



## **JOB DESCRIPTION**

### **SENIOR R&D / APPLICATIONS ENGINEER**

We are looking for an experienced engineer to manage the development of a proprietary coating technology for a commercial application. You will be working closely with internal staff and external customers to develop working product prototypes. You will also need to scale up our coating technology to meet the size and volume demands of the end customer.

This is a unique opportunity to commercialize an exciting new technology for a novel application within a dynamic small company environment.

Primary responsibilities will be to:

- Provide hands-on reduction to practice for all aspects of the technical development of the application, including scale-up of the coating technology, experiment plan, product design, prototype production, and reporting requirements.
- Follow existing and develop additional experimental plans to achieve project goals, including design-of-experiment (DOE) matrices, milestones, budget, timing, and resource allocation.
- Develop prototype product designs collaboratively with partners, customers, and consultants.
- Work with existing senior staff to design and assemble the equipment necessary to execute the experimental plan, test scale-up concepts, and produce prototypes for customer/partner testing.
- Conduct (and supervise, if necessary) all lab work and analytical and performance testing, and interpret data and results. Experience with analytical methods such as SEM, AFM, and XPS, preferably with the ability to perform one or more of these methods.
- Make recommendations and set new directions for the project based on data, test results, and feedback from our customers/partners.
- Prepare frequent written reports to satisfy sponsor/customer requirements and maintain project funding status. Excellent technical writing skills are mandatory.
- Assist in the preparation of follow-on or new funding proposals.
- Manage a junior engineering staff and technicians (as required).
- Participate in regular meetings with our partners and customers to ensure that key requirements, limitations, and goals are identified and accounted for at all stages of project execution.

Applicants should be detail-oriented, effective at planning and organizing, self-motivated, and result-driven. In addition, applicant should possess the following qualities:

- Hands-on: this is a dynamic, small-company environment which requires hands-on involvement in all aspects of the project; this is not a pure management position.
- Resourceful: ours is a highly entrepreneurial small-company environment where the ability to quickly harness outside resources is absolutely critical to the success of the program.



- Excellent manager: able to predict project scope accurately, manage people and resources (including your own time), and deliver on-time and under budget.
- Excellent communication skills: frequent, well-written reports will be essential to communicating project success quickly and efficiently.

Applicants must be comfortable with the dynamic culture of a small, team-oriented growth company. Applicants will need to work independently but not alone, as much of the work will require collaboration and communication with many people, both inside and outside the company.

Our fast-paced environment requires versatility and patience, but will be rewarding to those up to the challenge.

***Requirements:***

**US Citizens ONLY.** No H1B, F1 or other visa candidates will be considered

Applicant must have a PhD in Engineering (Chemical, Materials Science) or related field and 2-5 years of experience in R&D, product development, applications development, and some project management exposure.

Direct experience in materials development or vacuum technology (deposition, etching, sputtering) - and preferably both - is necessary. Priority will be given to applicants with experience in polymer vacuum deposition, specifically the scale-up and optimization of industrial tooling for forming polymer thin films.