

# UNISEC-Global The 42<sup>nd</sup> Virtual Meeting

March 16<sup>th</sup>, 2024, 22:00-24:00  
(Standard Japan time GMT +9)



**42nd Virtual UNISEC-Global Meeting**  
Theme: Student Initiatives and Projects at UNISON-Global  
Hosted by UNISON-Global

**Opening Speech**  
Mehmet Sevket Uludag, Delft University of Technology

**Introduction to PreMIC9**  
Richard Long, MIC1 Finalist

**Student Presentation**

- Hirotaaka Sekine, The University of Tokyo: Establishing a University Community for Deep Space Exploration
- Thiru Venkat. R, Cambridge Institute of Technology: Swarm of Solar Sail Nanosatellites
- Chayapat Songpipat, UNISEC-Thailand: Thailand CANSAT-ROCKET Competition
- Sanpak Tangsaguimwisai, National Science Museum
- Yunus Emre Özdemir, UNISON-Turkey: LAUNCHING THE FUTURE: SPACE WORKSHOP
- Keigo Mutsuo, Nihon University: Planetary Rover Driving Experiment by UNISON-Japan

**Moderator**  
Max Berthet, The University of Tokyo

Host: UNISON-Global  
Time: 22:00-24:00 (JST)  
March 16, 2024

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**Attendee Grid:**

Ira Sharma	Haruka Yasuda   UNISEC-Global	Irem Sezdi	Maximilien Berthet   UTokyo	Jorge Salazar Morales
Yunus Emre Özdemir	Richard Long	Suprabha Nambiar	UNISEC Thailand	Hironaka SHIBATA
Thiruvankat	Nikhil R.	Rei Kawashima	M. Sevket Uludag	George Maeda
Mohammed Khalil IRAQI	Ayman Kassem	terra	Keigo Mutsuo	Antony
Kiran Hegde	Chieder MJ Ruiz (BSAeroE)	Juan Nolasco	Alper Gövencin	Ariel Manabe

The following report was prepared by UNISEC-Global Secretariat  
March 16, 2024  
Japan

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# 1. Opening Remarks

Mehmet Sevket Uludag, Delft University of Technology

Mehmet Sevket Uludag currently works as an Electronics Engineer for Space Department at Delft University of Technology, the Netherlands. His job responsibilities are; to focus on small satellite projects, mostly related to the Delfi-PQ a 3U PocketCube, development of subsystems with respect to department needs, and cleanroom/facilities manager. He started working on small satellites since his sophomore. He has a B.Sc. degree with double major in Electrical Engineering and Mechanical Engineering from Istanbul Technical University, where he also did his masters (M.Sc.) in Astronautics & Aeronautics Engineering. As a research assistant he also worked in Istanbul Technical University with research focus on small satellites and their testing. In the field of small satellites, he has an overall 12 years' experience, 5 CubeSats projects (3USAT, BEEAGLESAT, HAVELSAT, ASELSAT and UBAKUSAT), for which he has developed and tested all the core subsystems for a small satellite plus a science unit (an X-Ray detection system). He has over 1000 hours of hands-on experience in thermal cycling test of CubeSats and various payloads and 200 hours for vibration testing.



*Pictured: M Sevket presenting his opening remarks*

## Highlights:

- M. Sevket was a member of UNISON and joined UNISEC back in 2013 when UNISEC Global began
- Experiences of building satellites since 2010 – during bachelors
- 5 satellite projects up to now: most as students and then as lead engineer
- Opportunity to network, collaborate, and partner
- Lead on conversations, close connections developed among each person
- Conversations in meeting led to future collaborations
- MIC was an amazing competition: same concept, different backgrounds/perspectives
- Opportunity to learn from multiple people at the same time
- The team was not very active during their time in UNISON but were involved in satellite projects
- COVID was a challenging time but connecting virtually was possible
- **“SPACE IS BIG but community is SMALL”**
- UNISEC has been contributing to increase the community engagement
- People used to be skeptical about CubeSats; the current deep space missions are answering them back
- UNISON can play a big role since as students; they have a longer time to make a change
- Currently, UNISON is way more active than the previous batch
- **UNISEC constellation mission is advised: to be accessible to everyone**
- Can contribute for the whole on satellite, only subsystems or just with a piece of code

