

IAC 2021 Next Generation Plenary Proposal

Space for Bending the Global Warming Curve and Protecting the Biosphere

72nd INTERNATIONAL ASTRONAUTICAL CONGRESS

Dubai, UAE

25 - 29 October 2021

Students and Young Professionals, We Want Your Input!

We are living in an era whereby human activities have a dominant and defining influence on the environment, sometimes termed the “anthropogenic era.” . Global warming, climate change, and the decrease in biodiversity are the prominent existential issues of our time. With rising sea levels increasing the risk of flooding and with shifting weather patterns and human development threatening the biosphere, the impact of climate change and biodiversity reduction is unprecedented in scale.

Global temperature and other key indicators of climate and biodiversity change, such as weather patterns, sea level, terrain, atmospheric pollution, and ecosystem health, are monitored through different space-based solutions which start with the unique vantage point of satellites. This year, our Next Generation Plenary will focus on how students and young professionals are utilizing space technologies to combat global warming and protect the biosphere. We want to know how you are participating in mitigating the effects of climate and biodiversity change through your work or research in the space sector.

Climate change is captured in the United Nations Sustainable Development Goals (SDGs) through SDG 13, Climate Action, which calls for ‘urgent action to combat climate change and its impacts,’ including those on biodiversity. According to the UN, 2019 was the second warmest year on record and the end of the warmest decade (2010-2019) ever recorded. We are looking for students and young professionals in the space sector who are actively involved in any aspect of characterizing and mitigating the effects of climate change to join our plenary and to share their expertise on this topic to a wide audience.

Are you an entrepreneur who's utilizing space technologies to tackle issues faced due to climate change? Are you a student conducting research to discover the effects of climate change or developing cutting edge technology? Perhaps you're a young professional working for a government agency or private company on a climate change initiative and you want to share your unique perspective on how the industry is working on this global issue? We want to know how space technologies have enabled you to protect the biosphere by combating climate change and protecting biodiversity, and we encourage you to apply today!

We want your input now! We invite you to share your ideas in a plenary panel with an audience of senior space leaders in government, industry and academia at the International Astronautical Congress in Dubai 25-29 October 2021!

This is a wonderful opportunity for you to address and influence the international space community.

Though this plenary is still in the application stages, if approved, it will take place during the week of 25-29 October 2021 in Dubai, at the International Astronautical Congress (IAC) (www.iac2021.org). We will be notified of its selection outcome following the IAF Spring Meetings in March 2021. The Next Generation Plenary Steering Committee is committed to the success of our proposed panels and will therefore find an appropriate venue for this panel during IAC2021 in the event its plenary application process is unsuccessful.

The participants will engage in a panel discussion with other students and young professionals from around the world and interact with the audience while discussing their efforts in utilizing space to curb global warming and protect our biosphere. The plenary will be moderated in a format similar to a talk show, interweaving clips from the panellists' audition videos with questions and comments from the moderator, other panellists, and the audience. The video clips will be used to enhance the audience's understanding of the ideas of the plenary participants. This is an exciting opportunity that you do not want to miss!

This sounds great! What do I need to do to participate?

Panelists will be selected via a global competitive process to identify the best candidates and showcase the diversity of successful efforts in the area of leveraging space technologies for climate change. Their contributions to the space community will be assessed by a group of subject matter experts.

QUALIFICATION:

As the impacts of climate change alter our lives and the environment drastically, it is imperative to showcase the efforts of the next generation in leveraging space to mitigate the effects of global warming.

The plenary serves to:

- Highlight significant contributions from the next generation of students and space professionals who participate in activities related to climate change characterization and mitigation.
- Showcase unique ways in which students and young professionals have leveraged space technologies to innovate in addressing the impacts of climate change.

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

- Researching/studying the impact of climate change in a space-related context
- Utilizing space technologies in their current work or studies geared towards climate change effects and mitigation
- Demonstrating/advocating to decision-makers how space can be used to address climate change challenges in their country or region

To apply, you must be a student or young professional, aged from 21 to 35 years old on 1st January 2021.

APPLICATION PROCESS:

ROUND ONE: 15 Seconds of Fame!

Create a 15-second video telling us very briefly the subject of the project you are working on that you would speak about on the panel, and why you should be selected to address the IAC. The video must be posted on [YouTube](#). You must be on screen and be speaking for the full 15 seconds. We will only watch/listen for 15 seconds, so be sure to not exceed 15 seconds! In addition to uploading your video, you must complete the Plenary Application by the deadline by filling out [this form](#).

Deadline Extended! Apply to the round 1 by January 22 2021 (11:59 pm GMT)

VIDEO DETAILS:

Please record your video in a high-quality audio and video format. If you are selected as a panelist, segments of your videos will be used during the plenary and leading up to it to promote the plenary. Evaluators are looking for videos that are aligned with the theme of this plenary and that incite curiosity and interest among the viewer. Please limit special effects and no music. The video is about you, not your video editing skills. Please do not use copyrighted video, images, or music.

ROUND TWO: Three Minutes!

We will select the Round Two subset of candidates from the above and notify all entrants by **12 February 2021**. Specific details of Round Two requirements will be sent to the candidates in the notification. Selected candidates will be asked to create and post a three-minute video on a specified YouTube site by **26 February 2021 (11:59 pm GMT)**.

FINAL SELECTION:

We will select the finalists from these entries based on their impact, efficacy of messages, and relevance to the plenary topics; we also take into consideration the IAF's 3G diversity criteria when selecting the finalists. We will be looking for concrete descriptions of how you are actively engaged with climate change initiatives, and why this is vital to your work or studies.

The IAF will make the final selection of plenaries for the IAC in Dubai the week of 22 March 2021 and will notify the finalists of its decision by **1 April 2021**.

Who Will Sponsor Me to Travel to Dubai, UAE?

Plenary participants will be responsible for finding their own sponsor or sponsors for their travel to and accommodations at the IAC. In addition to the obvious sources of sponsorship – yourself and your family, employer or school, and industry contacts – we want to share with you some great programs for students and young professionals that occur in conjunction with the 2021 Dubai IAC. The following are all distinct programs related to the IAC but are not directly related to this plenary opportunity.

- IAF Emerging Space Leaders Grant Programme. See <http://www.iaf-grant-programme.org/>
- Space Generation Advisory Committee(SGAC) offers a number of travel scholarship opportunities for students and young professionals to attend the Space Generation Congress

(SGC) and International Astronautical Congress. The SGC event is held prior to the IAC in Dubai. Visit spacegeneration.org for more information.

- Space agency education programmes. Students in Europe, Japan, Canada and the United States are encouraged to contact ESA, JAXA, CSA and NASA respectively to apply to their space agencies' student programmes at the IAC in Dubai, UAE.
- The Future Space Leaders Foundation offers grants to students and young professionals in the United States. More information can be found at <http://www.futurespaceleaders.org/about.html>.
- Be innovative! Previous Next Generation Plenary panellists have been successful in raising funding through other means such as crowd funding and local community organizations.

For questions, contact nextgenplenary.iaf@gmail.com