Senior Process Engineer/Membrane Scientist, Advanced Technology Development at Avanpore LLC, Woburn, Massachusetts

Avanpore is developer and manufacturer of advanced filtration and fluid purification devices. Next generation of high-tech products demand an increase in raw materials and product purity. Our unique technology enables differentiated filtration and purification of liquids and molecular level separations. We use well-defined novel manufacturing processes to develop differentiating high value products that help our customer meet new challenges in next generation high-tech product manufacture.

Job Description

We are looking for a Senior Process Engineer/Membrane Scientist (SPE) with expertise in membrane preparation and characterization to provide technical leadership in the area of materials science and polymer process engineering. SPE will manage new fluid purification media development that includes material selection, polymer processing, problem-solving, and applied research. You will be an important part of a cross functional team supporting corporate projects both internally and internationally. You will be a key contributor to new product development with responsibility to develop new formulations and manufacturing protocols by advancing existing technology and introducing new technology and products. You must act as an individual contributor and direct the work of other lower-level professionals. The majority of time is spent developing new porous media separation products and research initiatives related to development of new separation technologies - from design to implementation. Your focus as technical leader is on managing development of novel porous separation media and integration of components and assemblies that address the challenges associated with expanding functionality and rising product performance. It will involve interfacing with internal and external customers, program management and command of multiple engineering disciplines. Requires cross-disciplinary systems thinking approach to problem solving and solution implementation.

Essential Job Responsibilities:

- Apply principles of chemistry, physics, and material behavior to develop porous materials and hollow fiber membranes.
- Develop methods for the fabrication of membranes, including thin-film composite hollow fibers.
- Design and build systems to characterize the transport properties of hollow fiber membranes at industrially relevant process conditions.
- Manage technology scale up to pilot scale production. Develop optimal manufacturing formulations and resolve process challenges.
- Proactively identify project roadblocks and work with team and leadership to address them.
- Strong communication skills and ability to collaborate in a fast-paced team environment
- Comfortable working in the less certain culture and climate typical of advanced development work
- Develops critical relationships and establishes ways of working with cross-functional team members both within Avanpore and with outside vendors and customers.

Education & Experience:

5 years + technical product development experience, preferably in membrane fabrication, extrusion or related plastic processing industries. Demonstrated track record of driving projects in complex technology development. Experience tackling abstract problem solving and ability to drive concrete action in the uncertain territory of advanced development. May require practical knowledge and demonstrated competence within the job area typically obtained through advanced education combined with experience.

PhD Degree in material science and engineering or related fields required.

Nice to Have:

Process Engineering experience in Membrane Manufacturing Environment. Experience in Plastic Device Fabrication.

Avanpore is an equal opportunity employer that is committed to inclusion and diversity.

How to Apply:

Qualified Applicants submit resume to: Ben Bikson, PhD

President Avanpore

At bbikson@avanpore.com