



▶ WHAT IS MATERIALS SCIENCE?

According to Wikipedia, this relatively new scientific field investigates the relationship between the structure of materials at atomic or molecular scales and their macroscopic properties. - http://en.wikipedia.org/wiki/Materials_science.



LA-SiGMA Research Experiences for Teachers (RET) Program

Complete REAL RESEARCH TO SHARE with your students.

Join us this summer for an inside look into materials science research and computer-based modeling. You will meet world-class researchers, visit labs that are closed to the public, and work on meaningful research first hand. AND you will get ideas and projects to take back to your classroom!

Past RET projects include:

- Simulating an oil spill
- Integrating 3D visualization tools into the classroom
- Testing automobile exhaust sensors for Ford Motor Co.
- Using multiple, linked computers to speed up processing times
- Modeling science using graphic processing units like PlayStations

"I love the RET program because it allows teachers to be the students again... LA-SiGMA focuses on computational thinking and modeling, which are key components of the new science education frameworks and the next generation science standards."

- Chris Campbell, RET participant



LA-SiGMA

Louisiana Alliance for Simulation-Guided Materials Applications

RET Frequently Asked Questions

Where will I be?

You can request location preferences on your application. We have four South Louisiana options (Louisiana State University, Tulane University, Southern University, and University of New Orleans) and one in North Louisiana (Louisiana Tech University).

What exactly will I do?

You will be paired with a faculty mentor to work on a materials science summer research project. If you are in the North Louisiana program, you will also invite two students to join you in an on-campus STEM Student Experience during the final week of the program.

Is this a paid position?

Yes. Our total budget is \$7,000 per teacher, which includes an RET stipend, up to \$1,000 in travel, housing (if needed), meals, and materials and supplies for your classroom. The budget breakdown is left up to each host campus and may be determined in consultation with the teachers.

What if I want to talk more about the program?

We'd love to talk with you! Contact one of our Outreach Coordinators: Staci Kramer in South Louisiana (sckramer@lsu.edu, 225-578-5381), or Lindsay Gouedy in North Louisiana (lgouedy@latech.edu, 318-257-2204).

I'm ready to apply!

We hoped you would! You can apply online starting November 1. The first round of applications will be due March 1.

"The LA-SiGMA program is a wonderful way of bridging the gap between the university and surrounding schools. It gives students the chance to learn about the cutting edge technology being used in research and teachers the chance to actually work on current research first hand."

- Jeanine Edgcombe, RET participant

<http://ret.lasigma.loni.org>



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The LA-SiGMA RET Program is funded by the National Science Foundation under the NSF EPSCoR Cooperative Agreement No. EPS-1003897 with additional support from the Louisiana Board of Regents.