IAC 2025 Next Generation Plenary Proposal

### 76th INTERNATIONAL ASTRONAUTICAL CONGRESS

Sydney, Australia
29 September - 03 October 2025
Students and Young Professionals, We Want Your Input!

Apply to be part of one of the NextGen Plenary panels during the International Astronautical Congress (IAC) 2025, in Sydney, Australia. Come and showcase your ideas and work in front of an audience of senior space leaders in government, industry and academia! The two proposed panels will cover these topics:

- 1. Resource Responsibility lands, oceans, and space
- 2. Designing the Future of Human Spaceflight

## The NextGen Plenary - An Overview

The International Astronautical Congress (IAC), the premiere international space event, displays successes and trends of the sector through its Plenary Programme with proposals selected via competition. The NextGen Plenary (NGP) gives students and young professionals from around the world the opportunity to showcase their work and projects in front of the international space community. The plenary is a moderated conversation between the panelists and the esteemed moderator. This is an exciting opportunity that you do not want to miss!

## How does the NGP Process work?

- This current document is a call for applicants to be selected as panelists for one of the two
  plenary proposals, being drafted by the NGP Steering Committee for submission to the IAF.
- Panelists will be selected via a global competitive process (see Application Process below) by subject matter experts to identify the best candidates and showcase the diversity of successful efforts related to the two proposal topics.
- Though both plenaries are still in the application stage, if approved, one of the proposed panels will be selected by the IAF as the Next Generation Plenary to take place during the week of 29 September 03 October 2025, in Sydney, Australia at IAC 2025. We will be notified of the selected topic following the IAF Spring Meetings in March 2025.
- The Next Generation Plenary Steering Committee is committed to the success of both our
  proposed panels and in the event the plenary application process for either is unsuccessful, we
  will find an appropriate alternative venue for the panels during IAC 2025, as we have done since
  IAC 2019.

# The 2025 NextGen Plenary Topics

### TOPIC 1 - Resource Responsibility: lands, oceans, and space

Humanity's growth and survival requires the use of naturally occurring resources. Thoughtful, mindful, and responsible use of these resources can lead to sustainable growth and survival. There are many lessons humanity has learned over generations regarding resource utilization and the impacts of how they are utilized.

This session aims to showcase young professionals and emerging leaders who are actively involved in space initiatives related to resource utilization, both the use of space to improve resource utilization on Earth and bringing to space the lessons learned from resource utilization on Earth.

This session asks you to share your experiences related to:

- Preserving life: organic resource management (e.g., space-based data in supporting sustainability regarding fishing, agriculture, forestry, and wildlife)
- Extending Earth resource management to space (e.g., sustainable mining regulations, use of Arctic circle / Antarctic and international waters)
- Future of space resources (e.g., analysis of valuable minerals in space, lunar water ice, asteroid mining, solar energy)

This proposed Next Generation Plenary will especially focus on examples of how space can be an enabler for global sustainability practices. And also how lessons learned from centuries and millennia on Earth can be brought into space. We would love to share your work with the wider community, showcasing you and your ideas on the 2025 NextGen Plenary stage—please consider applying!

### **QUALIFICATION FOR TOPIC 1:**

### The plenary serves to:

- Highlight significant contributions of young professionals who are involved in sustainable utilization
  of resources, or who are pushing space companies and organizations to work on sustainability
  practices.
- Showcase unique ways in which space can be used for, or serve as platforms for, improving the
  utilization of resources on Earth by making practice more sustainable and responsible.
- Explore the future of space resources and what sustainable developments may evolve as human presence in space becomes more persistent and projects further.

# Panelists will be selected who demonstrate outstanding existing contributions to one or more of the following categories:

- Researching, studying, or working in fields that are space-related and focused on sustainable and responsible utilization of resources (on Earth or in space).
- Are actively engaged with a project that aims to support space resource utilization.
- Demonstrating an impact on improving the utilization of resources by harnessing space.

### TOPIC 2 - Designing the Future of Human Spaceflight

The history of space exploration during a period of time in human history has shaped the nature of human spaceflight. As our culture evolves and new technology emerges, we are being presented with the opportunity to design the future of human spaceflight. Human spaceflight has gone on a journey that includes state-sponsored technology development, a Space Race, international collaboration, scientific exploration, and even commercial tourism. As humanity's presence in space becomes more persistent and continues to project deeper into space, we have the opportunity to share the future we wish to see.

This session aims to showcase young professionals and emerging leaders who are actively involved in human spaceflight.

This session asks you to share your experiences related to:

- New innovation enabling space architecture (e.g. 3D printing, ISRU).
- Advancements in space medicine, biology, and life support systems (e.g. microgravity aquaponics, telemedicine).
- Intentional design and inclusivity (e.g. gender-neutral/diverse architecture, inclusivity of physical differences, automation/recognition of different skin color, supporting differently abled).

This proposed Next Generation Plenary will especially focus on how we can improve life for humans in space through technology development and culture change. The plenary will also seek to hear voices from those who are interested in diversity, equity, and inclusion as it relates to accessibility of human spaceflight. We would love to share your work with the wider community, showcasing you and your ideas on the 2025 NextGen Plenary stage—please consider applying!

