

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
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MARS SCIENCE FROM THE PERSPECTIVE OF INTRODUCING UNIVERSITY STUDENTS TO
SCIENTIFIC RESEARCH

Abstract

This presentation gives a progress report on the educational effort of the project “Earth and Mars Atmosphere” attached to the United Arab Emirates University, Al Ain, UAE and funded by a grant from the National Space Science and Technology Center (NSSTC).

The project started in early 2018 and is ongoing. The overarching goal is to build capacity in Mars Atmospheric and Surface Science. This is done by incorporating existing know-how in Earth Atmospheric and Surface Science. As an integral part, the project involves more than 10 selected undergraduate students from the university. As thus, the project has significant potential in the inclusion of the next-generation and diversification of the scientific community. Also, the project is relevant in the context of generating know-how for the scientific exploitation of data from the upcoming Emirates Mars Mission (EMM).

One key educational aspect of the project is the exchange of knowledge with partnering research institutions. For the students, this means not only attending on-site and remote lectures by professional scientists in the field of Mars Science. Also, a group of students was allowed to visit project partners at the Luleå University of Technology, Sweden in Jul. 2018.

Moreover, students are gaining hands-on experience in Mars related research by accomplishing student projects and presenting their work to the scientific community. So far, a student poster on Mars dust storms was selected for the final round of the Explore Mars Poster Competition 2019, organized by the Mohammed Bin Rashid Space Centre (MBRSC), Dubai, UAE. A number of student posters will be presented on an international Mars conference by mid of 2019. These activities are performed under the advice of the author and university professors.

In a general sense, the project strengthens the students’ skills in team work as well as individual scientific productivity, problem solving and communication of ideas, time management, etc..