Basic Function

Conducts and directs research and development programs requiring applications of advanced materials and nano-enabled technologies to the oil and gas industry. Applies scientific and engineering expertise in advanced materials to solve complex technical challenges. May review, coordinate, or direct the work performed by others.

Duties & Responsibilities

- Perform original basic and/or applied research in advanced inorganic and/or polymeric materials, including nanostructured materials, nanomaterial coatings, and nanocomposites; nanomaterial surface modification and characterization; and short and long-term technology development.
- Responsible for conducting research on nanomaterial applications for the energy industry, including nanomaterial synthesis, characterization of nanomaterials and nanointermediates with spectroscopic, thermal, microscopic, and rheological methods; writing and assessing proposals to expand into new nanomaterial research and technology areas; collaborating with ASC scientists and collaborators on new and existing programs; presenting results to staff, management, and the scientific community; and protecting intellectual property.
- Assist in designing new installations or modifications to existing facilities, evaluating and selecting capital equipment.
- Apply and reinforce all safety policies in the workplace.

Education and Experience

- PhD. in Chemical Engineering, Materials Science, Chemistry, or related field. In-depth knowledge of advanced materials and/or nanomaterials for energy technologies a plus.
- 5+ years hands-on experience in several relevant technical areas, including nanomaterial synthesis and characterization, including nanoscale materials, nanotubes, composites, inks, or surfaces; polymer chemistry and characterization; inorganic chemistry and characterization; nanocomposite formulation and characterization.
- Highly interactive interpersonal skills for effective communication with project team members, various staff (including engineers, scientists, technicians, clients, vendors, etc), and the scientific community.
- Desire to expand or develop new applied research and product development programs in nanotechnology and energy.
- Demonstrated success in proposal writing
- Experience in supervising and directing the technical contributions of others.
- Strong verbal and written communication skills including a track record of publications in peer-reviewed journals and the ability to create and successfully implement experimental test plans.
- Demonstrated ability to work equally well independently and as part of a larger team.
• Self-motivation and strong attention to detail to efficiently complete tasks outlined in experimental test plans on schedule and within budget.
• Creative ability to solve problems that arise without compromising data quality.
• Ability to prioritize responsibilities and handle multiple duties/projects simultaneously.

NO THIRD PARTY CANDIDATES ACCEPTED