

Ground-Based Preparatory Activities (11)  
Ground-Based Preparatory Activities (2) (2)

Author: Mrs. Nancy Vermeulen  
Space Training Academy, Belgium, nancy@space-training.com

Mr. Julien Villa-Massone  
Moonscape, France, julien@moonscape.space

Dr. Michael Waltemathe  
Ruhr-University Bochum, Germany, michael.waltemathe@rub.de  
Prof.Dr. Elke Hemminger  
Germany, hemminger@evh-bochum.de

Dr. Agata Kolodziejczyk  
Analog Astronaut Training Center, Poland, fichbio@gmail.com

Mr. Marc Heemskerk  
Vrije Universiteit Amsterdam, The Netherlands, marc@chill-ice.com

Ms. Sabrina Kerber  
ILEWG "EuroMoonMars", Austria, sabrina.kerber@outlook.com

Prof. Bernard Foing  
ILEWG "EuroMoonMars", The Netherlands, foing@strw.leidenuniv.nl

Mr. Myles Harris  
University College London (UCL), United Kingdom, myles.harris.19@ucl.ac.uk

Ms. Borghildur Indridadottir  
Iceland, borghildur@themoon.is

## EURO-MOON-MARS ASTRONAUTICS TRAINING ACADEMY

### Abstract

At the EuroMoonMars Astronautics Training Academy (EMMATA) we will train researchers and young professionals in order to prepare them for a possible role in the space industry. In our interdisciplinary programme, we use the knowledge and skillsets related to space travel to add a new dimension to their field of expertise.

The EMMATA initiative is based on the expertise of the International Lunar Exploration Working Group (ILEWG) and "EuroMoonMars". The latter is an evolving pilot research programme with a series of instruments, investigations, facilities that are relevant to MoonMars science, astrobiology, technology, habitability, utilization, inspiration, education, physical and mental activities for young professionals and public. EuroMoonMars has organised multiple field campaigns in specific locations of technical, scientific and exploration interest. EMMATA is created on a solid international basis combining existing activities, people, infrastructure and collaborations, and bundling them in a coherent and unparalleled offer. EMMATA will be one of the first organizations mixing theoretical and practical astronautics training in an international setting.

Objectives: 1. Practical space training for young professionals of all disciplines. 2. Contribution to scientific and technological insights in a way that is complementary to what universities and existing research institutions do. 3. Increase the level of consciousness, creating "space ambassadors" that will "spread the word" so contributing to the next level of global human collective consciousness. Human cultural aspects. 4. Enhance business career prospects by capacity building and workforce. 5. Contribute

to independent intra-, cross-, multi-, inter- and transdisciplinary research programmes in collaboration with universities and research institutes worldwide.

Programme: 1. Physical mental training: • Analog / survival mission • Rocket workshop • Diving • Zero-G • High-G centrifuge • Hypobaric chamber • Stratospheric mission • Basic flight training • Multi Crew Coordination training • Human performance

2. Scientific / Technical: • Space science • Science instruments • Space technology • Flight instruments, Principles of flight, • Radiocomms Navigation • Orbital mechanics

3. Humanities Social Science: • Humanities • Social science • Multi-cultural cooperation • Art, design space

4. Management: • Business economics • Mission / Project / Budget management • Sponsorships / Career • Data management / programming • Sharing the education / public communication

Acknowledgments: We thank the members of the EuroMoonMars team to the definition of EMMATA, and the previous and prospective faculty and students. We thank also the partners and sponsors for provision of training facilities.