



Corporate Internship Program on Plasma Technology Applications



Project Title:

Plasma Deposition and Modification of Parenteral Containers and Laboratory Consumables

Project Reference Code:

SiO₂

Host Facility:

SiO₂ Materials Science

Host Facility Location:

2250 Riley St

Auburn, AL 36832

<http://www.sio2med.com/>

Project Description:

This project will involve plasma enhanced chemical vapor deposition (PECVD) process optimization of multi-layer barrier coating systems applied internally to polymer-based containers used for parenteral drug storage, or consumables for laboratory testing. Containers include vials and syringes for injectable drugs, blood collection tubes for diagnostic testing, and microplates for drug discovery.

In addition, the PECVD barrier coating system's functionality and properties will be evaluated. The outcome of this work could translate into improved manufacturing processes and performance for existing products or new processes for brand new products.

We will consider both undergraduate and graduate students for this internship.

Disciplines:

Physics, Chemistry, Materials Science, Engineering (chemical and bio)

Is U.S. citizenship required to participate in this project?

No

Name(s) of Mentor(s) and contact information:

Ahmad Taha (ahmad.taha@sio2med.com)

Internship Coordinator/ HR manager:

Missy Du Toit (missy.dutoit@sio2med.com)

The name and contact information of personnel at the host facility is provided for further assistance with questions regarding the host facility or the project.

Interns will not enter into an employee/employer relationship with the host facility. No commitment with regard to later employment is implied or should be inferred.