



## Interfaces and Surfaces REU Program

*Open to all undergraduate students currently within science or engineering undergraduate programs.*

10 Week Program: May 29<sup>th</sup>, 2017 to August 4<sup>th</sup>, 2017

Apply now at: <http://www.clemson.edu/ces/mse-reu>

Conduct your *own* research project under the guidance of a faculty advisor and a graduate student mentor. You will explore research and learn about career pathways that can take you to graduate school and beyond. You will also have the opportunity to meet industrial entrepreneurs and academic researchers, attend professional development workshops, and explore the local area.

### Research Projects for 2017 Summer Program:

*'Making magnetically controlled "nanopancakes" using mechanical forces'*

[Dr. Jeff Anker \(Department of Chemistry\)](#)

*'Electrode Microstructure Design for High Capacity Li-Ion Batteries'*

[Dr. Raj Bordia, Department of Materials Science & Engineering](#)

*'Structure Property Relations in Ceramic Composites for Energy Conversion and Storage'*

[Dr. Kyle Brinkman, Department of Materials Science & Engineering](#)

*'Response of dental pulp cells to microenvironment'*

[Dr. Delphine Dean, Department of Bioengineering](#)

*'Sensing small changes of environment using torsional properties of natural fibers'*

[Dr. Kornev, Department of Materials Science & Engineering](#)

*'Improving Thermal Stability of Enzymes via Conjugation with Copolymer: Computer Simulation Study'*

[Dr. Olga Kuksenok, Department of Materials Science & Engineering](#)

*'Fabrication of reduced graphene oxide nanoscale films'*

[Dr. Igor Luzinov, Department of Materials Science & Engineering](#)

*'Polymerization of stabilizing polymer brushes on the surface of metal oxide nanoparticles'*

[Dr. Thompson Mefford, Department of Materials Science & Engineering](#)

*'Developing More Sustainable Pesticides by Understanding the Chiral Switch'*

[Dr. Lindsay Shuller-Nickles, Department of Environmental Engineering & Earth Sciences](#)

*'Injectable hydrogels with magnetically aligned structures for nerve regeneration'*

[Dr. Ken Webb, Department of Bioengineering](#)

### Details:

- 10 undergraduates invited to Clemson University in Summer 2017
- Chance to work with a team on exciting, interdisciplinary research projects using modern characterization and fabrication facilities
- Stipend- \$5,500 over 10 weeks
- Travel stipend (\$500)
- Housing in university apartments with kitchens
- Ability to present your work at local symposia and compete for travel to national conferences

### Eligibility:

- Members of traditionally under-represented groups in engineering and science are encouraged to apply!
- Open to students from rising sophomores to rising seniors in science and engineering programs
- Must be a US citizen or permanent US resident
- Priority given to those with least a 3.5 GPA and who have **NOT** had a prior REU experience
- All participants must be currently registered at a two- or four-year college, and may not have received their Bachelor's degree prior to January 2018

### Questions?

Send email to: [mskenne@clemson.edu](mailto:mskenne@clemson.edu)