### **QUALIFICATION FOR TOPIC 2:**

### The plenary serves to:

- Highlight significant contributions to how young professionals who are involved in human spaceflight, including operations, technology development, and research.
- Showcase unique ways in which the next generation of space leaders are championing equity, diversity, and inclusion in human spaceflight.
- Identify aspects in which human space operations can become safer and more inclusive.

# Panelists will be selected based on the demonstration of outstanding existing contributions to one or more of the following categories:

- Researching, studying, or working in fields that are related to human spaceflight, including operations, technology development, and research.
- Are actively engaged with a project that is focused on achieving increased diversity, equity, and inclusion in human spaceflight.
- Demonstrating an operational impact on safety and inclusion of humans in space.
- Identifying novel ways in which technology development and culture change can improve human spaceflight operations.

## **Application Process**

To apply, applicants must be students or young professionals between 18 and 35 years old, as of the 1st of January 2025. Applicants cannot have participated as a panelist in a previous NGP panel.

### Round One

To take part in round one:

- Create a 30-second video telling us very briefly the project you are working on that connects to the themes of the panel, and why you should be selected to address the IAC.
- You must be on screen and must speak for the full 30 seconds.
- We will only watch/listen for 30 seconds, so be sure to not exceed this amount of time!
- Post your video to YouTube as an unlisted video (NOT private).

In addition to uploading your video, you must complete the Plenary Panelist Application by the deadline by filling out one of the two following forms (you cannot apply to both plenaries). Deadline for Round 1 submissions: 17th February 2025 (11:59pm GMT)

- 1. Topic 1: Resource Responsibility lands, oceans, and space Apply Here!
- 2. Topic 2: Designing the Future of Human Spaceflight Apply Here!

### Round Two

- We will select the Round Two subset of candidates from the above and notify all entrants in late February.
- Specific details of Round Two requirements will be sent to the candidates in the notification.
- Selected candidates for Round Two will be asked to create and post a three-minute video on YouTube as an unlisted video (NOT private).
- Deadline for Round 2 submissions: 7th April 2025 (11:59pm GMT).

## **Application Guidelines**

#### Video Details

Please record your video:

- In a high-quality audio and video format with a minimum resolution of 720p
- In a landscape orientation (horizontal)
- With limited special effects and no music: the video is about you, not your video editing skills
- Without copyrighted videos, images or music

If you are selected as a panelist, we will require the rights of your submitted videos: segments of your submissions will be used during the plenary and to promote the plenary in advance. Evaluators are looking for videos that are aligned with the theme of the plenary and that incite curiosity and interest among the viewer. Make sure to publish your video on YouTube as an unlisted video (NOT private).

### **Final Selection**

We will select the finalists from these entries based on their impact, efficacy of messaging, and relevance to the plenary topics; we also take into consideration the IAF's 3G (Geography, Gender, Generation) diversity criteria.

We will be looking for concrete descriptions of how you are actively engaged with the panel topic, and why this area is vital to your work or studies. The IAF will make the final selection of plenaries for the IAC in Sydney by the end of March. If you are selected for a panel, you will be coached on public speaking in preparation for the plenary including monthly meetings with the other panelists and moderator.

We will notify applicants of the final outcome on 21st April 2025.

## **Application Timeline**

- 17th February 2025 Round 1 Application Deadline
- 10th March 2025 Outcome Notification to Round 1 Applicants
- 7th April 2025 Submission Deadline for Round 2
- End of March 2025 Plenary Proposal Outcome announced by IAF
- 21st April 2025 Final Outcome Notification to Applicants

## **Funding your IAC2025 attendance**

Plenary participants will be responsible for finding their own sponsor(s) to cover for travel, accommodation, and conference tickets to attend IAC2025 in Sydney. In addition to the obvious sources of sponsorship – yourself, your family, employer or school, and industry contacts – we want to share with you some programs applicable for students and young professionals (typically awarded through selection processes starting in January/February 2025):

- The IAF Emerging Space Leaders Grant Programme. See <a href="http://www.iaf-grant-programme.org/">http://www.iaf-grant-programme.org/</a>
- The Space Generation Advisory Committee (SGAC) provides travel scholarship opportunities for students and young professionals to attend the Space Generation Congress (SGC) and International Astronautical Congress (IAC). The SGC event is held the weekend prior to the IAC in Sydney. Visit spacegeneration.org, and their scholarship page spacegeneration.org/scholarships for more information.
- Your national space agency and its space agency education programme. National Space Agencies provide scholarships to attend events at the IAC. You can check available scholarships here: https://iseb.space/student-sponsorship-opportunities/ or contact your national space agency. In particular, students from Europe, Japan, Korea, Canada and the United States are encouraged to contact their national space agency: ESA, JAXA, KARI, CSA and NASA respectively.
- The Future Space Leaders Foundation offers grants to students and young professionals in the United States. More information can be found at https://futurespaceleaders.org/#grant.

# **Contact**

If you have any questions, please do not hesitate to contact <a href="mailto:nextgenplenary.iaf@gmail.com">nextgenplenary.iaf@gmail.com</a>.