

JOB DESCRIPTION (R2009857)

Process Research & Development Specialist_ Process Research & Development

The Dow Chemical Company has an exciting opportunity for right individual to fill the role of a Process Research & Development Specialist located in Jincheon, Chungbuk. The Process R&D specialist, as a member of the Dow performance Silicone R&D in Dow Consumer Solutions business organization, develops and delivers most efficient and optimized process solutions to Dow Manufacturing and Engineering, utilizing scientific approach to problem solving with intense lab experiments, computational process modeling and prior art study. To achieve excellence in process development and delivery, Process R&D works closely with Manufacturing & Engineering and Commercial teams as well as other R&D functions such as product development, Analytical Science and Technical Service & development.

Key Responsibilities

- Hold self to highest standards on safety, integrity within and outside Dow. Understand and follow appropriate EH&S standards, policies and procedures applicable to job.
- Participate in the innovation process as it applies to specific projects. Propose project proposal aligning to business strategies and objectives. Serve on multi-disciplinary project teams to collaborate, provide technical input, and deliver results aligned with team deliverables. Define and lead the scale-up activities for new products. Develop short, medium and long term scale-up and manufacturing strategies for new products.
- Investigate and develop novel processes for new and existing products that optimize or improve product application performance, yield/efficiency, quality (stability/capability), cost structure, waste or capacity.
- Support Manufacturing and Engineering activities aligned with incremental improvements for existing products, stretch or expand production capacity, assess/qualify raw material changes and scope/champion capital projects.
- Define and conduct research on projects using advanced knowledge of scientific principles, theory and experimental design within a scientific discipline. Develop and implement process solutions through hands-on experimentation and process modeling/simulation tools for research problems that are well defined within a project area. Consistently apply the Scientific Method in the planning and execution of experimental plans and problem solving. Formulate hypotheses and develop experimental plans to test hypotheses.
- Generate sound research data, interpretation of results.
- Understand patent and journal literature for a given area of technology. Initiate steps to secure right to practice and/or patent protection for new technologies.
- Communicate and appropriately document work in the form of internal reports/presentations and external publications/presentations (when appropriate). Identify relevant external networks and collaborators.
- Serve as a peer coach and provides constructive advices on projects within the team. Use skills and competencies to increase productivity of self and others. Provide support and guidance to technicians.

Required Qualifications:

- Master's or PhD degree with <1yr working experience in the field of Chemistry, Engineering, or material science .
- Ability to work independently and drive projects to completion.
- Passion to reach depth of knowledge and dissolve untrodden issues.
- Strong interpersonal and leadership skills. Ability to successfully partner with team members and stakeholders from multiple backgrounds.
- Excellent verbal and written communication skills in Korean and English. Proactively communicates results and progress to technical teams, supervision, management, and business leadership.
- Ability to deliver presentations that distill complex ideas.



Preferred Qualifications:

- Research experience in Reaction Kinetics, Process control, Rheology and Energy/Material transfer.
- Experience in program lead or project management.
- Good understanding on Process safety.
- Business/Financial acumen.
- Knowledge of Six Sigma Methodologies.
- Fluent in the English language.

Education:

- Master's or Ph-D degree in Chemical engineering (or equivalent) is preferred.

Dow Offers:

- A robust total rewards program, including: competitive base pay, variable pay that rewards individual, team, and Company performance, and comprehensive benefits
- On-going learning opportunities within a diverse, inclusive and rewarding work environment
- Career experiences that can span different Dow businesses and functions with opportunities for personal and professional growth
- The chance to work within a global company and interact with colleagues from around the world
- Opportunities that spark your imagination and ignite your passion to help others

About Dow

Dow (NYSE: DOW) combines global breadth, asset integration and scale, focused innovation and leading business positions to achieve profitable growth. The Company's ambition is to become the most innovative, customer centric, inclusive and sustainable materials science company. Dow's portfolio of plastics, industrial intermediates, coatings and silicones businesses delivers a broad range of differentiated science-based products and solutions for its customers in high-growth market segments, such as packaging, infrastructure and consumer care. Dow operates 109 manufacturing sites in 31 countries and employs approximately 36,500 people. Dow delivered sales of approximately \$43 billion in 2019. References to Dow or the Company mean Dow Inc. and its subsidiaries. For more information, please visit www.dow.com or follow [@DowNewsroom](https://twitter.com/DowNewsroom) on Twitter.

