

Membrane Scientist Los Angeles, CA

My client in Los Angeles is a young VC-funded startup that enhances current polymer-based membranes with a nano-structured material that allows additional control of key membrane properties. The result is a wide array of advantageous membrane characteristics including improved throughput at requisite salt and contaminant rejection levels, passive and active fouling resistance, and the flexibility to address specific water chemistries. They have recently received \$61 million in funding from several venture capital firms.

You will be developing a suite of innovative products based on current nanocomposite RO membrane chemistry as well as second generation membrane materials. Directing and working hands on to ensure quality and commercial viability of reverse osmosis products including hand cast and commercial reverse osmosis membrane testing and synthesis, prototype membrane testing and new product design. Work with other R&D team members to ensure highest quality laboratory procedures.

Essential Functions:

- Defining laboratory experiments and creating comprehensive R&D plans
- Hand-casting polymer and nanocomposite (mixed-matrix) membranes
- Performing advanced membrane characterization and desalination performance testing
- Synthesizing and characterizing new monomers and polymers
- Track the project mgmt process for experiments
- Robust analysis of data from lab experiments, manufacturing trials and field results
- Provide general assistance and expertise to manufacturing team members on building differentiated products that maintain company's competitive edge

Education/Training/Experience:

Required:

- M.S. or Ph.D. in polymer chemistry, chemical engineering, or material science.
- Minimum of 5 years demonstrated successful planning, execution and analysis in moving research work from the laboratory bench to a commercial product.
- Demonstrated excellence in application of analytical tools (UV-VIS, FT-IR) in quantitative and qualitative analysis.
- Thorough and demonstrated knowledge of analytical, inorganic, organic and physical chemistry.
- Ability to work with short cycle times for delivering results.
- Proven ability to lead scientific and engineering projects.
- Ability to thrive in an interdisciplinary environment.
- Good written and verbal English communication skills (MUST HAVE FLUENCY)

Desirable:

- Experience coating or casting polymer films, membranes or mixed-matrix materials
- Experience performing and interpreting AFM, SEM, TEM, XRD, EDX, XPS, FTIR, DSC, contact angle, and zeta potential

- Experience synthesizing monomers and polymers and characterization with NMR, GCMS, FTIR
- Adhesion and interactions between particles and surfaces in liquids, dispersions, and colloidal systems
- Mechanistic understanding of interfacial polymerizations
- Experience using micro and meso-scale characterization to explain macroscopic behavior
- Competitive product knowledge and industry trends
- RO membrane development including casting and coating processes
- Water analysis including ICP, ion chromatography, TOC Laboratory QA/QC
- SPC, DOE and Statistical Analysis of Laboratory Data

General Skills/Abilities: Proven attention to detail, excellent organization, written and verbal English communication skills. Competent in using Microsoft Office Word, Excel and PowerPoint.

Physical Requirements: Standing, sitting, walking, climbing stairs, light lifting up to 45 pounds, computer operation, travel if/as required by air/rail/auto, ability to work in office and manufacturing environment.

IF you interested in pursuing excellent opportunities, please respond with a confidential resume and cover letter, addressing which position is the best fit and why. Recommendations and referrals are welcomed.

Best Regards,

Nicholas Meyler
GM/President, Technology
Wingate Dunross, Inc.
ph. (818)597-3200 ext. 211
nickm@wdsearch.com