

MOON VILLAGE ASSOCIATION

ANNUAL REPORT

2023





www.moonvillageassociation.org

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THE MOON VILLAGE ASSOCIATION

ABOUT

The Moon Village Association (MVA) is a non-governmental organization, registered in 2017 in Vienna, which aims to promote international collaboration in the exploration and utilization of the Moon. MVA fosters cooperation with specific activities between governments, space agencies, commercial space entities, and academia to advance humanity's presence on the Moon. Its goal is the creation of a global forum for stakeholders interested in the development of the Moon Village, a Lunar Community open to stakeholders involved in peaceful Lunar Exploration and Utilization. MVA is creating international, national, and regional networks to engage civil society around the world.

LETTER FROM THE PRESIDENT



**GIUSEPPE
REIBALDI**

MVA President

MVA is a unique organization bringing together participants from 57 countries promoting lunar coordination and cooperation in all relevant fields from economic, technical, governance, educational and cultural and more. MVA is permanent observer at the United Nations Committee on the Peaceful Use of Outer Space (COPUOS) since 2019 and in this capacity informs regularly the Delegations about its activities.

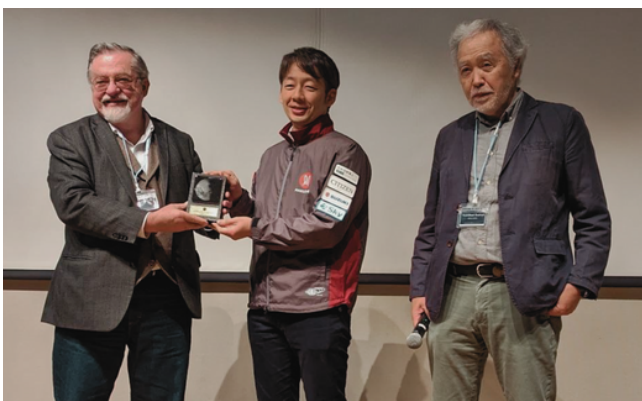
The goal of this annual report is to present these activities and foster further cooperation and coordination using them as incubators of future activities. Lunar Exploration and Utilization is for all Humanity and the participation of developing countries is one of the priorities of MVA. Many of the activities described are themselves platforms created to multiply the effectiveness of the cooperation in specific fields like Lunar Governance with the Global Expert Group on Sustainable Lunar Activities (GEGSLA) and the International Mood Day (IMD) for the civil society. The activities are carried out with the financial support of individuals and institutional members, as well as sponsors.



7th GLOBAL MOON VILLAGE WORKSHOP & SYMPOSIUM

The 2023 MVA Workshop & Symposium was held under the support of the Kurashiki City, MASC (Mizushima Aerospace Cluster), Universities of Okayama, Tottori & Kyoto, SUHPS (Science Union for Human Planetary Habitation in Space) and JAXA. It took place on December 6-10, 2023 in Kurashiki and Tottori, Japan, and involved the participation of 208 participants and 30 sponsors from in and outside Japan. Two daily sessions took place in Kurashiki on December 7 and 8, and on December 9, two outreach events in Kurashiki and Okayama, also open to the general public of these cities. On December 9, a special symposium was held in Tottori, and outreach events were conducted there. The Workshop was well attended by multiple stakeholders, from established industry participants, to academia, space agencies and the general public.

MVA MOON MARKET ANNUAL AWARD



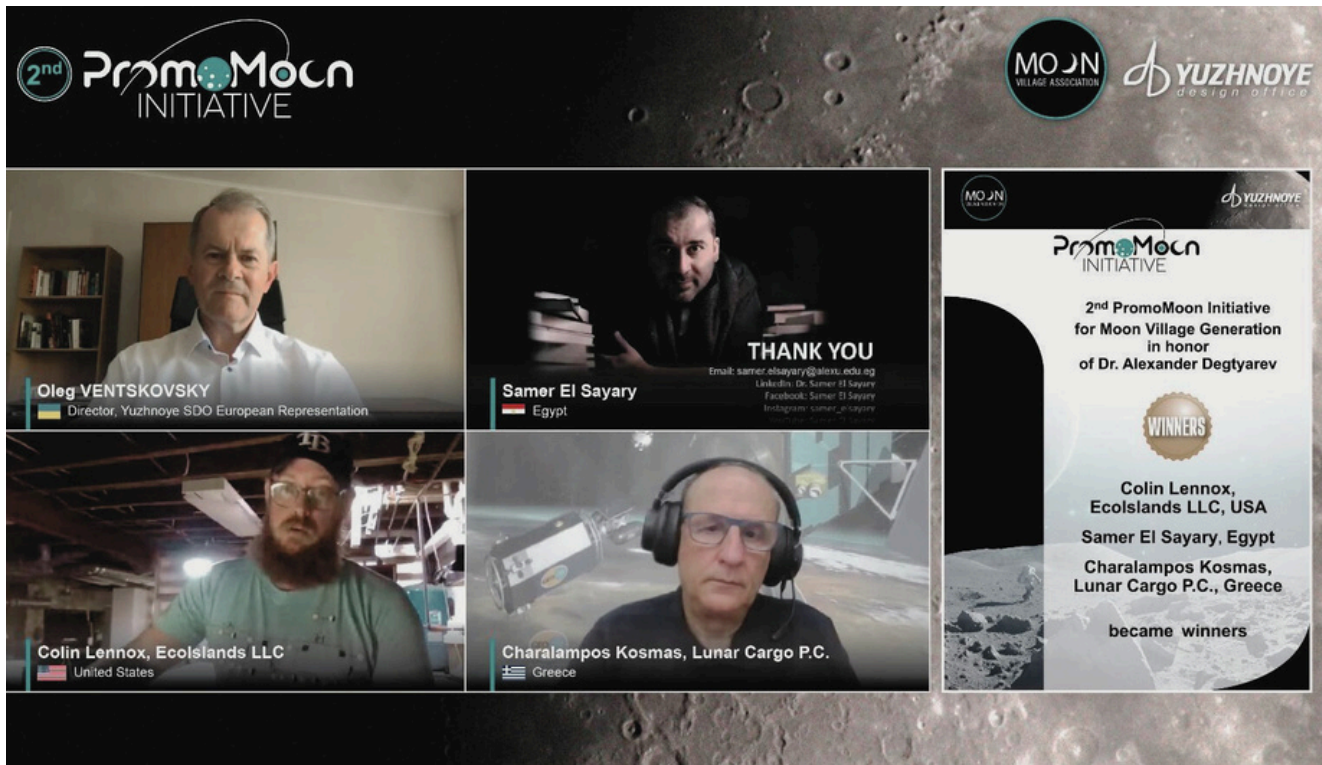
During the W&S, the first MVA Moon Market Annual Award for transportation was awarded to ispace, inc., for achieving with the Hakuto-R lunar lander, 8 of 10 lunar mission objectives and demonstrating outstanding prowess in fundraising for lunar infrastructure development.

