

System Design and Modelling Engineer

Compact Membrane Systems (CMS) is on a mission to save the planet. We create technology to capture and reduce greenhouse gas emissions, avert global warming, and transform industry into a long-term sustainable enterprise. One membrane system at a time. CMS is a high-growth, advanced materials company based in Wilmington, Delaware that offers its employees personal growth, autonomy, and the opportunity to work on award-winning disruptive technology that is bringing 21st century innovation to the industrial economy.

We are looking for a highly effective system design and modelling engineer who will work with our product design teams to optimize the separation system surrounding the membrane. This will require highly collaborative work. This person will need to be able to understand the big picture and communicate the critical concepts while also ensuring that the numbers behind those concepts are right. They will be a crucial member of the team developing a full product offering for our customers.

What you will be doing

- Using simulation software such as ASPEN, ChemCad or Symmetry to develop detailed process flow diagrams and systems analysis for membrane separation systems including capital equipment lists, mass and energy balances and operating expenses
- Performing sensitivity analyses to understand the impact of various system design components (i.e., operating pressures, temperatures, recycle rates, etc.) on system performance and economic evaluation
- Developing techno-economic analyses for membrane separation processes (mainly gas-gas separations)
- Communicating results internally and externally using clear, concise, data-driven analyses
- Working with product development and business development teams to understand the economic and system impacts of various changes throughout the process (i.e., cartridge design, customer specifications)

Position Benefits

The pay range we are offering is \$80,000-\$100,000 and will be based on experience. In addition to the annual salary, you will receive:

- PTO (paid time off)
- paid holidays
- Flexible work schedule
- Hybrid Work Option (if applicable to the role)
- Comprehensive benefit offering that includes:
 - Medical
 - Dental
 - Vision
 - 401k
 - Participation in the CMS Stock Option Plan

What you need for this Position

- Experience in modelling chemical engineering processes
- Knowledge of sourcing capital equipment such as compressors, controls, valving, etc.
- Bachelors or Master's degree in Chemical Engineering (Advanced degree is a plus)
- Proficiency in working with simulation software such as ASPEN or ChemCad
- Experience working in the oil and gas, petrochemical or specialty chemical industries
- Ability to understand and communicate the “80/20 answer” and drive to the “99% answer” when required
- Ability to balance multiple priorities
- Comfort with being the go-to person and expert in your areas of expertise
- History of working in a highly dynamic and collaborative team

About Compact Membrane Systems (CMS)

We decarbonize today's infrastructure for a cleaner tomorrow. CMS develops and deploys new climate-oriented technologies for carbon capture, renewable gas, and improvements to existing industrial processes. We live and breathe on the cutting edge of industrial technology. CMS enables large, capital-intensive industrial operations to meet the needs of a changing world and a climate challenge: operating more efficiently, while also supporting the growth of new, green industries.

We are a small but mighty group of inquisitive self-starters who are passionate about learning and making a positive impact on our team-mates, colleagues, customers, and the world every day. Our individual missions and work are varied, our work culture is collaborative, and our organization is flat.

CMS operates a research facility, product development shop, and membrane manufacturing facility.

Location

Compact Membrane Systems is located in Wilmington, Delaware. This great spot in the Northeast features friendly people, low cost of living, and abundant open spaces and nature. Commute from Center City Philadelphia, live in the burbs, or be tucked away, out of view of any neighbors.

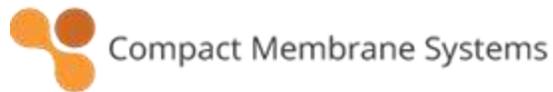
Why you should apply

Growth

When you join CMS, you join an entrepreneurial environment focused on company acceleration and your professional growth. CMS employees quickly become experts in their domain, and act as the face of the company to customers and other external stakeholders. We are a small team and you are getting in on the ground floor. You will have plenty of headroom to grow.

Innovation

Game changing innovation happens at small companies, where teams are creative, leadership is nimble, and politics are rare. Our thinking is not limited by 'what we have always done', impacting our existing portfolio, or the latest, quarterly change.



Access

Our small size means that everyone has a variety of projects and collaborations across the organization, with visibility to leadership.

Culture

We are a friendly home for ambitious, curious, self-directed self-starters who enjoy finding new solutions to new problems. The culture and work provide opportunities to chart your path within CMS, and externally with our customers and partners.

Impact

CMS takes on some of the toughest scientific challenges in industry, delivering innovative technology and high value solutions. We don't do me-too technology or incrementalism. We over deliver for our customers and our partners. We have high expectations of our products and our team.

For more information, to speak to a CMS colleague or to submit your resume, please contact resumes@compactmembrane.com

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