

Wednesday, April 14, 2021

HGS Environmental & Engineering Virtual Meeting

Virtual Meeting via Zoom

7:00–9:00 p.m.

HGS Members \$10 Non-Members \$25 Students \$5

<https://www.hgs.org/civicrm/event/info?id=2251>

Registered Attendees: A confirmation email will be sent upon registration with meeting links.

Event contact: Matthew Cowan – mrccowan1@hal-pc.org

****Non-Members can submit an application and pay their dues before registering to get the member price. Please call the HGS office at 713-463-9476 to be registered only AFTER your application and dues are submitted.****

*Kirsten Siebach
Rice University*

Roving Mars with Curiosity and Perseverance



In a stunning engineering feat, Perseverance, the largest and most complex Mars rover yet, landed successfully on Mars on the floor of Jezero crater on February 18, 2021. Its mission is ambitious: seek signs of ancient life and collect samples for future return to Earth. Perseverance's goals and landing site were selected largely due to the successes and key findings of the Curiosity rover, which is still roving 2,300 miles away. Together, these missions

have and continue to revolutionize our view of the Red Planet, and the eventual samples just might revolutionize our view of life itself. As a geologist on both mission teams, I'll share the motivation and context for these missions, our new and evolving understanding of our neighboring planet, and how it teaches us about our own world. ■

Environmental & Engineering *continued on page 15*

Biographical Sketch



KIRSTEN SIEBACH is an Assistant Professor in the Rice University Department of Earth, Environmental, and Planetary Sciences and calls herself a Martian Geologist. She studies the early landscapes and climate on Mars using rover observations of rock compositions and comparisons to analogous terrains here on Earth. She is currently a member of the Science and

Operations Teams for the Mars 2020 rover Perseverance and the

Mars Science Laboratory rover Curiosity, and previously worked on the science and engineering teams for the Phoenix Lander and the two Mars Exploration Rovers. Kirsten graduated with a BA in Earth and Environmental Science and Chemistry from Washington University in St. Louis, completed her PhD in Geology at Caltech, and did postdoctoral work at Stony Brook University prior to beginning her faculty position at Rice. She is actively engaged in promoting education and outreach related to Earth and Planetary science and loves travel and photography (on Earth as well as Mars).

