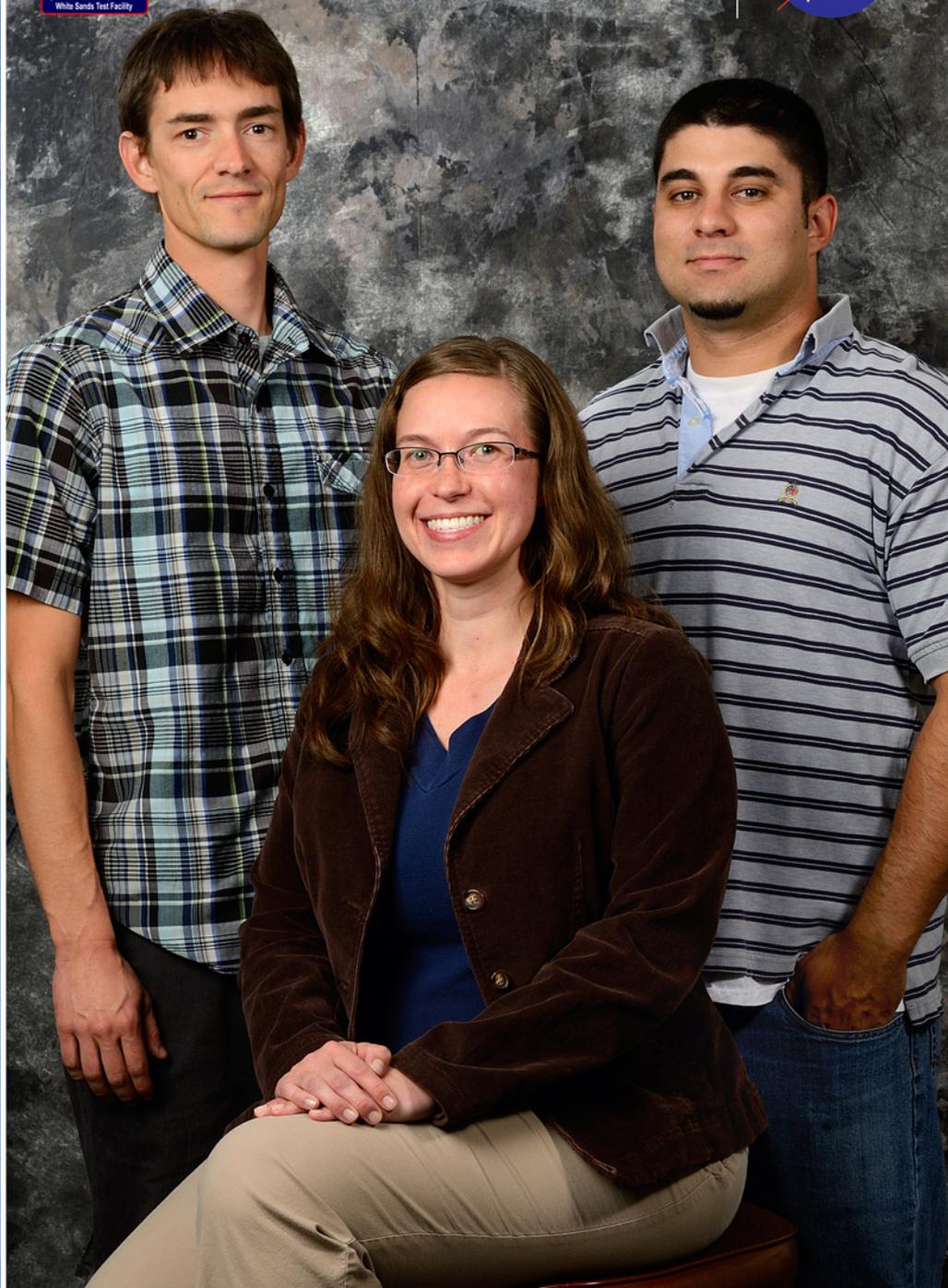
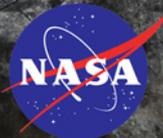


# i am an INNOVATOR



National Aeronautics and  
Space Administration



White Sands Test Facility needs a more accurate measure of pulse flow for engine testing. With the smaller diameter wave tube liquid level indicators currently being used, erroneous readings have been found during propulsion testing in the test stands. Asher Lieberman, Amaru Robinson, and Cathy Watkins are investigating causes of the problem and developing improvements to the technology that will provide a more accurate reading of pulse flow by transmitting liquid level measurements up to 2000 times per second.

Implementation of innovative improvements to the wave tube level indicator will measure the liquid level of pressurized hazardous fluids and provide an accurate measurement of propellant consumption. The wave tube level indicator system offers a safe pressure design, replaces the manned visual requirement, ensures material compatibility, has no mechanical moving components, and gives real-time liquid level measurement.