

## **Senior Engineer, Thin-Film Deposition**

Adranos is a company focused on energetic materials innovation, including the development of ALITEC, the highest-performing solid rocket fuel in the world. ALITEC dramatically increases the range and payload capacity of various launch systems, including missiles, hypersonics, space launch platforms, and various other systems utilizing solid propellant.

Adranos is seeking a Senior Engineer, Thin-Film Deposition to support its metal powder fuel research, development, and production efforts. This position will join Adranos as a leading member of the R&D team, focusing on materials processing and characterization for advanced coatings and thin-film fabrication.

The candidate most suited to this position would have experience with deposition of materials and processes in one or more of the following areas: Atomic Layer Deposition (ALD), Diamond-like Coatings (DLC), Electroplating, Physical Vapor Deposition (PVD), and/or Chemical Vapor Deposition (CVD).

### **Primary Duties and Responsibilities:**

- Initiate, plan, conduct, and direct the research and development of processing technologies that support advanced mechanical, thermal, fluidic, optical, laser, and/or electronic systems for various applications.
- Conduct experiments and produce thin-film coating materials using CVD, PVD, DLC, ALD, and/or other similar methods.
- Obtain and analyze thin-film data using a variety of characterization techniques such as profilometry, optical or electron microscopy, spectroscopy, and/or X-ray diffraction.
- Operate and maintain high-vacuum coating and deposition systems.
- Maintain production schedules and resolve scheduling conflicts by communicating and collaborating with the team of engineers and scientists.
- Document findings and implemented solutions. May be required to make brief technical presentations.
- Promote a high level of safety awareness and continuous improvement in safety practices.
- Contribute to project/program milestone completion and provide solutions to problems of limited complexity using standard techniques and methodologies.
- Perform other duties as assigned.

### **Qualifications**

- Master's and/or PhD in Chemical Engineering, Materials Science and Engineering, or related fields, or the equivalent combination of education and related experience.
- At least 3-5 years of experience with ALD, DLC, PVD, CVD, and/or other thin-film deposition methods
- Fundamental knowledge of material properties and various coating manufacturing methods.
- Ability to understand new concepts quickly and apply them accurately throughout an evolving environment and organize work assignments to meet designated timetables.

- Good communication, computer, documentation, presentation, time management and interpersonal skills.
- Experience working effectively in a multidisciplinary environment, both independently and as part of a team.
- Ability to work with limited organizational structure and thrive in scenarios with stretch goals
- Grace under pressure and good judgment in sensitive situations
- Flexibility to prioritize and manage many tasks at once
- Ability to obtain and maintain security clearance, which requires U.S. Citizenship.
- Fully vaccinated from COVID-19

**Other Valued Attributes:**

- Experience in the aerospace and defense industries
- Familiarity with safe handling of metal powders