

Interdisciplinary Collaboration on Borehole Core Testing for Extraterrestrial Material.

The Space Resources Roundtable and
the Planetary & Terrestrial Mining Sciences Symposium

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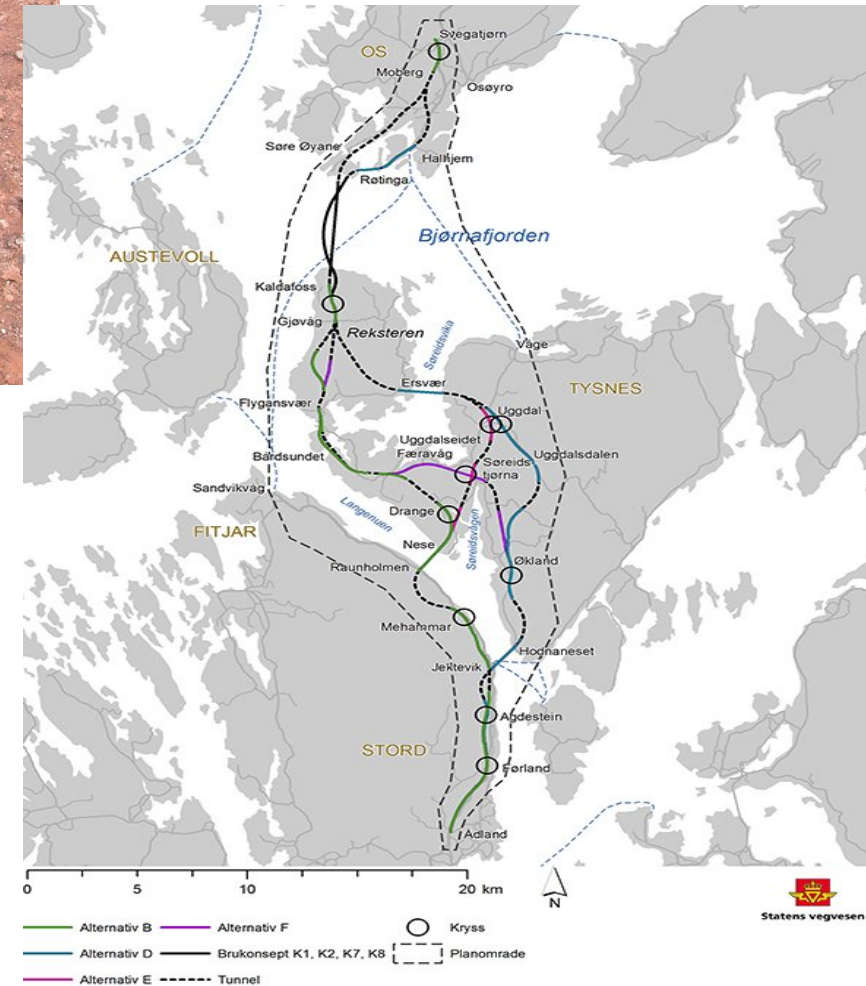
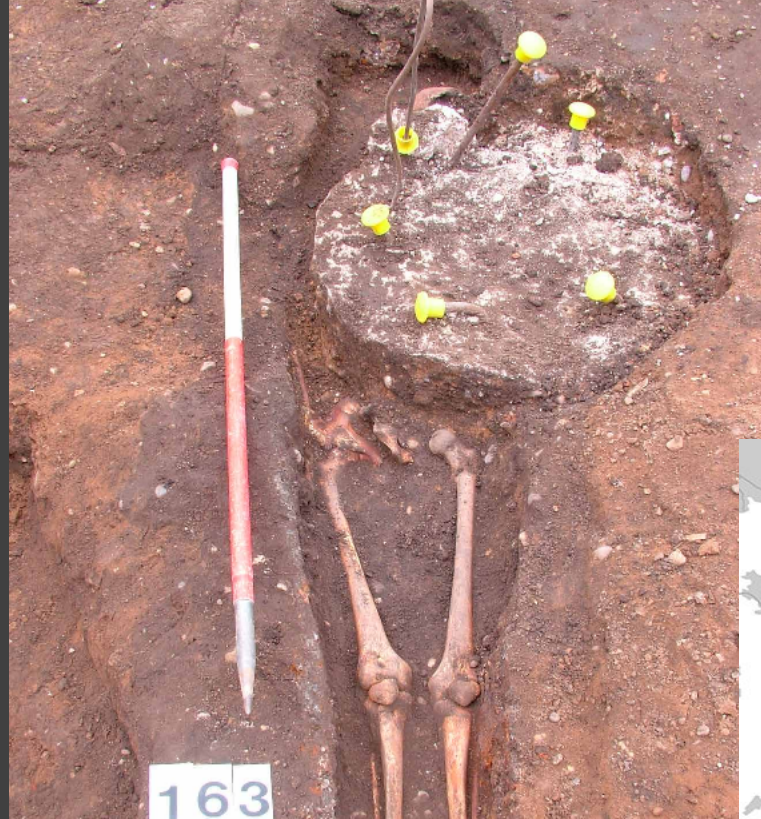
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Introduction