## 2. Presentation on “Swarm of Solar Sail Nanosatellites”

Thiru Venkat R, Cambridge Institute of Technology

Thiru Venkat R is currently pursuing Bachelors of Engineering (BE) in Artificial Intelligence at Cambridge Institute of Technology. He worked as a developer intern at Psamathe Technologies and has been actively contributing in the field as an Imun Campus Ambassador, showcasing his dedication to promoting and representing Imun's values and mission. Additionally, he is also serving as a research intern at Cambrian House of Student Startup (CHOSS). He also has experiences of working as a software testing intern at CodeMarks Enterprises Private Limited, Product Development Intern at Digital Impact Square, A TCS Foundation Initiative. Mentored by Dr. K Gopala Krishnan, Dr. Antony Louis Piriya Kumar and Dr. Cyril Prasanna Raj, Thiru along with his peer, Mohammed Wael Umar have been working together on a few more ideas. They have also together completed the course on “Geodata Processing using Python.”

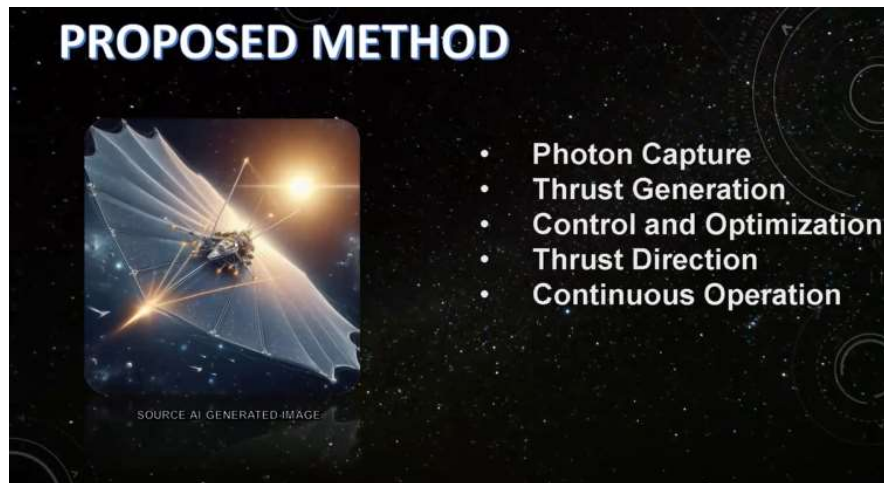


*Pictured: Thiru Venkat during his presentation about Solar Swarms*

### Highlights:

- Brief introduction and history of satellite presented
- Description of natural and artificial satellites; Sputnik 1 was the first artificial satellite
- Propulsion systems – accelerates spacecraft and artificial satellites
- Propulsion types: chemical/electrical/ others
- Chemical propulsion system uses propellants like Crypton, Liquid Oxygen to generate thrusts
- Electrical propulsion system uses electric energy/power to generate thrust
- Usually, segment detaches after generating thrust
- One problem of electrical system is it doesn't generate enough thrust to sail in space
- JAXA launches Solar Sail Method –IKAROS –I n 2010 – uses sunlight's pressure to sail in space
- The Mylar material unfolds itself when in space
- The sunlight which falls on the material is reflected
- This cuts down the cost by 50 to 80% because the sun is a propellant in the system
- This, however causes a problem during times of Low sunlight – high dependency on sun
- To solve the mentioned problems, Thiru Venkat presented a methodology
  - Aiming to capture photon and generate thrust
  - Control and optimize, direct and allow continuous operation
  - Photon is captured directly from sunlight and generates thrust from the energy stored
  - This method cuts down the cost by 60% to 80%
- Also allows 3-5 years of extension to satellite's life
- Lightweight since no external propellants will be carried from ground to space





*Pictured: Thiru Venkat explaining the methodology of the proposed method*

Q/A

**Q: Irem Sezdi:** Hello, Thank you for your presentation. I get really excited about these ideas because it combines physics, engineering, and like every natural science that humanity knows and it is so exciting, I think but I am curious about the material that is going to be used in this design because it has to be lightweight but it has to be resistant to all in little degree in space. But I don't really know about this topic so, can you give further information?

**Thiru Venkat:** So, yes, basically we are developing a material made up of quantum dots which has high resistance and can convert the photon from the sun to electrical energy to generate thrust. So, we are working on this project basically.