[W&S Recordings](#)

LINKS

[Moon Market Annual Award
press release](#)

2nd PROMOMOON INITIATIVE



The Moon Village Association and the leading Ukrainian space engineering company Yuzhnoye State Design Office are organizing annually the PromoMoon Initiative for Moon Village Generation in honor of Dr. Alexander Degtyarev. The Initiative inspires Moon Village Generation to develop ideas for future sustainable lunar activities and provides an opportunity to advance their engineering maturity level. An international team of leading space experts select the best technical concepts and the winners receive support for their research through mentorship and Q&A sessions.

In 2023, the 2nd Year of this initiative, nine teams from six countries around the world participated, out of which three teams won the competition and proceeded to receive mentorship from a team of experts. On July 18, 2023, as part of the International Moon Day 2023 celebrations, the PromoMoon Initiative's award and closing ceremony took place. The ceremony was broadcast live from Ukraine on the MVA's YouTube channel, and featured members of the Moon Village Association's board of directors, representatives from Yuzhnoye SDO, and the winning teams themselves.

The 2nd PromoMoon Initiative Closing ceremony can be watched [here](#).

ISRO-MVA CHANDRAYAAN-3 OUTREACH ACTIVITIES

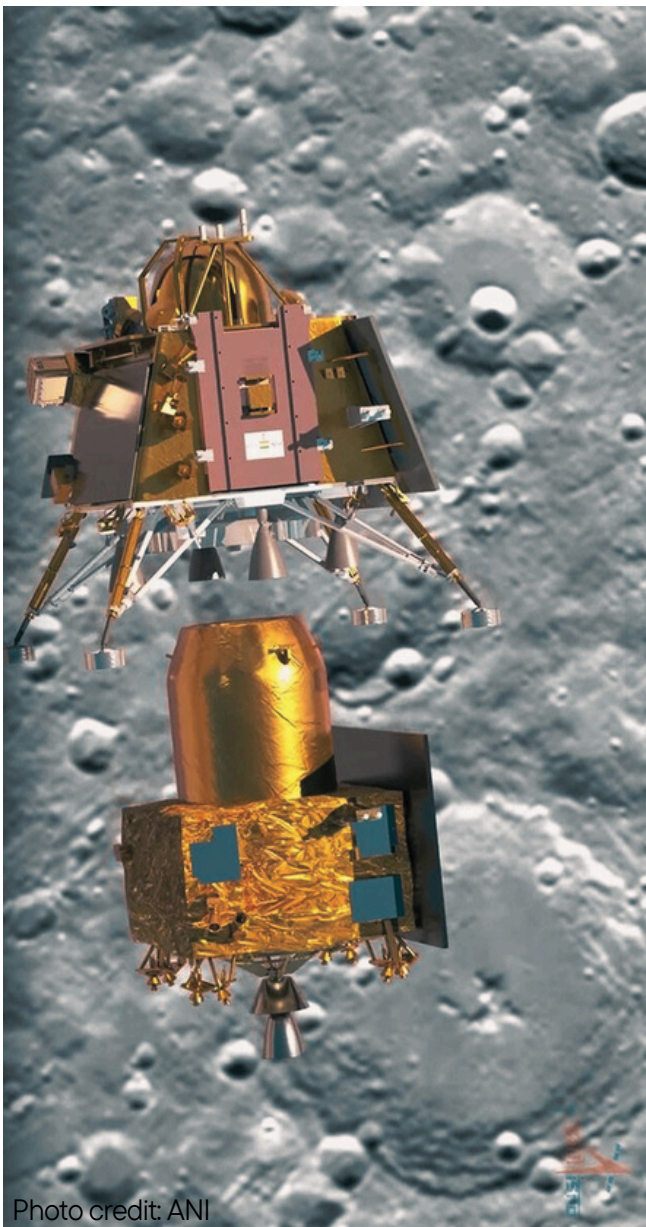


Photo credit: ANI

In April 2023, MVA and the Indian Space Research Organisation (ISRO) launched a campaign of outreach activities, before the launch and after the landing Chandayaan-3 on the Moon. The common goal of these activities was to increase the impact of ISRO lunar program on a global scale and foster further international cooperation.

