## IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) Enabling the Future: Developing the Space Workforce (5)

Author: Ms. Tania María Robles Hernández International Space University (ISU), France

> Ms. Emilie Karina Estrada Mexican Space Agency, Mexico

## TOWARDS A SUSTAINABLE TOMORROW: ENHANCING THE HUMAN CAPITAL IN THE MEXICAN SPACE SECTOR

## Abstract

Economic development stemming from knowledge, innovation, and industry is closely intertwined with the ability to leverage human and institutional capital within a country. In Mexico, there are institutions and organizations whose objective is to promote and drive human capital for the development of both public and private activities. This is the case of the Mexican space sector.

Through national policies and programs led by the Mexican Space Agency, efforts have been made to cultivate the necessary talent to meet national needs. This has been executed in accordance with diverse priority levels, development areas and applications under different policies by previous and present governments. Additionally, there are civil and academic organizations with significant efforts aimed at enhancing these capacities through scientific outreach, and formal and informal education and training.

However, despite these efforts and twelve years after the creation of the Mexican Space Agency and its public policy and programs on education, as of today, this human capital lacks pathways to employment within the space sector upon completion of their studies. Consequently, the economic investments behind the education of these students and young professionals are squandered as a considerable number of these are being directed towards working in other existing and robust sectors in the country (such as automotive, software, mining, and telecommunications) or emigrating from the country.

This qualitative research seeks to examine the aforementioned phenomenon through a generational behavior lens, identifying areas of opportunity for improvement such as coordination of public policies and strategic planning that could provide real opportunities for young Mexicans to work within their country and field of expertise.

To achieve this, an ecosystem mapping of the space sector focused on the interaction within actors and the students and professionals in Mexico will be conducted. In this analysis four essential actors will be considered: civil organizations, private industry, universities and academia, and government organizations.

Students and professionals will be studied being categorized under different generations and educational levels. It will be analyzed to understand their interaction, perspective and professional development, as well as their application of the country's current and previous institutional policies and lines of action.

This study is aimed to find the correlation and consequence of the system behavior like national space strategy plans and policies considering the outcome on the professional status and expectations of the study subjects .