

SION POWER CORPORATION

Job Description

Job Title: Materials Chemist

Dept: Materials

Reports to: Director of Material Development

SUMMARY:

Primary responsibility is to conduct experimentation on electrolyte and its components, polymer coatings, experimental battery electrode preparation and experimentation for product process development and application. Duties include: material synthesis, purification, mixture formulation, chemical, electrochemical and physical laboratory tests of solid, liquids, and gas materials. The position requires method development, experimental design and interpretation of results experience.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Contributes fundamental ideas to improve the quality of chemical formulations and processes.
- Conducts purification, synthesis and characterization of various materials; prepare coating mixtures and perform lab-scale coatings of polymer films and battery electrodes materials for battery component formulation optimization.
- Prepares samples for chemical and electrochemical testing such as electrolyte solutions, electrodes, polymer films and membranes.
- Sets up laboratory equipment and instrumentation required for tests, research, and process control. Maintains research and development laboratory equipment and material inventories needed for experimental work.
- Documents experiments and analysis for preparation and presentation of technical papers and reports.
- Maintains working knowledge of chemical formulations and process development techniques furnished through company meetings and from reading battery technical literature.
- Knows and follows safety practices in all areas of the workplace. Collects and disposes of hazardous waste according to approved standards.
- Other duties as assigned.

QUALIFICATIONS:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

EDUCATION and/or EXPERIENCE:

Requires Ph. D, or other advanced degree in chemistry, chemical engineering or electrochemistry with a minimum of 2 years of professional materials development experience. Must include hands-on experience in some of the following techniques: FT-IR, UV-VIS, HPLC, GS-MS, DSC, Elemental Analyzer, Cyclic Voltammetry. Electrochemical Impedance Spectroscopy experience and working with oxygen and moisture sensitive materials is highly desired.

COMPUTER LITERACY:

Must exhibit fluency in PC usage including MS Windows environment with including word processing, spreadsheets, databases and program management.

LANGUAGE SKILLS:

Ability to speak and understand English in a manner that is sufficient for effective communication with supervisors, employees, beneficiaries and customers, based on the assumption that such individuals can only speak and understand English.

MATHEMATICAL SKILLS:

Must have mathematical skills at graduate university level.

REASONING ABILITY:

Must be able to solve problems, generate ideas and set tasks.

PHYSICAL DEMANDS:

While performing the duties of the job, the employee will be required to regularly use a PC, telephone, fax machine, copy machine, lift objects, speak, hear, and write. The employee may need to work in a dry room (~-60 °C Dew Point) for extended periods of time. The employee may be required to handle and transport packaged chemicals and/or work with potentially hazardous and/or toxic chemicals, with appropriate protective clothing, apparatus and training. The employee should be able to lift and move 25 pounds and could be called upon to lift or move up to 50 pounds on occasion. Specific vision abilities required by this job include close and peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

The Candidate will be immersed in a fast paced, ever changing environment. This person must be able to adapt quickly, meet deadlines and goals, and interface with all levels of employees both internal and external to the company. While performing the duties of this job, the person will occasionally work near hazardous and/or toxic chemicals, energized electronic equipment, and office machines in laboratory, production and office environments.

SION POWER CORPORATION IS AN EQUAL OPPORTUNITY EMPLOYER.

Sion Power Corporation, a spin-off of Brookhaven National Laboratories, is located in Tucson, Arizona's second largest city and the hub of activity and commerce for southern Arizona—one of the fastest growing states in the U.S. With a population in the metropolitan area of one million people, Tucson is home to the University of Arizona and a center for optic, biotech and other high technology research industries.

Interested parties should contact Human Resources at Sion Power Corporation,
HR@sionpower.com