The two organizations worked together to focus on the global aspect of lunar exploration and identify, communicate and encourage the youth to focus on the mutual benefits that the entire world gets at every lunar mission. Thus, two major activities were launched: the Chandrayaan-3 Video Competition and a series of two webinars featuring ISRO scientists. Chandrayaan-3 lunar lander successfully landed on the lunar surface on 23 August 2023, this made India the 4th country to achieve this feat.

VIDEO COMPETITION



MVA, and in association with ISRO, honoring the memory of the late. Dr. S. Ramakrishnan, Former Director of VSSC, ISRO, and founding member of MVA, organized the Chandrayaan-3 Video Competition in April 2023, a groundbreaking initiative to engage young minds with space exploration. The topic was the “Importance of Chandrayaan-3 Mission for India and the Global Moon Exploration and Settlement”, and called for participation of students in two age categories (13-17 and 18-21). With a resounding response from across the world, the competition saw a remarkable 300 submissions, reflecting the enthusiasm and creativity of aspiring space enthusiasts. The quality of submissions and the enthusiasm displayed by the participants underscore the potential that our youth hold in shaping the future of space exploration. The results of the video competition, were announced on the day of the launch.

MVA-ISRO WEBINAR SERIES



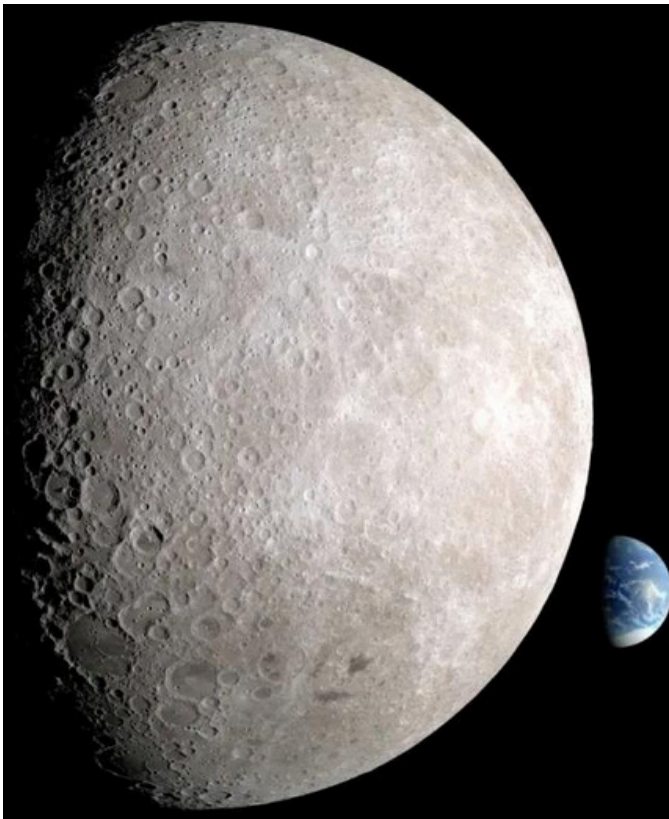
MVA and ISRO organized a series of webinars, as part of the Chandrayaan-3 outreach activities. On July 3, 2023, 10 days before the launch, the first webinar “Journey to the Unknown: Scientific Quest for Chandrayaan-3 at the Moon” was held. The webinar featured Smt. S. Megala, the Deputy Director for Lunar Science and Exploration at the ISRO Science Programme Office. The second webinar, “Challenges of Lunar Landing” took place following the successful lunar landing and featured Mr. Senthil Kumar G, Deputy Project Director of Chandrayaan-3 and Chnadrayaan-2 missions.

THE MVA WORKING GROUPS

The Moon Village Association hosts several Working Groups, each focusing on different aspects of sustainable lunar exploration and utilization.

During the MVA W&S in Japan the following WGs provided a video presentation for their 2023 activities:

- * Exploration Analogues WG, *Rob Mueller*
- * Cultural Considerations WG, *Remo Rapetti*
- * PESC Project, *Ghanim Alotaibi*
- * Towards a Moon Village Generation, *Surender Ponnalagar*
- * Lunar Commerce & Economics WG, *Christophe Bosquillon*



LINK

[WG Presentations 2023](#)





ADAPTIVE GOVERNANCE

CO-CHAIRS: GIUSEPPE REIBALDI, MARK SUNDAHL

The Adaptive Governance WG's main goal is to complement GEGSLA and MVA activities at the UN-COPUOS as well as initiate new projects. In 2023, the activities of the working group included discussions and outreach related to GEGSLA activities, participation in the UN-COPUOS Legal Subcommittee (LSC) and the Space Resources Working Group, and involvement in the Summit of the Future. Additionally, there was continued work on the Benefit Sharing Project, which included organizing open floor discussions with African countries, as well as organize IMD Global Events.



