Ph.D. Opening in Biosensor Research
Nano Electrochemistry Laboratory
School of Chemical, Materials and Biomedical Engineering
Principal Investigator: Dr. Ramaraja Ramasamy
www.ramasamy.uga.edu

Research Topic: Rapid Diagnostics (Biosensors) for Pathogen Detection
The Nano Electrochemistry Laboratory is looking for two Ph.D. students to work on the design and development of biosensors for detection of bacterial and fungal pathogens that are of relevance to healthcare and food safety. Biological sensors are devices that aid in the detection of a biological molecule or target that are useful in healthcare, food safety and environmental applications. This research will focus on developing sensors that offer rapid detection capability, while being inexpensive and easy to use. Focus will be on bacterial pathogens such as Listeria and MRSA, but research can expand into other targets of high interest (e.g. SARS-CoV-2). Research is highly interdisciplinary that overlap with chemical engineering, electrochemistry, microbiology, material science and bio/nanotechnology.

Relevant Publications:

About the Laboratory:
Dr. Ramasamy’s nano electrochemistry laboratory (www.ramasamy.uga.edu) is a 1200 ft² facility located in the Riverbend South Research building on campus. The lab currently has 5 PhD, 1 MS and 2 undergraduate researchers.

Desired Background and Expertise:
Prospective students with background in chemical engineering, biomedical engineering, chemistry, biochemistry, microbiology are encouraged to apply. Previous research experience as undergraduate or Masters student in areas related to biosensors is preferred. High GPA and strong references letters will boost admission chances.

Application Procedure:
Interested students must apply to the Ph.D. in Engineering (Biomedical or Biochemical Empahsis) program in the college of engineering. More information about the application procedure, eligibility requirements, deadlines and assistantships can be found at: https://engineering.uga.edu/graduate-programs/admissions