**Irem Sezdi:** It is really exciting though. If I had a satellite, I would really love to use that solar sail but unfortunately, I do not have a personally owned satellite. It also definitely sounds like Star Trek becoming real so maybe you can consider advising the Sci-fi thing because it really sounds like science fiction becoming real and it is really exciting for us nerds. So, it was just an idea.

...

**Q: George Maeda:** Quick question. Basically, is everyone using Mylar or are you going to use something different?

**Thiru Venkat:** I am going to use something different, sir. I am going to make a material made up of quantum dots and I am doing my research on this and we would develop a prototype on its basis.

...

**Q: Chayapat Songpipat:** You did not mention the size of it; solar sail or the CubeSat. Do you have any idea of it or are you not in the process of it yet?

**Thiru Venkat:** The solar sail would be basically approximately or less than 1,000 degrees F square meters because we cannot be extending the space so that it will generate more thrust. We have more complexity in this project and we are working with this.

**Dr. Gopala Krishnan:** Yeah, it will be 3U.

...

**Q: Richard Long:** Thank you for the presentation. I wonder if you could speak for a few moments on how you manage power raising in the spacecraft with the solar sail taking up the footprint exposed to the sun. How do you manage your power and does the solar cell impact any capability to raise power though solar panels?

**Thiru Venkat:** So, basically, we will not be using solar panels in this. We will be developing a new material for this made up of quantum dots. So, solar panels do not come into this play. They are basically capturing the photons directly from the sun and from that we would be generating thrust so we would like to keep its state as powered because we want to generate more thrust. As you see in

the electrical system, there is less thrust generated. So there is a major challenge in this. Also, if you see in the solar sail system, it generates less thrust so we want to solve this problem and also, we want to solve the problem of the satellite being dependent on the Sun. So, we cannot always be dependent on the cell. For example, if you go explore places where we lack sunlight, or for example, if the access to sunlight is very less, so, in those areas, we want to solve this problem.

**Q: Richard Long:** I see. So, if I understand correctly, you take advantage of the solace of the sail to raise some electrical power or you plan to be completely independent of solar power?

**Thiru Venkat:** Completely independent, sir.

**Q: Richard Long:** So, what would your power source for the spacecraft be?

**Thiru Venkat:** Sir, I am doing my research on this. So, I have to work on this basically.

...

**Q: Dr. Antony Louis Piriyakumar:** *That was a very nice presentation. Actually, you are also using solar I think because the sunrays come from that when you are taking photon from there but I think that this idea seems to be very novel, probably you should go for a patent.*

**Thiru Venkat:** Yes, I am working on this, sir.

...

**Q: Kiran Hegde:** *Given the continuous exposure to the radiation, what is the lifespan we are looking at for the material?*

**A: Thiru Venkat:** So, I have not explored and basically, I want to solve two problems; one is to increase the thrust and second is to explore the places where satellite is not available. So, I have not looked on it. I have to do the research.

### 3. Presentation on “Thailand CANSAT-ROCKET Competition”

Chayapat Songpipat, UNISEC-Thailand and Sanpak Tangsaguimwisai,  
National Science Museum Thailand

Chayapat Songpipat is currently the student president of UNISEC-Thailand. He is a 20-year-old student at King Mongkut's University of Technology North Bangkok (KMUTNB) in aerospace engineering bachelor's degree. His interest in the space field arose since 2019 and has continued his engagement by participating in different programs. He has participated in MIC8 as one of the finalist's team "SALVS-01" and also participated in one of CANSAT Leader Training Program (CLTP) class of 2022.



*Pictured: Chayapat Songpipat during his presentation*

## Highlights:

- Presented about the Thailand- CANSAT Competition
- Organized collaboratively by
  - Ministry of Higher Education, Science and Innovation (MHESI)
  - National Science Museum (NSM) and Defense Technology Institute (DTI)
- Supported by UNISEC Thailand
- Annual Competition starting on 2017
- **600+ high school participants every year**
- First and only running continuous space technology competition in Thailand
- Includes CANSAT & rocket making, proposal writing, oral presentation and launch activities
- 4 phases up to now
- Phase 4 will be a physical event with no CANSAT drone drop
- **70+ finalists are expected but for so far, no international collaborations**
- The final presentation of the current competition will be on 26 May 2024 at NSM facility
- Looking forward to global experience and collaboration
- Collaborations for this phase will be done after October 2024
- **Main goal to empower participants of 15-19 years of age**

