SACRAMENTO CITY COLLEGE

UNDERGRADUATE RESEARCH PROGRAM IN CHEMISTRY

The SCC Undergraduate Research Program was established to provide our students with the rare opportunity to enrich their education through practical problem solving and critical thinking. The SCC Chemistry Research Program supports student learning by providing various research opportunities for students to bridge classroom education to actual application. The program is suitable for both beginner and advanced chemistry students. Students will work closely with faculty mentors on exciting established research projects. Students will also have the opportunity to turn your questions or ideas into manageable research projects, then conducting experiments to find the answers. Finally, students will have the opportunities to showcase their research findings at research seminars and conferences.

Students can select to join one of the following research projects:

1. Phthalates in Food
   - Analyze and measure plasticizer contaminants in food
   - Instruments: HPLC, GC, GC-MS

2. Water Quality Analysis
   - Identify and analyze contaminants in water, specifically looking for hazardous metals.
   - Instruments: Flame AA, Graphite furnace AA, Flame emission

3. Pesticides (Carbamates) Analysis
   - Analysis of pesticides and their usage in agriculture
   - Instrument: HPLC

4. Growing mung beans in solutions of nanoparticles and imaging the nanoparticles via scanning electron microscopy

5. Homemade antacid pills

6. 3-D printed chemistry educational materials

How to participate?

To participate in the Undergraduate Research Program, students will need to attend a research seminar to understand more about the current projects. Student will also need to complete an application. Once selected, students may enroll in CHEM 484 (Honor Chemistry) and will receive 0-3 credits.

To find out more about undergraduate research at SCC, contact Professor Dao: daob@scc.losrios.edu