

REAP | University of Central Florida 2015



REAP 2015 students learn how an ion-selective electrode works and how it can be used to measure chemical concentration. While working in the research group of Dr. Stephen M. Kuebler (Chemistry Department, University of Central Florida, Orlando), the students are investigating how surface chemistry can be combined with laser-based 3D printing to create functional optical devices.

Learn more about the project at <http://npm.creol.ucf.edu>

Stephen M. Kuebler, D.Phil., is an Associate Professor of Chemistry and Optics at the University of Central Florida in Orlando. As a mentor for high school students through the Army's REAP program, he has valuable insights into the program's value. Here are his thoughts:

Having high school **students in our lab enhances our all-around education and training experience**. They learn about the project, conduct experiments, and analyze data alongside a graduate student who serves as their day-to-day mentor.

The REAP students learn first-hand how scientific research is done and how it is used to address problems in science and engineering in our national interests. The **REAP program gives the students exposure to new career paths** in science, technology, engineering, and mathematics (STEM) which they may not have considered for themselves.

REAP students **bring fresh perspective and curiosity that adds vibrancy to our research**. Mentoring the REAP students helps our graduate trainees develop their own leadership skills and gain a deeper understanding of their project.

As an educator, my primary goal is to support learning and the creation and dissemination of knowledge. REAP aligns perfectly with these goals. **REAP is helping to sustain and expand our nation's resource of knowledgeable, inquisitive, and creative scientists and engineers.**

I wish opportunities like this had existed when I was a high school student!

REAP is just one element of the Army Educational Outreach Program. The AEOP is comprised of Army-sponsored competitions, internships, education opportunities, and research and practical experiences designed to engage and guide students as well as teachers in science, technology, engineering, and mathematics (STEM).