## Q/Ans:

***Q: Maxiliem Berthet: It seems that 70 finalists join the CANSAT each year. So, this is a huge number. How do you manage such a large number of participants?***

***Chayapat Songpipat:*** So, about participation; I, myself used to be a participant in this competition too and I would say, that was the first step for me to get into CANSAT Technology. For handling the participants, we mostly are doing it online. We used to have semi-finalists. Back then, we used to have more funding than now and we had divided Thailand into four parts: The North Side, East Side, South Side and Middle Part. The National Science Museum helped us with the facility which has a big area.

...

***Q: Ira Sharma: Is there any platform where we can learn more about the competition?***

***Chayapat Songpipat:*** Yes, we do have a website and fb pages but most of the content are in Thai.

Website: <https://www.nsm.or.th/nsm/en/node/8040>

Facebook: <https://www.facebook.com/profile.php?id=100038803825229>

...

***Q: Mihir Rao S: Is this competition open to outsiders? (Participants from outside Thailand)***

***Chayapat Songpipat:*** I think we can do it in 2025 because I had a part for managing the participant and it will be more like an opportunity for students of Thailand to learn how international country or other country are doing So, I think it will surely improve us.

...

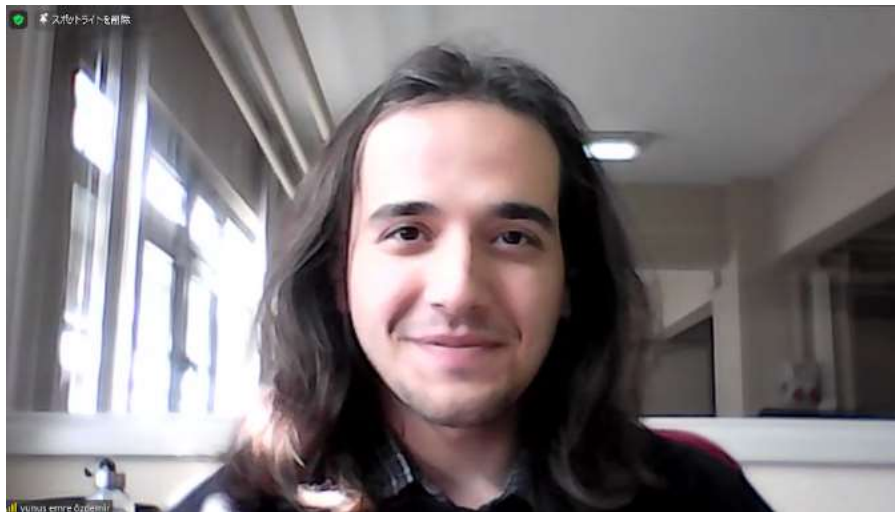
***Q: Richard Long: I wonder, what input and support could you gain from industrial partners may be from academia or form the industry. It could be financial or some of the contributions in terms of the time or effort or expertise or consulting.***

***Chayapat Songpipat:*** So, the expertise, they judge in the competition. We have Dr. Phongsathorn who is the Point of Contact of UNISEC-Thailand. He is always the judge for the competition. We also have expertise from The Defense Technology Institute to have feedback of comment on the rockets. And this year, we would have some engineers from Thai Satellite Consortium that would help us in the comments, feedbacks, and so on.

## 4. Presentation on “Launching the Future: Space Workshop”

Yunus Emre Özdemir, UNISON-Turkey

Yunus Emre Özdemir is a current Undergraduate Sophomore Aerospace student at Orta Doğu Teknik Üniversitesi / Middle East Technical University. He is a finalist of Mission Idea Contest 8 - 2023 and Antolian Rover Challenge - 2023. His main focus area is in terms of CubeSat Computing and Communications and Rover Autonomy and Navigation and has been involved in The University Rover Team and University Satellite Team. He also has experience as an Electronic Engineer at ODTÜ Robot Topluluğu / METU Robotics Society and is a current member at UNISON-Turkey.



