**Summer 2018 Undergraduate Research Opportunities**

**CSU Chemical and Biomedical Engineering**

**POSTING DATES:** April 2, 2018 – April 27, 2018

**POSITION TITLE:** Student Research Assistant (positions for Summer Undergraduate Research)

**DEPARTMENT:** Chemical and Biomedical Engineering

**SUPERVISOR:** Dr. Moo-Yeal Lee, Dr. Nolan Holland, Dr. Chandra Kothapalli, Dr. Jorge Gatica, Dr. Geyou Ao,

Dr. Christopher Wirth, Dr. Sasidhar Gumma, Dr. Surendra Tewari

**POSITION SUMMARY:** Students are needed to work on research projects in the area of chemical and

 biomedical engineering during the summer 2018 semester. Applicants must be

students enrolled in science or engineering. The projects will span ten (10) to

twelve (12) weeks between May 21 and August 10, 2018 with hourly pay ranging

between $10-$13 per hour.

Project Titles:

1. A 384-pillar plate platform for creating human liver tissue mimics - (2 position);
2. Decorating a cage protein with elastin-like polypeptides to create a twelve-armed star polymer – (1 position)
3. Interdisciplinary research on the optimization, fabrication and implementation of micromixers – (1 position)
4. Reaction engineering for sustainable living environments
5. Probing the effect of metal ions on DNA-wrapped carbon nanotube dispersions – (1 position)
6. Influence of surface forces on the locomotion of active particles – (1 position)
7. Synthesis and characterization of nanoporous materials
8. Microstructural inhomogeneity in directionally solidified metallic alloys: influence onf interdendritic convection during solidification

**Project Descriptions are available at**

<https://www.csuohio.edu/engineering/chemical/upper-division-honorsscholars-research-creative-activities>

**POSITION** Hands-on experimental laboratory research

**ACCOUNTABILITIES:** Gathering, analyzing and summarizing data

**QUALIFICATIONS:** Engineering or Science enrolled students

 Junior or Senior standing preferred (as of Fall 2018)

 Must have successfully have completed General Chemistry II

**LEARNING OBJECTIVES:**  organizational and leadership skills; critical thinking with aim of understanding

 and appreciating experimental research

**DAYS/TIMES NEEDED:** 10-12 weeks, Summer 2018

**SALARY:** $10-$13 hourly rate

**FWS AWARD REQUIRED?** NO

**ADDITIONAL DOCUMENTS** MUST LIST PROJECT TITLE FOR WHICH YOU ARE APPLYING

**REQUIRED TO APPLY:**

**EMAIL TO SEND APPLICATION DOCUMENTS:** b.laird@csuohio.edu

**WEBPAGE LINK:** https://www.csuohio.edu/engineering/chemical/summer-research