



[Women in STEM: Sian Proctor, Ph.D., Geology, Planetary Science, Sustainability](#)

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Sian Proctor, Ph.D., is a geology and sustainability professor who not only teaches but also designs curriculum, science materials, and educational games. She was a finalist for the 2009 NASA Astronaut Program, was on the Discovery Channel reality TV show called The Colony, was the Education Outreach Officer on the 4-month NASA funded Mars simulation, and a PolarTREC teacher studying climate change research in Barrow, Alaska.

Last year Sian was featured in a new PBS series called Genius with Stephen Hawking. Sian is in Episode 3, “Are We Alone?”, where she learns how to search for intelligent life in the universe. This summer Sian will be hitting the high seas as a

National Oceanic and Atmospheric Administration (NOAA) [2017 Teacher at Sea](#).

Dr. Proctor is also a motivational speaker, specializing in women and minority leadership, and encouraging girls to pursue STEM. She earned her degrees from Arizona State University and Edinboro University of Pennsylvania. Below she shares a little about her career and the inspiration behind it.

What is your specific area of STEM?

Geology, Planetary Science, & Sustainability

How would you explain your STEM field to young girls?

I teach people about ways in which the Earth creates resources and hazards, but also about human’s impact on the Earth.

What traits might a child possess that may indicate an interest or aptitude for your STEM field?

Independence, curiosity, adventurous, spatial intelligence.

What did you know about your STEM field when you were a child?

My father was a scientist and he encouraged me to be inquisitive. I loved aviation and astronomy and he told me I could be anything I wanted to be. So from an early age I knew I would study science but I didn't have any particular focus. I was curious about everything.

Why did you choose your STEM field? Were you inspired by someone?

I wanted to move out west and I applied to a variety of schools. Arizona State University gave me the best financial package which included being a teaching assistant (TA). Becoming a TA changed my life because I realized my passion for teaching science. After getting my MS in Geology, I became a full-time geology professor and, over time, got my Ph.D. in Science Education.

What are some really cool things that people in your profession work on?

As a geoscience professor, I have traveled, conducted research, and taught around the world. The Earth is my living laboratory. I have learned about astronomy in Chile, investigated climate change in Barrow, Alaska, and lived in a NASA Mars Simulation in Hawaii. This summer I'm going to Kodiak, Alaska to learn about fish habitats. Geoscientists are modern day explorers of the Earth.

What inspirational message would you give young girls to inspire them to pursue STEM?

Be a GeoExplorer. That means always be inquisitive about the world around you from your backyard to the moon - STEM is all around you.