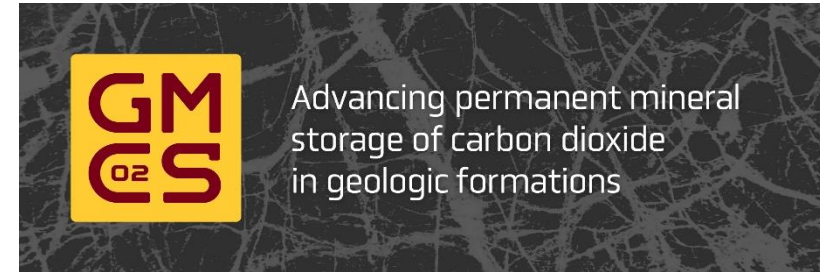


# Geo-processes in Mineral Carbon Storage (GMCS)

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**MISSION:** To develop the fundamental science and engineering capability that will lead to realizing the full potential for large-scale subsurface storage of CO<sub>2</sub> via mineralization.



<https://gmcs.umn.edu/>

## RESEARCH PLAN

Study the reaction, flow, and fracture processes over three distinct scales: (i) porous medium (mm) scale of the host rock, where the mineralization and carbon storage takes place; (ii) fracture-porous medium (m) scale, capturing an individual fracture from which the CO<sub>2</sub> is delivered to the surrounding rock; (iii) fracture network (km) scale to describe how the CO<sub>2</sub> charge is distributed by the fracture system.

