NSF Summer Research Experiences for Teachers (RET) Opportunity for Secondary (grades 6 – 12) Math and Science Teachers and Community and Two/Four Year Associate Degree College Faculty Members

on "Engineering Design Challenges and Research Experiences for Secondary and Community College Teachers"

Research Projects Include:

Project 1: Effects of Natural Organic Matter on Energy Production from Salinity Gradient

Project 2: Energy Storage Devices Based on Three Dimensional (3D) Graphene: Case

Supercapacitors and Lithium-Sulfur (Li-S) Batteries

Project 3: Bio-Inspired Optimization of the Multiple Traveling Salesman Problem

Project 4: Air Quality Monitoring Near a Major Roadway

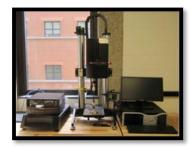
Project 5: Secure Cyberspace



Gas Chromatograph With Mass Spectrometry



Travel Salesman Problem



Instron Micro Testing Machine

Benefits of being a RET Teacher?

- \$6000 and a laptop for participation in 2018 RET Site for the 2018-19 academic school year
- 7-week RET program, from Monday, June 11th through Friday, July 27th including research, coursework, and PD workshops and seminars
- Mentored by a RET Resource Person and RET Engineering Education Resource Person
- Create a Unit that utilizes challenge based learning and the engineering design process
- Participate in professional opportunities presenting at the annual STEM Conference and/or presenting papers at other regional and national conference

Apply NOW! Don't hesitate if you are interested in this tremendous professional leadership opportunity! *Don't miss out!*

For more information go to:

https://www.ceas3.uc.edu/ret/archive/2018/ret/

Email the application packet to:

futurescience.uc@gmail.com

Application **deadline** is Friday, **January 12, 2018.**

Questions? Contact: Debbie Liberi liberid@ucmail.uc.edu