*Pictured: Yunus presenting about Space Workshop Planning*

### Highlights:

- METU established The Department of Aerospace Engineering in 1981
- The institution has 40+ years of excellence in
  - satellite development
  - aircraft manufacturing
  - UAV
- Constant involvement in national and international programs
- TEKNO FEST - An international Aerospace and Technology Festival
- **UNISON-Turkey is a new initiative**
- 3 initial team members are currently working for the Space Workshop
- Other members of UNISON are engaged in other works
- Not many such workshops currently offered –
- Undergraduates, especially lack the experience, deeper knowledge, and career inspiration
- Divided into 3 Parts:
  - Part 1: Data Analysis using open-source data
  - The Google Earth Engineer workshop at MIC8 was effective for him; incorporating it in the workshop
  - Part 2: Hands-on learning by inviting industry leaders and companies for lectures
    - understand satellite subsystems
    - learn basic coding principles
- Aim to provide students with practical experience
- Companies like “HELLO SPACE” is also providing assistance
- Part 3: Presentations by renowned lecturers and industry leaders who shall explain their expertise
- The speakers have not been chosen yet
- The targeted students are undergraduates for now
- Further plans to conduct similar program for high schoolers as well
- The program will be conducted at METU, Ankara, Turkey
- Aim to establish a regional satellite learning hub at METU and **initiate international collaborations**



Q/A

**Q :** *Chayapat Songpipat: What is the location?*

**Yunus Emre Özdemir:** At Middle East Technical University, Ankara, Turkey

...

**Q: Irem Sezdi:** *First of all, sorry for my voice, it is not like that normally. So, Yunus, thank you for the presentation and thank you for your ideas. I think it is very valuable to do such thing in Ankara because I know so much valuable engineers who graduated from your university and they are so much valuable that I think this collaboration was needed. So, I would like to thank you for that presentation here. So, I wanted to ask you that are u thinking any collaboration with Tubitak uzay because it is also established in your university?*

**Yunus Emre Özdemir:** Yes, actually, I have not mentioned because it is not certain right now but for hands-on training or hands-on part of the workshop, we will invite many companies and is not certain but for the hands-on part of the workshop, we will invite many companies and also here, we have Tubitak Space, mainly works on satellite. I think that Tubitak can give us some engineering models of the satellites to work with here in this workshop

...

**Q: Irem Sezdi:** *Yeah that would be great. I am coming from Istanbul technical University and I will be very happy to help any parts of this workshop or joining as a member because I really love Ankara.*

**Yunus Emre Özdemir:** Yes, I will reach out to you.

...

**Q: Ira Sharma:** *Hi Yunus, thank you for the presentation. So, I just had a small comment. We have been conducting such kinds of workshops here from UNISEC-Nepal as well and basically here, we focus more on satellite boot camps so sort of like the same kind of idea and the same kind of planning that you were doing. We have been conducting it here as well so if there is any kind of help in terms of resources or in terms of anything that you would like, feel free to just contact us and we would be indeed happy to help you with any kind of workshop framings and any kind of resources that we have been using and I think that would be really helpful and useful for you to conduct the workshops as well. So, we would be just happy to help in that terms.*

**Yunus Emre Özdemir:** Thank you so much. I will reach out to you too. Thank you so much.

## 5. Presentation on “Planetary Rover Driving Experiment by UNISON-Japan”

Keigo Mutsuo, Nihon University

Keigo Mutsuo is a student at Nihon University and a member of UNISON-Japan.



Mutsuo Keigo  
Pictured: Keigo Mutsuo during his presentation on Planetary Rover Driving Experiment

Highlights:

- UNISON has organized ARLISS (held in USA)
- **Also offers financial support for domestic and international competitions**
- Learning of project management and systems engineering
- Local and international CanSat and rover projects have been conducted
- CanSat projects in Japan are very popular currently
- This promising culture allows participants to directly learn the development
- **Keigo himself started from CanSat during his undergraduate**
- Knowing the importance, he has been involved in organizing such events for others.
- Competitions focusing on CanSat and Rovers have been conducted in Japan and USA
- Each event location has a diverse environmental difference: soft grasses, dry desert, volcanic plume
- Most of the other projects are also focused on Sand Desert environment to replicate lunar surface
- Lunar Terrace – a rigorous “lunar surface” type environment
- Limited area but similar topographic features and sand strength
- JAXA also has similar facilities
- Tottori Lunar Rover Workshop 2024 – 2 days experiment participated by 5 teams
- CanSat, rover and science classes were conducted
- Experiments, competitions were conducted throughout and the problems were addressed
- Many CanSats projects worked well in grass but failed to move properly on sandy fields
- The practical demonstration in different environmental circumstances was experiences
- Rover practical demonstration was shown which tackled the circumstances
- Larger the tire diameter, better travel over rougher surfaces
- The technical knowledge is still now, more such programs recommended
- This event will be held as a competition on March of next year, UNISON-Japan will manage



