

JOB DESCRIPTION (#1809813)

1. Position Title: Process Research & Development Specialist_ Process Research & Development

- 2. Lead Paragraph:** 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.

3. Job Description:

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 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.

4. Job Qualifications:

Required Qualifications:

- Master/PhD degree with <1yr working experience in field of chemical engineering.
- 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/PhD in Chemical engineering (or equivalent) is required

5. Boilerplate (list below Education):

About DowDuPont

DowDuPont (NYSE: DWDP) is a holding company comprised of The Dow Chemical Company and DuPont with the intent to form strong, independent, publicly traded companies in agriculture, materials science and specialty products sectors that will lead their respective industries through productive, science-based innovation to meet the needs of customers and help solve global challenges. For more information, please visit us at www.dow-dupont.com.

The positions represented by this job posting are aligned to one of the three divisions, Agriculture, Materials Science or Specialty Products, which are expected to separate from DowDuPont into stand-alone public companies. Information on the division alignment will be provided during the recruitment process.

Join Our Talent Community

Join our community (<http://www.dow.com/en-us/careers/dow-talent-community>) to stay up-to-date on career events, job opportunities, company news, and projects in your field of interest. Our recruiters may also use this information to contact you when they have an opportunity that may be of interest to you.

DowDupont offers:

- Competitive salaries and comprehensive benefits
- An annual variable pay program that rewards team and individual performance while sharing success across the company
- Employee stock ownership - and the commitment to long-term success that it brings
- 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

JOB DESCRIPTION (#1809816)

1. Position Title: Product Development Research Specialist_ Product Development

2. Lead Paragraph: The Dow Chemical Company has an exciting opportunity for right individual to fill the role of Product Development Research Specialist located in Jincheon. The Project Development Research Specialist as a member of the Dow Performance Silicone in Consumer Solutions organization, provides silicone base specialty product solution to targeted market and application such as consumer electronics, display, industrial, automotive etc. The key role of Product Development is technical problem solving and enhancement of formulation capability to develop differentiated product. The incumbent works closely with commercial team to explore new business opportunity and deliver innovative technical solution/product with scientific approach that would help customer success and sustainable growth aligning with business strategy. The position requires intimate knowledge of customer requirements and ability to match them to fundamental properties that our product can provide.

3. Job Description:

Key Responsibilities

- Hold self to highest standards on safety, integrity within and outside of Dow
- Develop and commercialize new products for targeted customer and application using differentiated technical solution(new chemistry set, modification or development of curing chemistry and formulation)
- Validate the efficacy of new products by laboratory testing and larger scale trials at customers, using industry standard or customer specific end use test methods.
- Scientific understandings to ensure appropriate product specification setting to allow smooth project transfer to process engineering and manufacturing.
- Solve technical problems with scientific rigor.
- Work and interact with commercialization team and process R&D, Manufacturing team in commercialization project to deliver the innovation new product to customer
- Effective communication skills are necessary for working with the external customers, and to translate the market needs into product specifications and concepts.
- Work closely with regional and global technical experts and leverage technical expertise/specialty
- Documentation of technical report, paper and maintain a technical understanding of the literature and patent
- Protect intellectual property

4. Job Qualifications:

Required Qualifications:

- Good understanding of basic knowledge of organic chemistry, polymer chemistry
- Master/doctor degree with (<1yr working experience) in field of chemistry, chemical engineering, polymer or material science
- Research experience in the application such as electronics, display, automotive, appliance etc.
- Strong verbal, written and presentation skill in English and Korean both for interacting frequently with customer and global team
- Lead Design of experiment and formulating to meet technical target
- Approach to literature and patent. Bring and adopt new technical idea to own development work
- Basic understanding on business and application
- Skillset for basic instrument and analytical tool which is used for mechanical property measurement and chemical analysis/material characterization(Rheometer, SEM, Microscope, Spectroscope, Chromatography etc)

Preferred Qualifications:

- Experience in leading program and project management experience is preferred
- Knowledge of the polymerization using industrial monomer
- Experience in chemistry of thermo-plastic/setting industrial product
- Communication, interpersonal skills, and the ability to build networks will be essential to foster team success and accomplish the project objectives.
- Fluent in the English language

Education:

- Master/PhD in Chemistry, Material science, polymer science/engineering is required

5. Boilerplate (list below Education):**About DowDuPont**

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