



International Conference

**Space and Sustainable Development  
CEDS 2020**

July 1,2, 3, 2020

Faculty of Physical and Mathematical Sciences

Universidad de Chile

## Overview

The last years has witnessed a strong growth in the interest of the national and international community in issues related to space and its use by all nations. In this scenario, Chile is called on to play a frontline role. Its stance in the development of space activity, especially astronomy, concentrating a high percentage of observatories on a global scale; having an ideal ambience, such as the Atacama desert for testing harsh environments and outer space vehicles; the alliance with the Copernicus program of the European Union that will enable the access of open data, are just samples of the growing activity that is now occurring in our country, which demands us to advance in the search for strategies and guidelines that can contribute to the development of space-related applications.

The Universidad de Chile has been closely linked to space activities since it signed the cooperation agreement in 1958, to support NASA's programs by creating the Center for Space Studies, and in 2017 when, through the SUCHAI nano-satellite program, launched the first Chilean nano-satellite, as well as by signing the agreement with the Copernicus Program from the European Union. For these and other reasons, the University along with a number of national and international institutions, public and private, have organized the International Conference on Space and Sustainable Development 2020 (CEDS2020).

CEDS2020 has been conceived as a platform for knowledge sharing and exchange of ideas on the challenges and opportunities and possible actions in the space activity. To achieve this goal, we convene a broad group of players, recognized international experts in the various fields, the industry sector, who provides technology and services, the academia sector in its role for the scientific and technological development and also public actors responsible for providing the framework to ensure the sustainability of these actions.

Likewise, we invite researchers and academics who are conducting research in these fields to present their studies in this Conference, to contribute in the quest for strategies and action plans for the sustainable development of the space activity.

## Main Topics

### 1. *Space development Opportunities and Challenges.*

- Quest and promotion of sustainable strategies for the space development, as set out in the Space 2030 document and by the United Nations ODS. This discussion should cover, among others, the following points:
  - *The strategic advantages for the development of the space activity and planetary technology.* To facilitate the prospective description of the new scenarios that emerges at a global scale and the scientific challenges that emanate from them.
  - *Role of the industry, academia and government.* The role of each entity, in a space growth policy to strengthen the development of the countries.

- *Strategies and regulatory frameworks*, emphasizing sustainable development that favors a high degree of social inclusion and economic growth.
2. ***Promotion of Space Science and Technology development.*** In knowledge-based society, the generation of value and the positioning of nations in the international context are defined by their level of development and investment in science and technology, particularly in the case of Space context.. Therefore, the following topics be such be tackled:
- *Development of space-related sciences*: Physics, Data Science, Computer Science, Applied Mathematics, Space Biology, among others.
  - *Technological Development in key areas*: Telecommunications, Automatic Control, Geomatics, Robotics, and similar..
  - *Development of human capital*: Striving to develop collaboration schemes with the industry. The seeking of new education plans are highly desirable.
3. ***Promote Innovation and Industrial Development in Space.*** Take part of the economic growth resulting from the space industry is not only an opportunity available to the developed countries. In this activity of exponential growth, there are ample opportunities to participate in the economic benefits by generating businesses areas that actively participate in the generation of new products and services that, based on innovation, can provide welfare. Among others, the following opportunities that arises from:
- *Geoprocessing*, a key industry for harnessing data collected from satellites, drones, aircraft and other earth observation instruments.
  - *Nanosatellites*, the macro trend to use clusters of nano satellites to serve part of the functions performed so far by medium or big size satellites.
  - *Sensors and instruments*, development of sensors for the space industry and its ground sites.
  - *Robotics*, to contribute in the development of instruments and processes in space and other planets.
  - *Data Science*, the information and knowledge derived from datasets processing provided by space instruments and their various sensors.
  - *Artificial Intelligence*, build the skills to manage complex systems without human intervention, key to the deployment of outer space missions.

4. *Space as an Asset of Mankind.* Considering that space belongs to all of us, we are seeking guidelines on how to build legal and collaborative frameworks that ensure equitable and their sustainable use, business generation, the use of state-of-the-art technologies and the management of resources, among others.