- Current PhD Work: Combining geotechnical engineering, geology and geoarchaeology on major development projects.
- Reduction of time, cost and risk
- The Framework is being tested on Norwegian mega road development E39.
- Successful results from on site testing and laboratory analysis so far.



Methodology

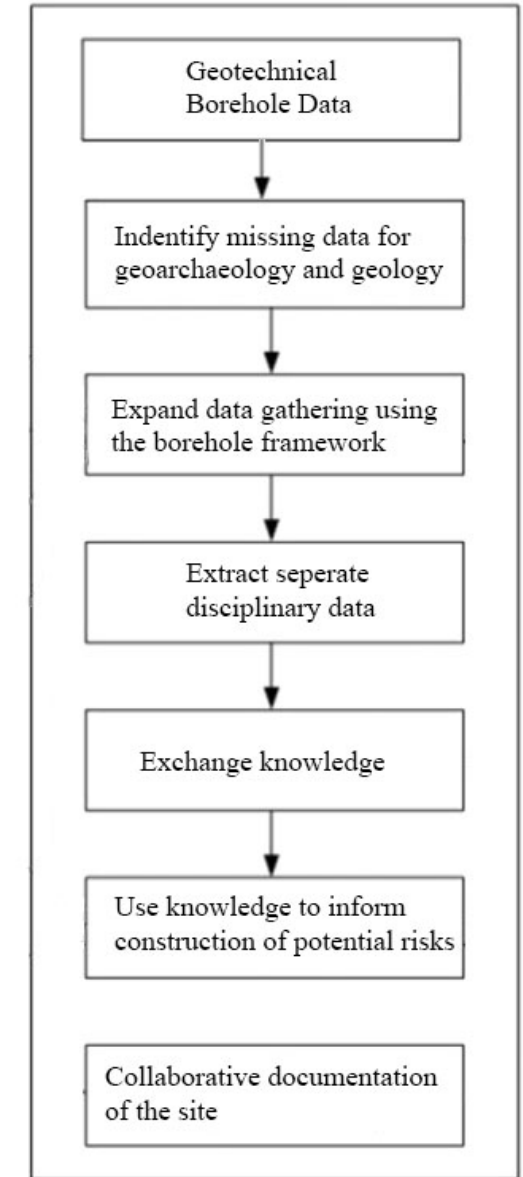
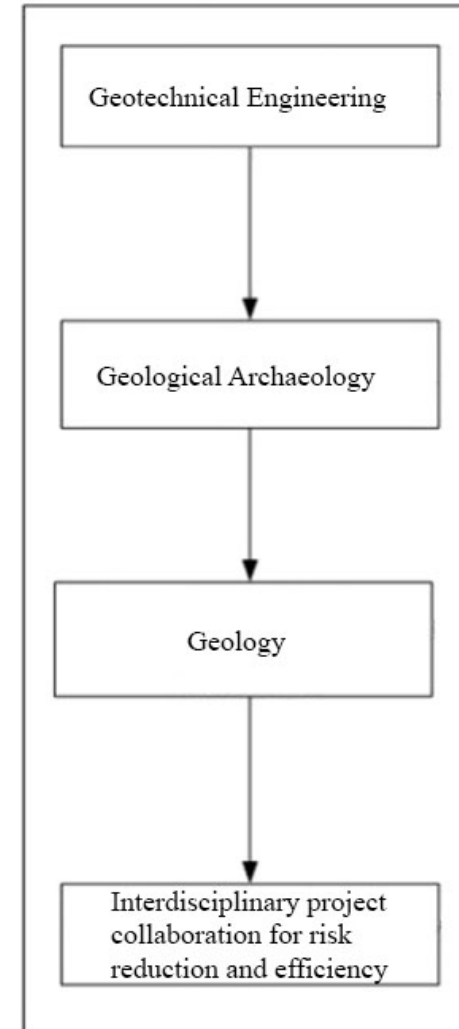
Desk based
investigations