CULTURAL CONSIDERATIONS

CO-CHAIRS: REMO RAPETTI, ARTHUR WOODS

The Cultural Considerations WG aims at providing a forum for the discussion of cultural implications of a steady return of humanity to the surface of the Moon. This return is expected to bring about a number of cultural questions spanning philosophical and religious issues, new forms of societal organization, and different ways of conceiving and performing arts. In 2023, the Cultural Considerations conducted five webinars, three of which centered around the theme of the Deep Space Effect, [“The deep space effect and its influence on human society”](#) (with Frank White, Annalisa Nezami and Marie-Luise Heuser) in collaboration with Space Renaissance International on February 8, 2023, [“The Deep Space Effect, Culture And The Human Space Program”](#) (with Frank White) on March 22, 2023 and [“Deep space: awe or fright?”](#) (with Seana I. Weibel and Christopher Cokinos) on June 6, 2023. Other webinars were [“Space Design For A New Extra-Terrestrial Human Being”](#) (with Annalisa Dominoni & Benedetto Quaquaro) and [“Moon rocks: Study and inspiration”](#) (with Erika Blumenfeld, Ian Crawford and Lisa Pettibone). Additionally, Co-chair Remo Rapetti participated in external activities including webinars and presentations at the MVA Italia Summer School. Co-chair Arthur Woods also presented papers and took part in webinars related to space exploration topics.



EXPLORATION ANALOGUES

CO-CHAIRS: ROB MUELLER, KOOROSH ARAGHI

The Exploration Analogues Working Group organized a Tele-Robotics Collaboration Event on July 20, 2023, for the second year, in support of International Moon Day. Three partners provided unmanned ground vehicles (robots for tele-operations): Mission Control, Inc., Neurospace GmbH, and PISCES University of Hawaii. Participants included student groups from around the world.



LUNAR HUMAN PHYSIOLOGY & BIOLOGY

CHAIR: THAIS RUSSOMANO

In late 2023, the Lunar Human Physiology and Biology WG was created, and it aims to promote and highlight initiatives centered on the exploration of the Moon by humans, which is in alignment with the Artemis project that will see humans return to the Moon. This will be achieved through educational and outreach activities based on presentations and discussions with experts in areas related to the main theme of the WG, as well as with the establishment of research projects.



ARCHITECTURAL CONCEPTS

CO-CHAIRS: JOHN MANKINS, INATANI YOSHIFUMI

The Working Group continued to elaborate the OASIS 2045 concept and published a paper at the IAC 2023 in Baku. The emphasis of the paper was mainly on the power requirements of the OASIS 2045.



LUNAR COMMERCE & ECONOMICS

CHAIR: CHRISTOPHE BOSQUILLON, LARI CUJKO

The main activities of the Lunar Commerce and Economics (LCE) Working Group are related to the production of a “Lunar Commerce Portfolio” (LCP), a biannual publication, which describes the commercial potential of Lunar activities, produced by a dedicated group of volunteer analysts, without bias, using fully-referenced objective international data sources, and agreed by consensus to be the best, commonly agreed assessment of Lunar commercial potential. The first issue of the LCP was published in 2022 and the next issue will be published in 2024 (currently in finalization stage). The LCE WG also oversees the Moon Markets Award, to organizations that reached major achievements during the year by supporting the creation of the Moon Market. The Inaugural Award was delivered to the Japanese company ispace, inc. at the 2023 MVA W&S in Japan.



TOWARDS A MOON VILLAGE GENERATION

CO-CHAIRS: PAVITHRA MANGAIPATHY, BERNADETTE DETERA

The TMVG WG organized the Moon Village Association Hackathon, a global, online remote event for engineering students and young professionals to solve challenges in a future Moon base. In 2023, the theme was “AI and robots”. Participants were required to design a robot with built-in AI functions for operations on the lunar surface. The event took place in a shared 3D environment, and involved 30 teams from 10 countries.



THE MVA PROJECTS



The Moon Village association hosts at the moment three Projects, the International Moon Day, the Global Expert Group on Sustainable Lunar Activities and the Participation of Emerging Space Countries Project.

These Projects, while operating under the coordination and support of the MVA, they have a separate leadership, and if necessary, their own budget and Sponsors.

The Projects release their own separate Annual Reports.

INTERNATIONAL MOON DAY



The International Moon Day, an annual, proposed by MVA and proclaimed by the United Nations in 2021, was celebrated for the second time on July 20, 2023. On that day, the IMD 2023 Main Event took place in Gwacheon, South Korea. During the week before and after, 47 IMD Global Events, across 42 countries took place

This project has its own budget and sponsor.

LINK

[IMD Annual Report 2023](#)



IMD Main Event

1

IMD Global Events

47

Countries Participating

42



GLOBAL EXPERT GROUP ON SUSTAINABLE LUNAR ACTIVITIES

In January 2023, the Global Expert Group on Sustainable Lunar Activities (GEGSLA) started its Operational Phase, in order to promote consideration and implementation of the Recommended Framework produced by the Group, with special focus on discussions conducted within the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) as well as exchange information on the ongoing lunar missions

This project has its own budget and sponsors.

