



CENSSS NEWSLETTER

September 2022

RCN site visit to CENSSS

The Research Council of Norway came to visit CENSSS on Friday 9th of September. The visit is a part of the RCN routines in the SFI-program. CENSSS and RCN had a good dialogue with focus on information exchange and status update. A very brief summary may be that CENSSS and RCN shares the worry about recruitment issues as lacking recruitment delays our scientific activities and costs. The RCN focused greatly on the need for CENSSS internal and cross-work package projects.

A more detailed summary will be sent to all partners via e-mail.

Applications submitted to the ESA Reserve Pool of Science Activities for the Moon: A SciSpace Announcement of Opportunity

CENSSS Exploration submitted two applications to the call for ideas.

The WP5 team proposed, in collaboration with IDEAS and The Centre for Earth Evolution and Dynamics, CEED at UiO, The Compact Lunar Neutron and Gamma-Ray Spectrometer (CLUGAS).

CLUGAS is capable of measuring galactic cosmic ray-induced secondary gamma-ray and neutron radiation for the purpose of studying the elemental composition at the lunar subsurface. Using the Gamma-Ray and Neutron Spectroscopy method, the detector will collect spectral information that will be used to identify major rock-forming, minor or trace elements (e.g. Rare Earth Elements), radioactive elements, or the presence of water on the Moon, addressing many scientific questions related to the Moon's geology and its resources.

CLUGAS will contribute to lunar exploration and to the studies of lunar chemistry and mineralogy, by measuring secondary gamma-rays and neutrons resulting from galactic cosmic rays interacting with the Moon's surface. This compact spectrometer suite is to operate on the surface as a near-field gamma spectrometer, but also could work as a remote-sensing instrument on satellites. The instrument will be capable of detecting gamma rays in the energy range of 30keV - 8MeV with energy resolution of less than 4% at 662keV (Cs) and neutrons with energies of 0.025 eV - 1 MeV. CLUGAS will be based on recent scintillators and semiconductor technologies and aimed to be 10x10x20 cm³ or less in the total size depending on the volume of the gamma-ray and neutron detector modules.

The WP4/Rimfax- team, proposed “Radar Imaging of the Lunar subsurface Experiment – RILAX”

CENSSS satellite

The initial Request for Information (RFI) to vendors for the CENSSS satellite has passed. Initial information meetings with the vendors will take place at the end of September.

UiO “på trappene” together with the Library at Lillestrøm

The Department of Technology Systems has started an series of research outreach events together with the newly re-opened Library at Lillestrøm. The first event saw Svein-Erik Hamran talk about the Rimfax journey from Kjeller to Mars!

Photo by Mette Johnsrud/UiO

Come meet us!

At the ESA’s Industry Space Days, 28-29 Sept. Several CENSSS partners will attend the ESA Industry Space Days, so if you have registered, please set up a meeting with us.

Link: <https://isd.esa.int/>

CENSSS will have a stand at Spaceport Norway 25th-26th of October. UiO is hosting a gathering on Monday 24th of October at Sommero Hotel in Oslo to set focus on the Space related activities at UiO. All partners are invited to the event, and we hope that you have accepted the invitation.

Announced positions

Postdoctoral Research Fellow to Develop Instrument(s) for Mapping Resources on the Moon.
Deadline 2nd of October 2022

Link to announcement text: [Postdoctoral Research Fellow to Develop Instrument\(s\) for Mapping Resources on the Moon \(230766\) | University of Oslo \(jobbnorge.no\)](#)