Framework
development

Interviews

Field observations

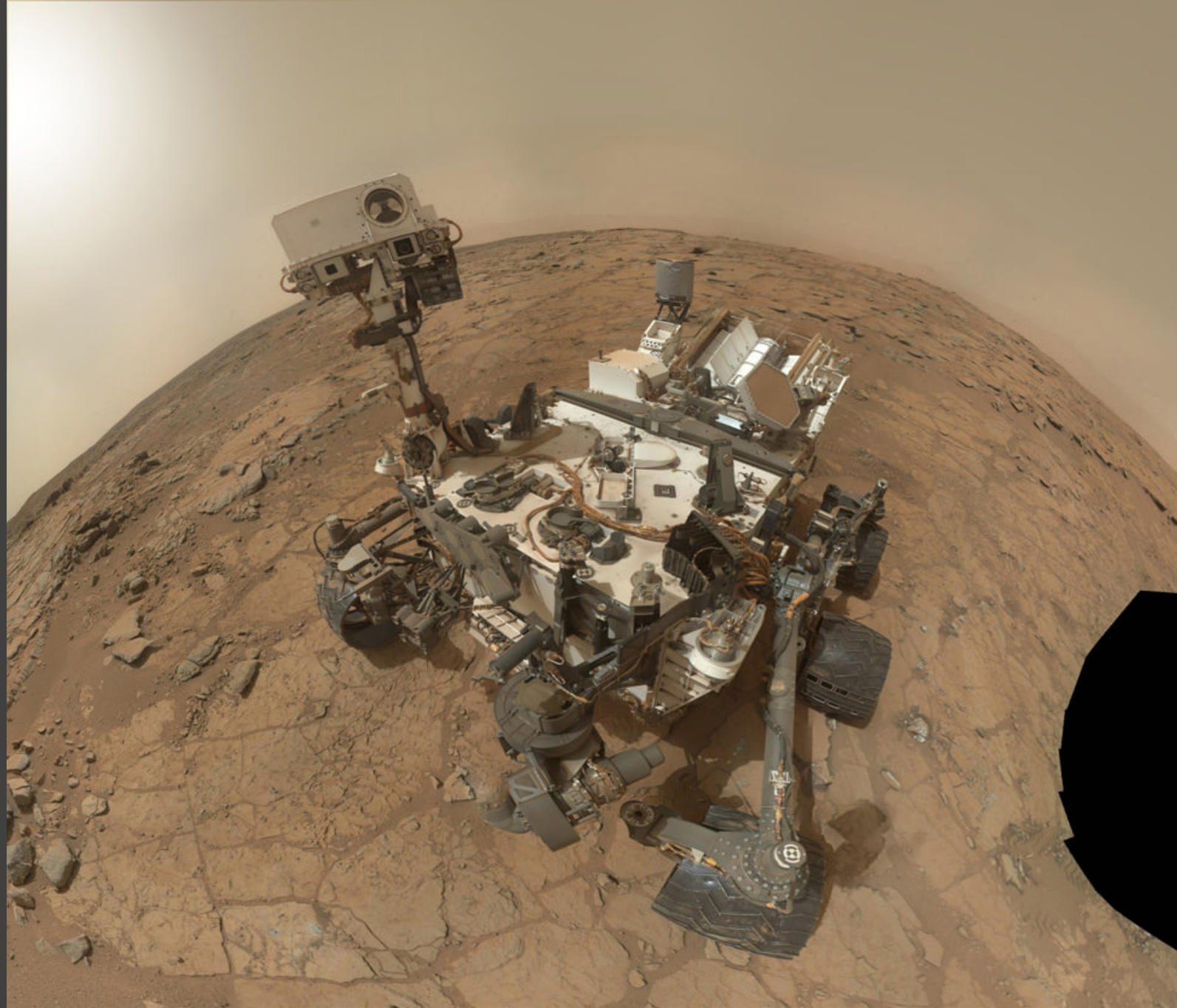
Field testing



Framework pending Patent in EU and US and not shown

Interdisciplinary Collaboration on Borehole Core Testing for Extraterrestrial Material

- Reduce the amount of samples needed for data collection
- Expanding the Testing Framework
- Help reach scientific goals of space exploration
- Pending publications



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Creating an expanded Testing Framework

- Main focus areas of the framework
- The selection of disciplines suggested
- Expert and organizational feedback and input needed to ensure needs are met.

Geology	Geotechnical Engineering	Astrobiology	Geophysics
Surface Structure and Morphology	Shear Strength	Carbon Content	Energetic Processes
Surface Elemental Composition	Atterberg Limits	Chemical Analysis	Transport Processes
Mineral Phases	CBR Test	Elemental Composition	Microphysical Processes
Geochemical Analysis	Particle Size	Biosignatures / Biotraces	Radiative Processes



Thank You.