



Department of Geology Seminar Series Presents

Dr. Greg Wanger

Consultant, NASA-Jet Propulsion Lab
Deep UV Raman and Fluorescence Spectroscopy

*Looking down to look up: New approaches in
the search for life in strange places*

FRIDAY, MARCH 22 - 11:00am
Science 411

Everyone is welcome to attend!



GEOLOGY
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Dr. Greg Wanger, Consultant for NASA-Jet Propulsion Lab - Deep UV Raman and Fluorescence Spectroscopy; Member of the SHERLOC 2020 Science Team



Title: *“Looking down to look up: New approaches in the search for life in strange places”*

Abstract: Looking for biosignatures on planets beyond our own requires that we first truly understand how life on Earth has left its mark. Examining extant microbial life in Earth’s deep subsurface has changed our understanding of the limits of life. The introduction of new Deep-Ultraviolet spectroscopic techniques (UV-Raman and fluorescence) allows us, for the first time, to accurately map and characterize organic compounds and microbes on mineral surfaces here on Earth. Now this ability will be put to the test on Mars with SHERLOC, a spectroscopic instrument set to fly on the Mars 2020 mission.