The purpose of this project is to renovate the existing 730SF Geochemistry Clean Room Facility to meet the research needs of the College of Engineering, Department of Earth and Atmospheric Sciences.

The Snee 4th floor Clean Room currently consists of six separate spaces that include: a vestibule/gown-up area, weighting room, distillation room, two separate chemistry laboratories and an ion exchange laboratory.

The use of acids within the space was causing significant corrosion problems, especially to metallic materials such as door frames, hinges, plumbing, and electrical conduit and boxes. The corrosion is attributed to improper storage of acids, poor capture of acid fumes used during research processes, and the use of HVAC equipment that recirculates air within the space through HEPA filters in an effort to provide required air change rates to maintain a class 10,000 clean room environment.

IPD Engineering designed the replacement lab space to hold up in the harsh, acid rich environment by eliminating exposed carbon containing construction materials, utilizing a once-through HVAC system (all air exhausted through an energy recovery unit) and designing isolation cabinets and fume hoods that avoid contamination of the space, as well as the science contained within.