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## IAF MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM (A2)

Science Results from Ground Based Research (4)

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## PRACTICAL APPLICATION OF ELECTROLYSIS ON THE MOON ENVIRONMENT CONDITION.

## Abstract

Successful exploration of Space demands a sustainable development of the Moon. In order to utilize and develop the Moon as a consistent settlement, it is necessary to extract certain resources like water, oxygen and hydrogen at site. In this work, we propose to pay attention to the peculiarities of the process of water electrolysis in conditions of low gravity and vacuum. Also in this article the technology of water separation into constituent elements are combined with other technologies for development of other technologies to develop the algorithm which is used to store hydrogen and oxygen in further devices and machines applications. The results of the research are presented in that paper.