OUTREACH 2017

Dr. Donna Stokes





 Bernard Harris STEM Camp Outreach – SPS members perform demos and make liquid nitrogen ice cream for ExxonMobil Bernard Harris Summer Science Camp for 6th, 7th, and 8th grader. (July 20176)



• StatOil STEM Camp Outreach - SPS members perform demos and make liquid nitrogen ice cream for the StatOil STEM camp which offers 5 themed weeks that integrate science, technology, engineering, and math for students entering grades 5th -8th grade. (June and July 2017)



- San Jacinto College Dow Chemical Adventures in STEM UH Department of Physics and Texas Center for Superconductivity perform demonstrations at the San Jacinto College Dow Chemical Adventures in STEM event along with Mind Trekkers from Michigan Technological University who tours the nation with more than 100 interactive science experiments. Approximately 6,500 sixthgraders from six independent school districts attend the event. (Spring 2017)
- Mars Rover 2017 Each year, primary and middle school students interested in science and engineering research, design, and construct a model of a Mars Rover to carry out a specific science mission on the surface of Mars. The model is mostly a mock-up, constructed at a minimal cost (estimated cost of less than \$10-\$25) of mostly found objects and simple art supplies. RC, Solar powered, and free-form (unpowered) models participated in their own categories. The students built the models as part of a 6-week fall semester classroom-learning or homework project on Mars. (Spring 2017)



• Math and Science Family Night – SPS members perform physics demos at Lamar Elementary for their annual Math and Science Night. Both students and parents have the opportunity to perform interactive math and scienc activities. (Fall 2016)



Energy Day 2016 -- An official City of Houston event, Energy Day is a free, familyfriendly, annual festival celebrating and highlighting the importance of energy in our daily lives. The festival hosts nearly 70 interactive demonstrations and exhibits teaching students and their families about the various forms of energy, science, technology, efficiency, conservation, and careers in the energy industry. The exciting exhibits and interactions with energy experts help spark students' interest in science, technology, engineering and mathematics (STEM). UH had the largest tents set up at the event; volunteers included faculty, undergraduate students, and graduate students. Other UH students could be found working other booths, such as the tent full of fossils and oil demos that Shell had sponsored (and mostly engineering students volunteered for); "Alternative Sources of Energy," whose demos included the copper wire and magnet electric generator and a multi-lemon battery, run by Schlumberger and the Bauer business students, and the ever-popular superconductor demos provided by the physics department. (Fall 2016)



Girls Exploring Math and Science (GEMS@HMNS)– GEMS is organized by the Houston Museum of Natural Science (HMNS) and the Girl Scouts of San Jacinto. Girls (and boys) or primarily elementary age are invited to spend a day down at the museum to learn more about science, technology, math, and engineering through many interactive demos and brief presentations put on by both those at the collegiate level and many of the girl scout troops in attendance. The event lasted from 9:00 in the morning until around 1:00 in the afternoon; (Spring 2017)



• UH STEM Camp Outreach - SPS members perform demos and make liquid nitrogen ice cream for the UH STEM camp which offers 5 themed weeks that integrate science, technology, engineering, and math for students entering grades 5th -8th grade. (July 2016)