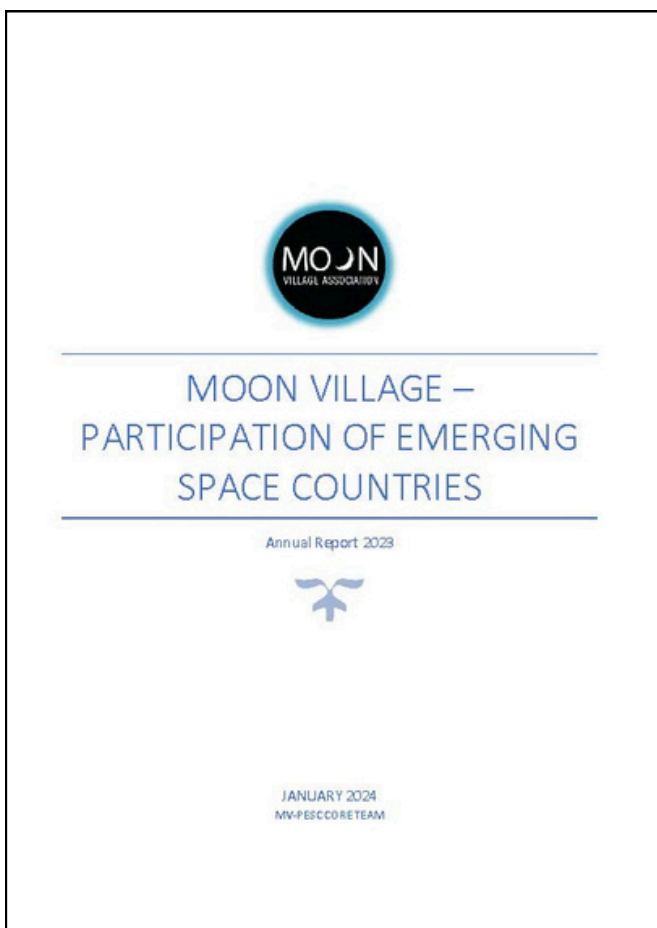


LINK

[GEGSLA Annual Report 2023](#)



PARTICIPATION OF EMERGING SPACE COUNTRIES PROJECT



The Participation of Emerging Space Countries (PESC) Project, established in 2020, is on track in its mission to be an enabler for Emerging Space Countries. Today, the MV-PESC project is the largest bottom-up active moon exploration community for Emerging Space Countries in the world. The key project deliverables are roadmaps from local teams in each participating country. The role of the PESC Project is to provide mentorship, advise, partnerships and visibility to each local team's roadmap activities. Each local team is assigned a team leader to provide guidance throughout the lifecycle of a roadmap.

For updates on the Project's progress and a summary on each participating countries Roadmap, read the Annual Report.

LINK

[PESC Annual Report 2023](#)



NEW PARTNERSHIPS

In 2023 several Memoranda of Understanding (MoUs) were signed to cooperate with lunar stakeholders.

VERNEWELL GROUP

In September 2023, MVA signed an MoU with Vernewell Group, a UAE based Innovation Research and Consultancy firm focusing on space and deep-tech activities. The goal is to work together to pursue the highest standards for outreach and education and promote the international participation of space stakeholders into research in all subjects related to the exploration, development, and use of space.

KEPLER SPACE UNIVERSITY (KSU)

In November 2023, MVA signed an MoU with the Kepler Space Institute (KSI), in order to provide a framework for collaboration and cooperation between the two organizations, specifically related to educational matters.



PLANETARY TRANSPORTATION SYSTEMS (PTS)

