2016 Engineers’ Week at the Saint Louis Science Center

The Engineers’ Week at the Science Center event hosted by the Missouri Society of Professional Engineers (MSPE) commenced Saturday morning, February 27, 2016 with the opening of the Science Center doors at 9:30 a.m. A variety of engineering fields were represented by organizations, government agencies, companies, and colleges.

In addition to MSPE, five other engineering societies were present during Engineers’ Week. The American Society of Civil Engineers (ASCE) exhibit included a hands-on cable-stay bridge display. Gateway Biomedical Society (GBS) brought there surgical scope to operate on a squash and medical equipment for reading blood pressure and oxygen levels. The Society of American Military Engineers (SAME) Saint Louis & Scott Field Post launched soft projectiles using a catapult. The Society of Hispanic Professional Engineers (SHPE) displayed their miniature robotic car and the Society of Women Engineers (SWE) turned toothbrush heads and cell phone batteries and motors into Bristle Bot machines.

The United States Army Corps of Engineers brought several hands-on models including their water sediment transport model and levee protection model. Boeing used different household appliances to relay signals to operate different programs on interactive laptops. Geotechnology displayed their Interactive Ground Penetrating Radar system and KJWW demonstrated the concepts of fiber optics, superconductivity, and Bernoulli’s Principle via air flow, PVC pipe, and ping pong balls.
Bricks 4 Kidz showcased different LEGO robots and their variety in functionalities including spin art and paper crinkler. FIRST Tech Challenge (FTC) teams showcased their robots in a 12’x12’ mat field and FIRST displayed their different levels of robotics team competitions for varying ages. Junior Code Academy @ Peer 151 & Metro East STEM Society provided the opportunity for kids to learn some basic computer coding using multiple laptops and visual displays. Maryville Science and Robotics Program displayed their LEGO alligator chomping robot created from their Science and Robotics Program and ROBOMO had interactive robotics displays and demonstrations.

Several universities participated this year at the Science Center. Missouri University of Science and Technology (Missouri S&T) had their Student Design Center & Recruitment tables along with the Advanced Aero Vehicle Group (AAVG), Baja SAE Car, Concrete Canoe, Engineers without Borders, Formula Electric Car, Formula SAE Car, Human Powered Vehicle, International Genetically Engineered Machines (iGEM), Mars Rover Design Team, Materials Advantage, Robot Competition Team, Solar Car, Solar House and Steel Bridge Teams. Southern Illinois University Edwardsville (SIUE) displayed their Baja Car and discussed their Steel Bridge competition, and their SIUE ASCE student chapter simulated earthquakes with their shake table. St. Louis Community College brought along metal castings and solar panel models. St. Louis University (SLU) NASA United Student Launch Team launched paper rockets while streaming video of their rocket launch the day before and the SLU Engineering Health Collaborative (EHC) built towers out of household supplies that could hold a marshmallow.

Missouri S&T:
Several new exhibitors joined us this year in addition to Bricks 4 Kidz, Junior Code Academy, ROBOMO, SLU EHC, and SWE including the Lil Monster Trucks that were not so little that kids as young as ten years old drive in races. The St. Louis Carpenters Joint Apprenticeship Program (JAP) showcased their hands-on virtual reality welding systems and the Construction Forum Education Foundation (FEF) displayed their model drone unmanned aviation system video & distributed the scholastic reader children’s book “Goodnight, Goodnight Construction Site” to many.

The MSPE exhibit was located near the entrance of the Science Center and intrigued many throughout the two day event. It involved a ramp, a rubber ball, office supplies, and a Buzz Light-year figurine. The objective was to build a structure out of half sheet of paper, a piece of tape and two rubber bands, paper clips & one-inch long pipe cleaners. The structure to be built was to protect Buzz Light-year, who was located at the bottom of the ramp, from being knocked over by the rubber ball (a.k.a.-the asteroid) that rolled down the ramp. The activity was popular with all age groups, and a variety of solutions were discovered. Special thanks to these volunteers who made the MSPE exhibit a success: Lisa Cheng, Mike Hernke, Krista Kotur, Jennifer Kuchinski, Everett Litton, Scott Nall, Don Perrin, Darcy & Donna Riegel, George Robin, Emma Tegels, Matt Wombacher, & Jieman Xu.

Engineers’ Week is nationally recognized and concluded in St. Louis, MO with the close of the Saint Louis Science Center at 4:30 p.m. on Sunday, February 28, 2016. A high attendance was recorded both Saturday with 6,675 people, and Sunday with 3,350 people. Thanks to HDR for donating the Engineers’ Week posters for the event. Thanks also to our Science Center contact Paul Freling for making the Engineers’ Week Event at the Science Center a smooth and successful operation. We are looking forward to next year’s Engineers’ Week at the Science Center scheduled for February 25-26, 2017!

- Erin Jearls, MSPE