihara, Japan

Organized by APRSAF SEWG and JAXA
Sponsored by Northrop Grumman and Young Astronaut Club - Japan
15th APRSAF WRE Participants

65 students, 24 educators, and 32 observers from 13 countries

Bangladesh, Cambodia, China, Colombia, Korea, India, Indonesia, Japan, Malaysia, Nepal, Sri Lanka, Thailand, and Vietnam
15th APRSAF WRE Program

- Country Presentation by students
- Educator Session
- Facility tour of JAXA Sagamihara Campus
- Water Rocket Making and Launch Competition
Country Presentation by Students

Sri Lanka

Thailand

Japan

India

Cambodia

Colombia
Country Presentation by Students

Vietnam

Malaysia

China

Bangladesh

Korea

Indonesia
Students from across Asia Pacific Region
Educator Session
APRSAF-26 Water Rocket Competition

- Participants: Students between the ages of 12 and 16 years
- 1st, 2nd, and 3rd place winners were decided based on the shortest distance from the target located 80m away in two trials.
- The special award was to be selected based on the combined total distance of two trials from the target.
Launch Competition
Launch Competition
APRSAF-26
Water Rocket Event
Award Ceremony
Best Combined Award

U.G. Didula Adithya
(Sri Lanka)
4.64m (3.30m + 1.34m)
3rd Place

Maria Jose Mercado
(Colombia)
1.73m
2nd Place

Mohamad Ashraf Mohd Salim
(Malaysia)
1.47m
1st Place

U.G. Didula Adithya
(Sri Lanka)
1.34m
APRSAF-26
Poster Contest
APRSAF Poster Contest is...

- For school children between 8 and 11 years old
- Started from 2006 and 14th contest this year
- Organized by APRSAF SEWG

2014 “Space and Me”
2016 “Careers in Space”
2017 “My Dream Planet”
Purpose of APRSAF Poster Contest

1. To enhance children’s interest and awareness toward space science and technology.

2. To present the creative artwork of children in Asia-Pacific region.

3. To encourage young people to expand their imagination about the universe.
Launch of the works of past Poster Contest

- Launch to the ISS
  - All works of 2017 contest were printed on 297x297mm paper
  - Delivered to Nanoracks on November 16, 2018.
  - Launched on December 5, 2018 by Spx16
  - Photo taken on the ISS on December 10, 2018
Poster Calendar of last year’s entries

- Yearly A1 poster and Monthly A4 version
- Can be downloaded at SEWG page [https://www.aprsaf.org/working_groups/se/](https://www.aprsaf.org/working_groups/se/)
APRSAF-26 14th Poster Contest

Theme: “See you in Space!”

29 posters from 10 countries:
Bangladesh, Cambodia, China, Indonesia, Japan, Malaysia, Nepal, Sri Lanka, Thailand, and Vietnam
156 Votes
Were cast from APRSAF-26 participants

Thank you very much!
Best Poster Award

(30 Votes)

Miss Michelle Fiona (Age 10, Indonesia)
Special Poster Award

(16 Votes)

Mr. MD Rittik (Age 10, Bangladesh)
Special Poster Award
(15 VOTES)

Miss Natwara Sanewirush (Age 9, Thailand)
JAXA Award

Miss Hansi Sneha Riswan (Age 11, Sri Lanka)
Suggested Themes for AP-27 Poster Contest

1. Space Exploration/Let’s explore Space/Explore Space for Your Future (3)
2. Beyond The Earth (4)(0)
3. Life in Space/Well-Being life in Space (4)(1)
4. Space for you (2)
5. Space Culture (1)
6. I am an astronaut (3)
7. To the Moon and beyond (8)(5)(7)
8. From Space to Earth (0)
9. Moon Village in Future (6)(2)
10. Space is ultimate (1)
11. Space my destination/Space is my destiny (3)
12. Peace in Space (9)(8)(9)
13. Fly to the Mars (3)
14. Challenge to Space (3)
15. Space Edutainment (2)
16. Space Olympic (9)(8)(8)
17. Discover new Space/New discovery in Space (5)(0)
18. Rocket Technology for Space Education (0)
Annual Session of the SEWG

- General exchange of views on space education – presented by 9 countries*
- Introductory session of Educator seminar: Keynote presentation and three hands-on sessions. The first online presentation at SEWG was given by the representative from VSSEC, Australia.
- Sharing of teaching and educational materials – 2 presentations
- Other Space Education Activities – 11 presentations by various organizations, including space agencies, educational institute (university and high-school), NPO/NGOs and private companies.

* Indonesia, Japan, Republic of Korea, Malaysia, Nepal, Philippines, Pakistan, Thailand and Vietnam
Joint Session with SEUWG

- First joint session with SEUWG. Each working group made presentation and discussed about the joint educational activities.
- Agreed that both Working Group should collaborate with each other in the space education program, including Kibo/ISS utilization.
Recommendations by SEWG

1. To continue promotion of educational activities, on the space methodology that will be beneficial for the human resource development. And to continue providing opportunities for the young generation, based on the SDGs philosophy.

2. To continue conducting the Water Rocket Event, Poster Contest and encourage other self-initiated educational programs in order to enhance space education activities in the Asia-Pacific region.

3. To collaborate with other Working Groups in space education programs, including new experiments and space utilization programs.
Thank you!