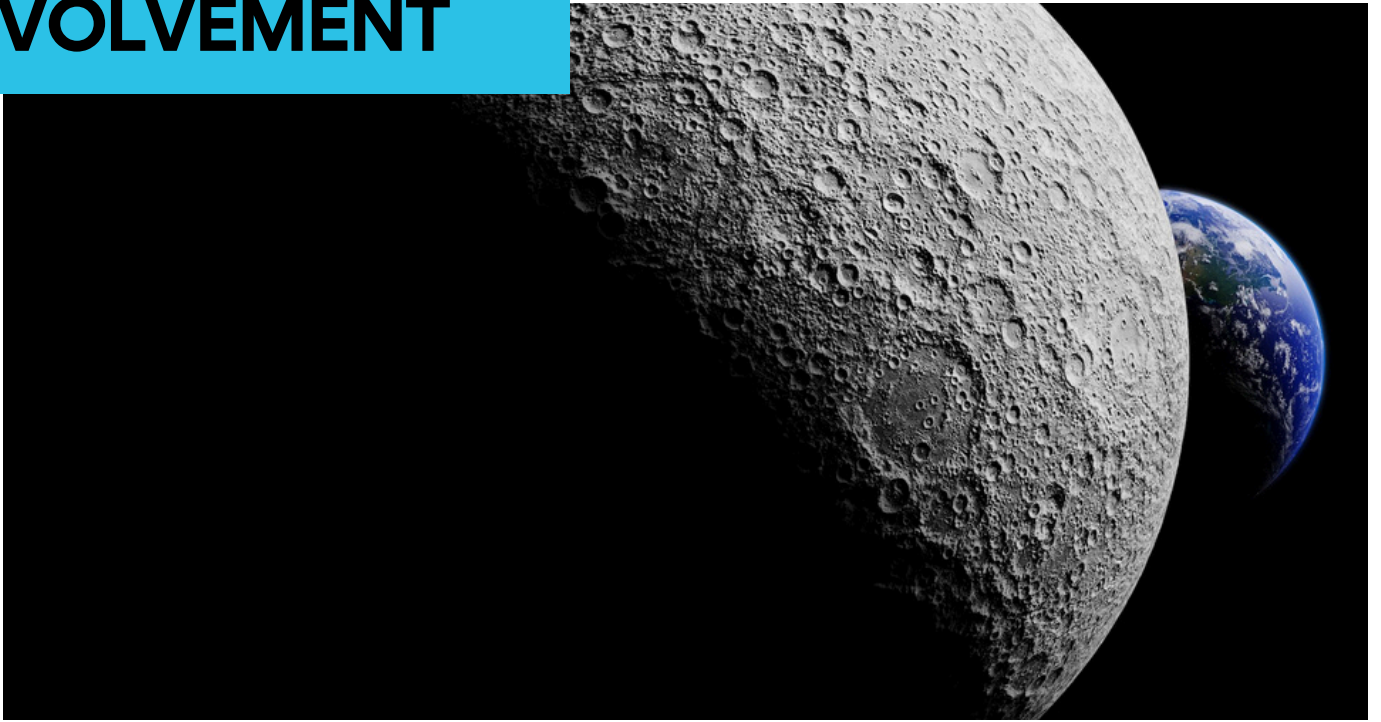
MVA has signed an MoU with PTS is a Germany based new-space firm whose aim is to bring down the cost of space exploration and democratize access to Space.

THE HUMAN SPACE PROGRAM (HSP)

In November 2023, MVA partnered with HSP, an international initiative focusing on the broader implications of space exploration. HSP, through its activity, aims to overcome the dichotomy between environmental and space interests, demonstrating how space initiatives can be aligned with environmental sustainability goals. This cooperation emphasizes the interconnectedness of space and Earth's environmental concerns, bridging the divide between environmentalists and space enthusiasts.

MOON STATION 2050- HARBIN INSTITUTE OF TECHNOLOGY & CHINESE SOCIETY OF ASTRONAUTICS

MVA, Harbin Institute of Technology (HIT), and the Chinese Society of Astronautics (CSA) have signed an MoU for partnering to organize the “Moon Station 2050” Global Innovation Competition. The culmination of the [Moon Station 2050 Global Innovation Competition](#) will be marked by an Award Ceremony, held in conjunction with the International Moon Day (IMD) 2024 Main Event. This dual celebration is scheduled to take place on July 20 at the Harbin Institute of Technology in Harbin, China.



UNITED NATIONS INVOLVEMENT

MVA is a permanent Observer of COPUOS and in this capacity participate actively to all relevant meeting of its committees.

UN-COPUOS SCIENTIFIC AND TECHNICAL SUBCOMMITTEE (STSC) | FEBRUARY

- * During the 2023 UN-COPUOS STSC, MVA organized a side event on February 9, titled [“The Recommended Framework and Key elements for Peaceful and Sustainable Lunar Activities”](#).
- * On February 7, a Technical Session Presentation was delivered, titled [“The Lunar Commerce Portfolio”](#)
- * A Conference Room Paper was presented, titled [“Report of the Moon Village Association on the Global Expert Group on Sustainable Lunar Activities – Status/Deliverables/Plan”](#)

UN-COPUOS LEGAL SUBCOMMITTEE (LSC) | MARCH

- * During the 2023 UN-COPUOS LSC, MVA organized a side event on March 22, titled [“The Recommended Framework and Key elements for Peaceful and Sustainable Lunar Activities”](#).
- * A Conference Room Paper was presented, titled [“Report of the Moon Village Association on the Global Expert Group on Sustainable Lunar Activities – Status/Deliverables/Plan”](#)

UN-COPUOS 66TH SESSION | JUNE

- * MVA organized a side event, in cooperation with Secure World Foundation, Open Lunar Foundation and The Hague Institute for Global Justice. The side event was a round table discussion, titled [“International Lunar Coordination: A round Table”](#).
- * A Technical Presentation was delivered, titled “The first International Moon Day Results and outlook 2023”
- * A Conference Room Paper was presented, including [“Report of the Moon Village Association on the Global Expert Group on Sustainable Lunar Activities – Status/Deliverables/Plan”](#) as well “Report of the Moon Village Association on the International Moon Day 2022 and outlook for 2023”

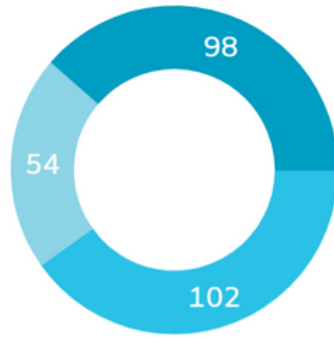
UN SCIENCE SUMMIT | SEPTEMBER

MVA organized a GEGSLA Side Event on September 20, titled [“Recommended Framework for Sustainable Lunar Activities – Potential Contribution to the UN SDGs and the Summit for the Future”](#)



