

International Space University Enhancing Research Activities in Strasbourg

Strasbourg, France: After a pilot project last year, the International Space University (ISU) is launching a second, research-oriented thesis year as an extension to its highly successful one year MSc in Space Studies (MSS).

In line with ISU's mission to work closely with the space sector, the MSS Thesis Year will focus on enabling cooperation in research with other space organisations and entities. The MSS Thesis Year has been established jointly by the MSS Program Director, Prof. C. Welch and the ISU's newly nominated Research Program Director, Prof. J.J. Favier. Prof. Favier, one of the few scientists in the world who has been able to fly his own experiments as an astronaut, brings his long experience in space research to ISU.

Prof. Welch explains the initiative as follows: *"ISU caters to an international student body. In Europe the harmonization of higher education is making two-year Master's degrees the norm. This new ISU offering allows ISU students to take either a one-year or a two-year degree, depending on their particular needs."*

Prof. Favier expressed his involvement: *"I have been involved throughout my professional life in research, recently coordinating research at the French national space agency, CNES. My objective when joining ISU was to stimulate research in ISU."*

The MSS Thesis Year is intended to promote cooperation with another space organization. Examples this year are:

- A feasibility analysis on the use of alternate carriers to satellites for local telecommunication services, supported by a large telecommunications operator
- An independent assessment about a permanent settlement on the Moon, supported by a space agency

One particular research project is an innovative cooperation between ISU, the Eurometropole of Strasbourg, the University of Strasbourg and Airbus Defence and Space. The idea is to design an experiment which will fly aboard the Space Station to investigate the possibility of methane production by micro-organisms in outer space. This is based on recent discoveries of methane plumes (or dynamic traces) on Mars.



Nasa's Curiosity rover found methane at about 1 part per billion in Mars's atmosphere, 4,000 times less than in Earth's air. Photograph: Nasa/JPL-Caltech/MSSS/EPA

The strong know-how in this field of microbiology within the Department of Microbiology, Genomics and the Environment at the Laboratory of Molecular Genetics, Genomics and Microbiology, a joint research unit of the University of Strasbourg and the CNRS (French National Center for Scientific Research), combined with the knowledge of space hardware developments at ISU, is a very promising way of fostering new space related microbiology research in Strasbourg.

About the International Space University - www.isunet.edu

The International Space University (ISU), founded in 1987 in Massachusetts, US and now headquartered in Strasbourg, France, is the world's premier international space education institution. It is supported by major space agencies and aerospace organizations from around the world. The graduate level programs offered by ISU are dedicated to promoting international, interdisciplinary and intercultural cooperation in space activities. ISU offers the Master of Space Studies program at its Central Campus in Strasbourg. Since the summer of 1988, ISU has also conducted the highly acclaimed Space Studies Program at different host institutions in locations spanning the globe. ISU programs are delivered by over 100 ISU faculty members in concert with invited industry and agency experts from institutions around the world. Since its founding in 1987 on the campus of MIT, with Sir Arthur C. Clarke as its Founding Chancellor, more than 4,000 students from over 100 countries have graduated from ISU.