



April 18, 2022

**RE:** Employment Opportunity within Shoen Electronic Materials, Inc.

**Job Title:** Chemist / Scientist / Process Engineer / Chemical Engineer

**Location:** Corvallis, OR

**Job Description:**

The person holding this position will be involved in optimizing nanoparticle synthesis to produce high quality material as well as process development. This effort is focused on accomplishing many objectives, which include: development of monodispersed, highly luminescent materials while optimizing the reaction efficiency. This includes manufacturing the nanomaterials, as well as developing methods and techniques in purifying these same materials. The ultimate goal of which is to develop an optimized process for the low-cost production of high quality nanocrystalline material that has been designed to meet the customers specifications.

***Specific Tasks include:***

- Develop techniques and technologies to produce nanomaterials in high volumes, including purifying the resultant nanomaterials in high volumes and rates.
- Characterize material, process and process equipment used in the synthesis of nanomaterials.
- Design experiments to optimize the synthetic process to ensure that the highest quality nanomaterials are obtained. Use the "Design of Experiments" platform to plan, execute and analyze the experiments.
- Select and install process equipment.
- Diligently record data and observations.
- Generate intellectual property and ideas.
- Design processes that generate nanomaterials that are compatible with customer processes/applications.
- Generate, maintain and update controlled documentation related to process and process changes.

***Other Job Responsibilities include:***

- Understand customer needs and their applications.
- Operate safely and to promote safety in a team environment.
- Stay abreast of current research activities across the world.
- Generate monthly reports and effectively communicate ideas and results to a broad audience (as well as to a specific, highly technical audience).

***Desired Skills and Experience:***

- Excellent communication skills, both verbal and written.
- Education level required: B.S. in Engineering or Sciences.
  - o *Preferred:* B.S. in Chemistry, Chemical Engineering, Process oriented engineering.
- Years of experience required: 0 to 5 years.
- Understand processing of small particles, including purification and size separation techniques.
- Able to use Microsoft Office suite, including: Word, Excel, PowerPoint and Outlook.
- Self-sufficient and self-reliant – strong ability to initiate and design experiments.
- Strong work ethic and an eagerness to complete work

Send resume/CVs to Diane Burnett: [dburnett@semi-nano.com](mailto:dburnett@semi-nano.com)