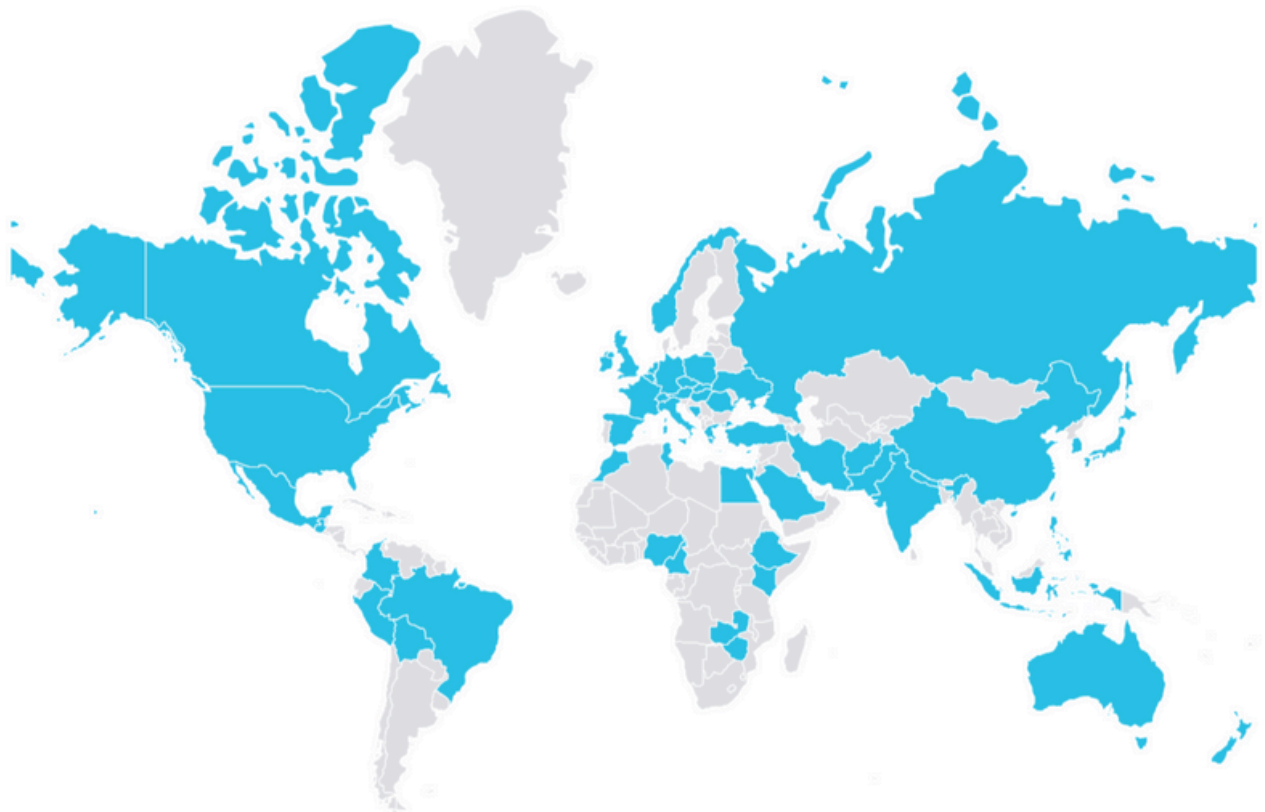
INDIVIDUAL MEMBERS

- * 254 Individual Members
- * 57 Countries
- * 156 Full Members
- * 98 Associate Members



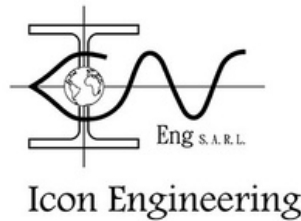
■ Full 102
■ Student / Retiree 54
■ Associate 98

MEMBER DISTRIBUTION



INSTITUTIONAL MEMBERS

MVA is proud to have 22 Institutional Members. Institutional members come from large, medium and small companies as well as Universities and NGOs.