*Pictured: Keigo Mutso presenting the demonstration of Rover in replicated Lunar Surface*

Q/A:

***Q: Richard Long:*** Hello there, thank you very much for the presentation and it was very interesting to learn about this facility and the area and what you can do with it. I am interested in terms of The CanSat Rover. What type of experiments or missions could you foresee performing with The CanSat Rover on the moon? It looked like you had some rovers which were CanSat in their form factor. So, they were this kind of a single wheel rover. Or perhaps, for the rovers that you have looked at so far, what type of missions are you expecting to be able to be performing with these rovers?

***Keigo Mutso (translated by Maximilien Berthet):*** Yeah, so it really depends on what the team is planning, I guess. And depending on the composition, you can use just one wheel or other approaches. So, it really depends.

...

***Q: Richard Long:*** And in terms of the type of missions you could perform with the rover? So, there is the Rover Technology but then, there is the mission you can apply it to. What type of missions and what type of information could you return with these rovers?

***Keigo Mutso (translated by Maximilien Berthet):*** So right, for now, the objective is mostly to navigate towards a fixed point on the lunar surface. So yeah, navigation mostly.

**Richard Long:** And the building of and demonstration of The Rover Technology. Okay.

...

**Q: Chayapat Songpipat:** *I had a question. It is about the participants in the activity. Is it only the Japanese people or is it people of other countries as well?*

**Keigo Mutso (translated by Maximilien Berthet):** So, for now, it is mostly Japanese but in future, we will move towards more international.

**Chayapat Songpipat:** *And is there an age limit of the participation? Because as a project that I am representing, maybe I still want to have somewhere to send a student for CanSat competition or activity. Is it possible for people around high school of age 15 to 19? Is it possible?*

**Keigo Mutso:** *Yes, it is possible.*

...

**Q: Dr. Antony Louis Piriya Kumar:** *Yes, just a quick question. I think, NASA is using drones to do all these work. Why do we then use and what is the advantage of rovers, then?*

**Keigo Mutso (translated by Honoka Shibata):** So, rover might be better when you have to drive. Inside the craters and those bumpy-like places surfaces of the moon.

**Dr. Antony Louis Piriya Kumar:** Why do you want bumpy spaces? You would have a smooth flight. There should be some reason, I am 100% sure, Japanese will not do something like this when Americans have already started using drones. There should be some reason maybe we need to look into it little more deeply and I think there is a reason. I strongly believe.

**Tomoki Mochizuki:** Can I have a comment to that point? Probably in the lunar surface, there is few atmospheres, right? So, in this case, I think it is very important to have a rover skill rather than having the drone skill. So, suppose, onto the point of creating the rovers, especially application for lunar surface, I think it is very important to have about kind of technologies.

**Maxiliem Berthet:** Yeah, thank you for making that important point. If there is no air, it is difficult to fly during, right? It is true

...

## 6. Introduction to PreMIC9

Richard Long, MIC1 Finalist/MIC Reviewer

Richard Long was a participant in Mission Idea Contest 1 (MIC1) and had received the third place for his “Distributed Multispectral Imaging System” Idea in MIC1 held in Japan and organized by UNISEC. The abstract was then applied through Surrey Satellite Technology Limited.



*Pictured: Richard Long presenting about PreMIC9*

### Highlights:

- MIC launched in 2010

- Launched with an aim to create a platform to present innovative space ideas and forge collaborations
- 8 MICs and 4 Pre-Workshops have been conducted
- 4 books and 2 e-books published as a series: <https://iaaspace.org/product-category/pub/bookseries/>
- Richard Long was Former finalist in MIC1 in 2011
- Reviewer for MIC8
- Presenting about MIC9: to the moon
- MIC9 will be split over 2 phases: Pre-MIC
- Previously: single phase over 1 year
- **MIC9: 2 categories:**
  - **Lunar Orbit CubeSat Mission (LOCM)**
  - **Lunar Surface Rover Mission (LSRM)**
- **Abstract Submission Due: July 24,2024 – evaluated by review team**
- Notification: September 10, 2024 – will also be published on website
- Final Presentation: November 27, 2024 (Stellenbosch, South Africa)
- Finalists selected on the basis of the abstract

