SDSU Science & Engineering Sampler • March 19, 2016 • 9am-2pm
FREE Public Event and Parking • Fun for the entire family • No RSVP needed

CHEMICAL SCIENCES LABORATORY (CSL building)

**VizCenter: Helping the World**

See how the VizCenter helps with Humanitarian Assistance Disaster Relief, stimulation of international relationships and trade, plus assisting law enforcement through emerging technologies, innovative back-end processing, and operational needs.

**CSI meets CSU**

Learn about Forensic Science, develop fingerprints utilizing different methods.

**X-ray Crystallography**

Chemists and biologists learn how a molecule works by studying its three-dimensional structure. Even the largest molecules are too small to be directly observed by the most powerful light microscopes.

**Make a Bouncing Ball with Polymer Chemistry**

Make a polymer bouncing ball out of common household items.

**Show-Me Geology**

Learn about the importance of rocks and minerals in everyday-life, start a mineral collection.

**Laser Applications in Chemistry and Biochemistry**

A wide range of lasers, used in multi-photon nonlinear laser techniques for biomedical and environmental applications, will be on display.

**Engineering & Electromagnets (Aztec Science Camp)**

Find your creativity as you complete an engineering design task to withstand “The Crusher” and build an electromagnet. Parents can learn more about Aztec Science Summer Camp.

**Marine Life Touch Tank**

Learn about Southern California marine life and ecosystems with the Coastal and Marine Institute.

**Who Cheated? Find out by Using Chromatography**

Five students are suspected of forging the answers to an exam. You need to determine if one of the pens found on a suspect matches the ink from the exam. Use the same technique the police use to analyze ink.

PHYSICS ASTRONOMY (PA building)

**The Lab Zone**

Hands-on design, building, and testing of your very own project to learn basic math, engineering, and scientific principles.

**Super-Cool Ice Cream: The Cool World of Cryogenics**

Liquid nitrogen instant ice cream, balloon freezing, and much more.

**Planetarium Shows**

Enjoy a tour of the starry night sky in our planetarium. Shows are 20 minutes long and are given every half-hour. (Unfortunately, there is no wheelchair access inside the planetarium.)

**Telescopic Views of the Sun**

View the Sun (safely!) though telescopes; hopefully see sunspots.

**Show-Me Geology**

Learn about the importance of rocks and minerals in everyday-life, start a mineral collection.

**Laser Applications in Chemistry and Biochemistry**

A wide range of lasers, used in multi-photon nonlinear laser techniques for biomedical and environmental applications, will be on display.

**Engineering & Electromagnets (Aztec Science Camp)**

Find your creativity as you complete an engineering design task to withstand “The Crusher” and build an electromagnet. Parents can learn more about Aztec Science Summer Camp.

**Marine Life Touch Tank**

Learn about Southern California marine life and ecosystems with the Coastal and Marine Institute.

**Who Cheated? Find out by Using Chromatography**

Five students are suspected of forging the answers to an exam. You need to determine if one of the pens found on a suspect matches the ink from the exam. Use the same technique the police use to analyze ink.

PHYSICAL SCIENCES (PS building)

**Electron Microscope Facility**

See inside cells magnified thousands of times on our scanning and transmission electron microscopes.

LIFE SCIENCES (LSS & LSN buildings)

**Museum of Biodiversity**

See big bugs, hairy spiders, skeletons, furs, feathers, plants, and more from our vast museum collection. Learn about field biology and natural history education at SDSU.

**Phage Attack: Weapons of Microbe Destruction**

Learn how phage, the viruses of bacteria, launch attacks against their bacterial targets. See bacterial cultures before and after phage attack.

**Exploration of the Human Body**

Explore the amazing world of the human body. Look into a microscope to see the incredible organization and beauty behind bone and muscle.

**Flow Cytometry Facility: Lasers Make Cells Glow**

Watch with microscopes as high-powered lasers allow individual cells to fluoresce in different colors.

ENGINEERING (Mediterranean Garden & E building)

**Engineering Village**

Various displays including: mechanical engineering machine shop, aerospace, and robotics. Facility tours start at 10:30am, 11:30am, and 12:30pm.

**BioEngineer for the Day**

Learn how electrical signals are measured from the muscles and brain and used to control devices from games to prosthetic limbs.

DISCLAIMER:
Sierra Academy of San Diego does not sponsor, supervise, nor endorse this activity, event, organization, or its content. Distribution of this material is provided by the district as a community service for non-profit organizations. Any questions or comments should be directed to San Diego State University, College of Sciences (619) 594-5142.

http://sdsu.edu/sampler