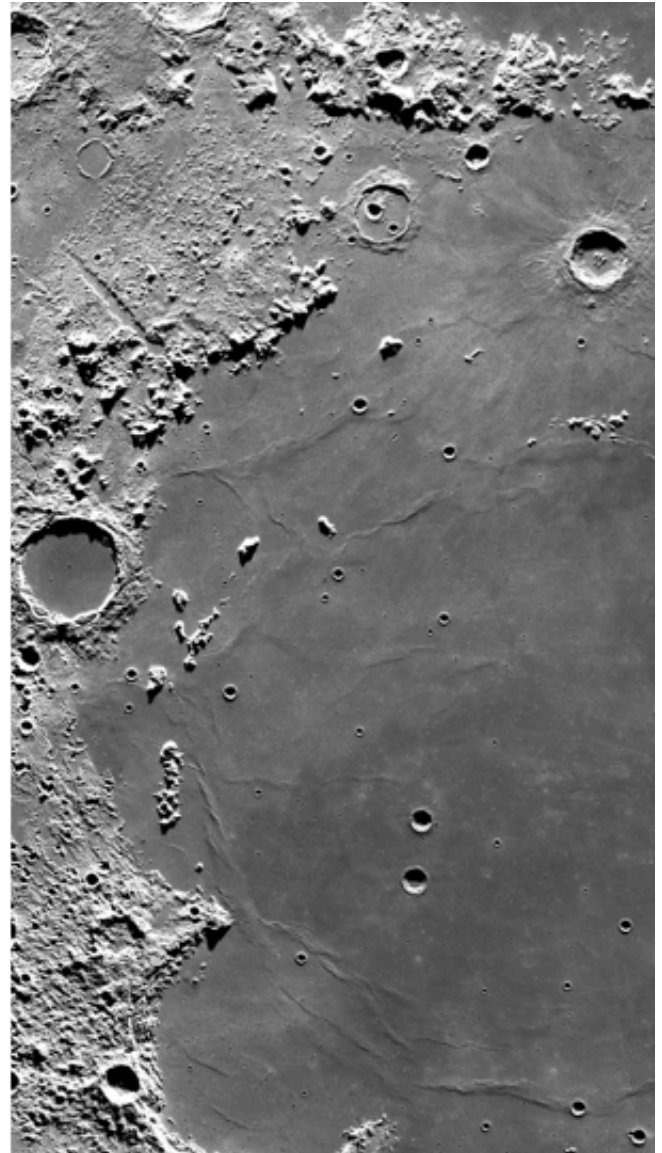


As we look ahead to 2024 and beyond, the Moon Village Association is poised to continue its pivotal role in fostering international collaboration for sustainable lunar exploration.

8th GLOBAL MOON VILLAGE WORKSHOP & SYMPOSIUM

In 2024, the 8th Global Moon Village Workshop & Symposium is going to Luxembourg, as part of the Luxembourg Space Agency 's Luxembourg Space Week!

Join us on December 2-3 at the European Convention Centre Luxembourg (ECCL). Stay tuned for more information!



INTERNATIONAL MOON DAY 2024

The International Moon Day 2024 Main Event, will take place on July 20, 2024 in Harbin, China. The event will be co-organized with the Harbin Institute of Technology and the Chinese Society of Astronautics.

The Call for proposals for organizing an IMD 2024 Global Event is open. If you are interested in organizing IMD events in your country, see more info at www.internationalmoonday.org

**GET
INVOLVED**

JOIN US IN BUILDING THE MOON VILLAGE

MVA is dedicated to creating a global collaborative effort to explore and develop the Moon for the benefit of all humanity. We invite you to be a part of this exciting journey by becoming a member, subscribing to our newsletter, or sponsoring our initiatives.

*** BECOME A MEMBER**

Joining the MVA as a member provides you with a unique opportunity to be at the forefront of lunar exploration and development.

[JOIN](#)

*** SUBSCRIBE TO OUR NEWSLETTER**

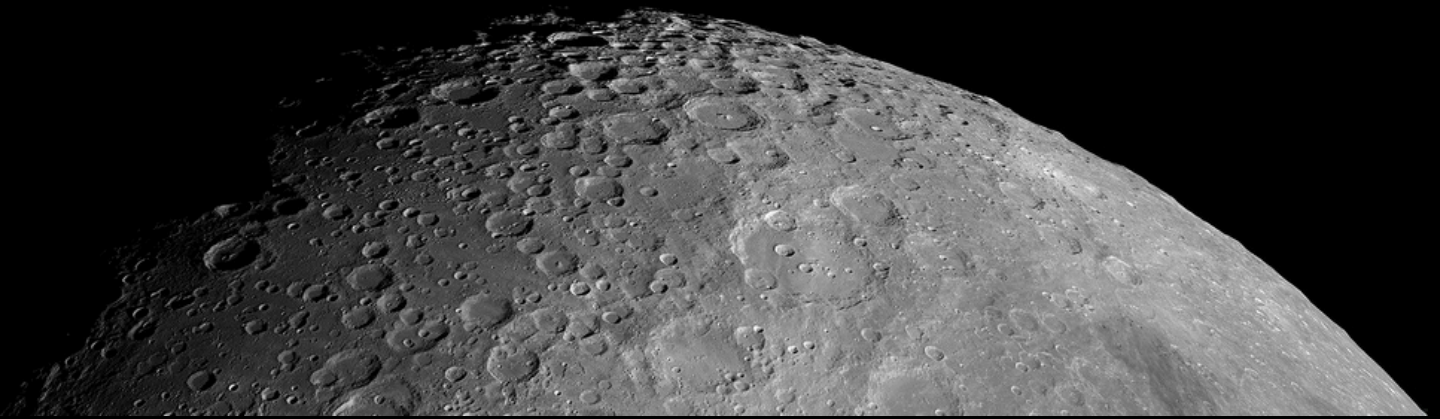
Stay connected with the Moon Village Association and get the latest updates on our activities, projects, and partnerships by subscribing to our newsletter.

[SUBSCRIBE](#)

MVA will continue to work with all its committed team to foster cooperation between countries using its activities described above.

MVA is confident that 2024 will be a year of significant progress and achievement. We invite all our Partners, Members, and the global community to join us on this journey as we continue to explore, learn, and inspire!

AD LUNA!



CONTACT US



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