MIC Winners' Mission Ideas		
	Proposed idea	Country
MIC 1 (2011, Tokyo) (constellation)	Integrated Meteorological / Precise Positioning Mission Utilizing Nano-Satellite Constellation	Japan (professional)
MIC 2 (2012, Nagoya) (Satellite Design)	SOLARA/SARA: Solar Observing Low-frequency Array for Radio Astronomy/ Separated Antennas Reconfigurable Array	USA (student)
MIC 2 (2012, Nagoya) (Business model)	Underground and surface water detection and monitoring using a microsatellite	South Africa (student)
MIC 3 (2014, Tokyo)	Clouds Height Mission	Germany, Italy, Sloveni (professional)
MIC 4 (2016, Bulgaria)	CubeSat constellation for monitoring and detection of bushfires in Australia	Australia (student)
MIC 5 (2018, France)	Smallsat Ionosphere Exploration at Several Times and Altitudes,	Taiwan, USA, India (student)
MIC 6 (2019, Tokyo) (ISS-IceCube)	MUSA: An ISS Experiment for research of a dual culture for Panama Disease	Costa Rica (student)
MIC6 (2019, Tokyo) (ISS-ISEEP)	Spectrum Monitoring from Space with i-SEEP (SMoSiS)	Philippines (professional)
MIC7 (2022, Tokyo)	PARS: Precursor Asteroid Remote Surve	Turkey (student)
MIC8 (2023, Tokyo)	MOTHS: Moon Obsi	Italy (student)

*Pictured: Description of past winners' idea*

- Generally, the missions focused on CubeSats or spacecrafts
- For MIC9, mass-optimized mission is a priority
- The theme is “Lunar Mission”
- Requirements and abstract template details is available on the website
- Key evaluation components:
  - Originality – Novel Concept / New
  - Feasibility – Realistic, Development Schedule, Infrastructure
  - Engineering – Technical description/ operational
  - Impact – Contributive
- MIC Coordinator mentor. Co-ordinate and assist in networking
- Connect with peers within you region and beyond
- Get a platform to present meaningful/innovative ideas and attend lectures on diverse space topics
- Integral career development through networking
- Recognition through awards

Q/Ans:

**Q: Yunus Emre özdemir: Why is it called “Pre” MIC?**

**Richard Long:** Okay, it is Pre-MIC9 because this MIC will be divided into 2 stages. The first stage is the idea presentations and the workshops. So, the idea is to capture the ideas and then develop them through the workshop. So that would be the Pre-MIC9. The second phase for the full or final mission idea contest will follow-on from that and it will take those ideas which have been workshop and then develop them into a more matured and final presentation of ideas. So, it is a 2-part process.

**Maxiliem Berthet:** Right, so this is a kind of bridge to get expertise, refine the design and then present something fantastic for the MIC9.

**Richard Long:** Exactly. So, in South Africa, these ideas and abstracts that the papers will be presented and those ideas will be shared in a workshop session between other mission idea contest, contestants and candidates as well as experts from industry or academia and then with from the back of that there will be the development of ideas and the maturing of them and the development which can then be moved forward into the final presentation of MIC9.

...

**Q: Ying Liao: Is there any networking events for those who are interested in joining MIC9? (Especially for those who have ideas but find it difficult to make a team.)**

**A: Richard Long:** This is a very good point. I will have to take that question away and come back with an answer but you have got your regional coordinators and various chapters of UNISEC but of course, if you don't have that access, then it can make it somewhat challenging. What I could propose that we could do is hold some intermediate sessions which could be open for everyone like an online kind of this discussion opportunity or presentation to provide some more information and some Q&A sessions could be done in the coming weeks perhaps. So, if you do have a question like that, what I do is invite you. Please send us an e-mail to the UNISEC and MIC Office and we will try to follow up with that.

