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Health and safety of nanomaterials and antimicrobial properties

Nanomaterials have been extensively investigated for biomedical, industrial, and environmental engineering applications because of their antibacterial properties. These nanomaterials have unique properties but in their pure forms, they still present toxic effects against humans and diverse organisms. Dr. Rodrigues' research group has been successfully incorporating carbon-based nanomaterials (e.g. graphene, graphene oxide) into polymers to develop advanced functional materials and coatings for different applications, such as antimicrobial, anti-biofouling, and anti-corrosion. These novel advanced functional materials also have the property to have reduced toxic effects against human cells, which facilitates their application in diverse fields. The present talk will focus on presenting the novel polymer nanocomposites developed as well as their anti-microbial properties and safety to humans for biomedical and environmental applications. The lessons learned about the mechanisms of anti-microbial properties of these nanomaterials and nanocomposites will be also presented.

Keck Seminar

Friday, Nov 2, 4pm

BioScience Research Collaborative

BRC Rm 280



The Gulf Coast Consortia is a collaboration of:

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