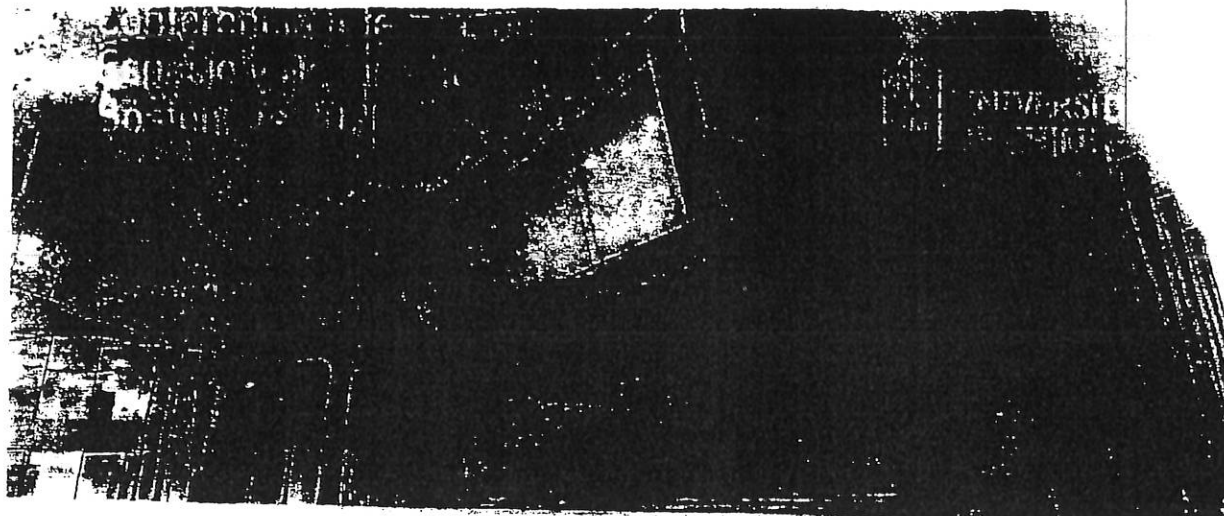
- *Engaging in international agreements:* Drawing a distinction between those that are universally enforceable and those that reflect non-binding commitments, as well as analyzing and quantifying the role of the private sector.
- *International Legislation:* Analysis of the Space Treaties and their amendments in view of the new challenges, demands and globalization crisis.
- *Cooperation:* as an element to reduce asymmetries in space technology, allowing synergies.

### Structure

- *The Conference will extend for 2.5 days and will be structured according to the following scheme:*
  - Plenary Sessions, with recognized international experts on the main topics of the Conference.
  - Parallel sessions, with presentation of papers and lectures that will deepen the themes proposed for the Conference
  - Sessions to allow proposals exchange and conclusions.

### Organizing Committee

- Raimundo González
- Marcos Díaz. Universidad de Chile
- Jaime Ortega. Universidad of Chile
- Florencio Utreras. Universidad de Chile
- Pedro Ramírez. KSAT
- Macarena Pérez, Ministry of National Assets
- Carlos Cárdenas. Universidad de Magallanes
- Cristián Mattar, Universidad de Aysen
- Luis Vargas. Universidad de Chile



## Audiencia

Convocamos a un amplio colectivo de actores, involucrados en el desarrollo de la actividad espacial:

- Reconocidos expertos internacionales
- La Industria, que aporta tecnología y servicios
- La academia, en su rol en el desarrollo científico-tecnológico
- El ámbito público, que debe proveer un marco de acción que asegure la sostenibilidad de las acciones

Usted podrá encontrar a:

- Tomadores de decisiones gubernamentales
- Organismos Públicos, usuarios de productos y servicios derivados de la Actividad Espacial
- Representantes de la industria espacial
- Académicos e Investigadores
- Representantes de organismos no gubernamentales
- Y a todos aquellos vinculados a la gestión y/o uso de los productos y servicios derivados de la actividad espacial

## Sea parte de CEDS2020

### Categorías de Auspicios

| Platino                                                                                                                                                                                                                                                                      | Oro                                                                                                                                                                                                    | Plata                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| US\$20.000                                                                                                                                                                                                                                                                   | US\$15.000                                                                                                                                                                                             | US\$10.000                                                                                                                                                       |
| Presentación Plenaria<br>Apertura / Stand 18 m <sup>2</sup><br>/ Sala de reuniones<br>privadas (2 horas<br>diarias) / 6 pases<br>libres / 2 pases<br>Ejecutivos / Sala de<br>reuniones / 2<br>Pendones espacio<br>público y registro /<br>imagen en materiales<br>del evento | Presentación Plenaria<br>/ Stand 12 m <sup>2</sup> / Sala de<br>reuniones privadas (1<br>hora diaria) /<br>4 pases Libres / 2<br>pases Ejecutivos / 6<br>Pendones / Imagen en<br>materiales del evento | Presentación Sesión<br>Paralela / Stand 6 m <sup>2</sup><br>(3x2) / 4 pases Libres /<br>1 pase Ejecutivo /<br>4 Pendones / Imagen<br>en materiales del<br>evento |

### Otras Oportunidades de Auspicio

- Stands
  - Stand de 12 m<sup>2</sup> (6X2);  
4 pases para personal atención Stand: US\$7000
  - Stand de 6 m<sup>2</sup> (3x2); 3 pases para atención: US\$4500
- Cena de Gala
- Auspicio de cara de la Conferencia, Presencia de Imagen durante esta (pendones, video, entrega de material)
- Participación en discurso de inauguración y cierre

<http://eventos.cmm.uchile.cl/ceds2020>

Para más información:  
ced2020@cmm.uchile.cl