## 7. Announcement and Acknowledgment

Haruka Yasuda, UNISEC-Global



*Pictured: Yasuda-san announcing the latest updates from UNISEC-Global*

### Highlights:

- **Video Message of New Point of Contact:**
  - UNISEC – Belgium: Dr. Ir. Jurgen Vanhamel KU Leuven
    - Linked with TU Delft in Netherlands and KU Leuven
    - Bachelor degree in Mathematics, Physics and Economics,
    - Masters in engineering and Electronics
    - PhD related to Space Electronics
    - Worked for ESA missions; starting off with Picasso CubeSat Mission
    - System Engineer for Altius, PM of VenSpec-H
    - Focus on atmospheric monitoring, RF and antenna system
    - Teaches telecommunication and transmission, mentor projects
- **The 9th Mission Idea Contest (Preliminary Workshop)**
  - The MIC9 theme is “Lunar Mission”
    - Category A: Lunar Orbit CubeSat Mission (LOCM)



- Category B: Lunar Surface Rover Mission (LSRM)
- Requirements can be downloaded at PreMIC9
- Website: <https://www.spacemic.net/>
- Important Dates:
  - **Abstract Submission Due: July 24,2024**
  - Notification: September 10, 2024
  - Final Presentation: November 27, 2024 (South Africa)
- Contact: [info@spacemic.net](mailto:info@spacemic.net)
  
- **Launch Opportunity: J-Cube**
  - Special Discounted Launch opportunities
  - 1U, 2U, 3U, deployment from International Space Station
  - Collaborate with UNISEC-Japan's University
  - Technical support will be provided
  - Contact: [info-jcube@unisec.jp](mailto:info-jcube@unisec.jp), <http://unisec.jp/serviceen/j-cube>
  
- **Next Virtual Meeting**
  - Date: April 20, 2024
  - Host: UNISEC-Mexico
  - Virtual UNISEC-Global Meetings take place on the third Saturday almost every month

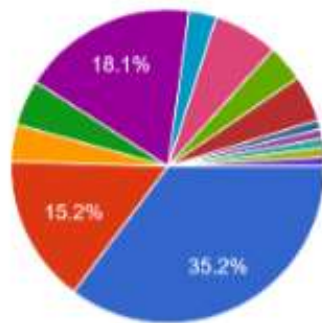
## 8. Participant Statistics

105 participants registered from 28 countries and regions for the 42<sup>nd</sup> Virtual UNISEC-Global Meeting.

Country/Region	Number of registrations	Country/Region	Number of registrations
Argentina	1	Mexico	1
Australia	1	Nepal	2
Bangladesh	2	Netherlands	2
Bulgaria	2	Paraguay	1
Burkina Faso	2	Philippines	3
Chile	2	Portugal	1
Colombia	16	Romania	2
Dominican Republic	1	Russia	1
Egypt	3	Spain	2
India	28	Taiwan	5
Indonesia	1	Thailand	4
Italy	1	Turkey	6
Japan	13	UK	2

### Student or professional?

105 responses

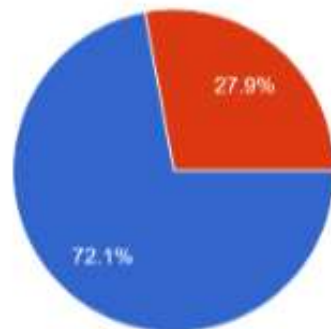


- Student (undergraduate)
- Student (master)
- Student (PhD candidate)
- Student (other)
- Professional (university)
- Professional (government, space age...)
- Professional (private company)
- Professional (NGO)

▲ 1/2 ▼

### Have you participated in the UNISEC-Global Meeting previously?

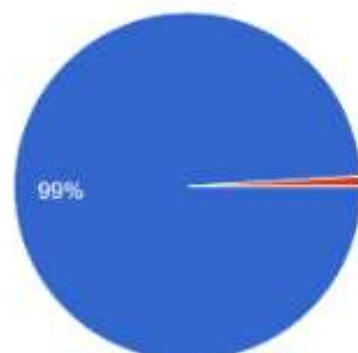
104 responses



- Yes
- No

### Are you interested in activities of UNISON-Global ?

102 responses



- Yes
- No

## UNISEC-Global Social network accounts



@unisecglobal  
<https://www.facebook.com/unisecglobal/>



@unisec\_global  
[https://www.instagram.com/unisec\\_japan/](https://www.instagram.com/unisec_japan/)



<https://www.linkedin.com/groups/8982613/>

Thank you