IMERYS

JOB DESCRIPTION

POSITION TITLE	Material Scientist or Senior Material Scientist / Engineer or Sr Engineer		DATE OF ISSUE	June 2018
BUSINESS GROUP/ DIVISION/COMPANY	Innovation/S&T Platform Technology	FLSA STATUS (US ONLY)		
REPORTS TO (position)	Platform Technology Dir or Sr Manager	LOCATION Negotiable; ITC-Lyon, ITC-SJ, etc		

JOB SUMMARY/PURPOSE

In 2-3 sentences, summarise the job purpose stating overall role and objectives, and its overall contribution to the Company

Primary responsibilities of this role are material science/engineering technology developments focused on surface and interfacial science, especially for composites, and for Digimat (e-Xstream, computer modeling and application simulation) use and validation. This scientist will be part of a team developing and implementing our surface and interface core technology competencies.

Invents and develops transformational (and transversal) technologies and enablers based on key market drivers and associated roadmaps. Performs disruptive research to greatly expand scientific knowledge of Imerys leading to faster new product and process developments, using synthetic and computational tools. Develops research plans and studies in support of specific transformational technology targets, projects and initiatives. Provides technical consultation, coordination, and/or staff support to various strategic projects and programs (especially with University and expert consultant lead initiatives).

JOB SCOPE/DIMENSIONS

Individual has the ability to independently conceptualize and initiate disruptive R&D projects, as well as facilitate the development of any associated new best practice, etc. Projects are typically >$10MM in revenue or > $5MM cost savings potential.
Individual will have limited budgetary responsibility but will manage projects and related portfolio that contain significant technical resource investments.

80-90% of time spent in a lab (Imerys or external) environment and reading technical literature
Directly supervises 0-5 highly skilled lab technicians/technical specialists.
Make decisions concerning employment status of position(s) supervised.
5-10% of time spent supervising (including external to Imerys resources).
Domestic and international travel is required (15-30%).

KEY TASKS AND RESPONSIBILITIES

IMERYS

List the essential functions, major activities and the main areas of ongoing responsibility concerning the position. Give the precise long- term results or the contributions expected of the position. Use action verbs (ex : contribute, assure, supervise…) to indicate the degree of responsibility of the position with regards to the expected results. Identify the necessary components of success and the specific difficulties for the position.

1. Conducts literature and IP landscape evaluations in support of potential disruptive technologies products and processes related to predictive engineering priorities and deliverables. (Constantly)
2. Conducts in-house scientific experiments to develop proprietary and high value new technologies/products/applications/skill sets. (Constantly)
3. Attends test trials at outside test labs for new developments. (Frequently)
4. Interprets, evaluates, and communicates research data and results for research projects. (Constantly)
5. Write Invention Disclosures/Reports, drafts IP and assists in prosecuting patent applications. (Frequently)
6. Manages multiple research projects and 1 or more bench scientists (or external resources). (As needed)
7. Participates and coordinates, as needed, cross-functional teams for especially complex and new to Imerys projects and technology developments. (Often)
8. Provides technical support for initial testing of prototypes. (Occasionally)
9. Writes research reports to document research results. (Frequently)
10. Attends technical conferences, presents research papers and publishes research papers in peer-reviewed scientific journals. (Frequently)

OTHER IMPORTANT FUNCTIONS

What other functions are performed in this position that might not be considered essential?

1. Attends technical symposia to gain insight into new technology developments and to interact with industry peers and academia. (Occasionally)
2. Participates in S&T Sr mgmt meetings or wherever projects are reviewed and prioritized and resourced
3. Ability to coordinate technical activities (related to their projects) across S&T clusters and other Imerys functions (especially Industrial and Operations).

JOB SPECIFICATIONS

Education and Experience requirements
(Educational requirements should be the minimum level acceptable for the position. Experience should describe both type and amount of necessary qualifying experience. Also note any professional licenses required)

Education:
Ph.D. in Science, Engineering or related discipline (required) with postdoctoral experience (preferred). Expertise in polymer materials science required. Experience using Digimat (or other application modeling software/tools) is highly required.

Experience :
Preferred minimum of 5 years research experience including minimum 3 years industrial R&D experience. Extensive technical experience with computer science, material science, polymer chemistry, and/or engineering. Ability to conceptualize and lead complex technical efforts (transformational and transversal). Authorship of significant and relevant patents and/or papers is preferred.

Knowledge, skills, abilities and other characteristics *(Identify skills/ attributes required for this position which may include leadership, problem solving, interpersonal, communications, planning, team participation skills, and/ or language requirements.)*

Knowledge, Skills, Abilities, and Attributes:

1. Specific and deep understanding of the science and practical use of predictive engineering tools.
2. Demonstrated analytical, project management and new technology/product/process development skills.
3. Ability to invent and develop and deploy disruptive new technologies, products and processes.
4. Highly organized and able to work well with colleagues at all levels in the organization.

5. Excellent "teaming" skills. Able to work effectively (especially in leadership role) on cross-functional teams and projects.
6. Capable of multi-tasking.
7. Skill in the use of computerized spreadsheet, relational database, word processing, drawing, plotting and process diagram software.
8. Knowledge of project management principles, practices, techniques, and tools.
9. Knowledge and understanding of new product research principles, processes, and techniques.
10. English language fluency (written and oral).

Liaison:
External – Expert consultants/suppliers, peers, industry professionals, and especially relevant university faculty and students.
Internal –Marketing/Business Innovation, Legal and Innovation/S&T department personnel.

Freedom to Act:
Highest degree of authority to make independent decisions. Position is non-conventional with no set procedures and guidelines to be followed, but general supervision is given to ensure the adequate performance of job responsibilities.

Problem Complexity:
High level of analytical and problem solving skills.

Impact of Decisions:
Decision making has a high degree of impact on the organization with respect to disruptive new product and process development.

Independent Judgment:
Uses full independent judgment in the process of developing transformational new technologies, products and processes.

Attendance Requirements:
Typical working hours are Monday through Friday, 8:00am – 5:00pm. Occasional overtime and travel may be required for attending outside test trials or other similarly related functions.

Physical/Environmental Aspects – US ONLY

List specific physical demands and activities of the position with a description of the activity including the frequency and duration required. Also note the work environment.

Physical Conditions of Employment:
Sitting - 70%
Standing - 10%
Walking - 20%

1. Frequent use of near vision to view a computer screen for extended periods of time.
2. Frequent typing and using a mouse.
3. Frequently sitting or standing for extended periods of time without getting a break.
4. Frequently listening and talking on the phone.
5. Occasionally walking and standing to do lab experiments, retrieve files, provide assistance to other employees, and retrieve supplies.

Environmental Conditions of Employment:

The majority of time is spent inside an environmentally controlled laboratory. The main source for noise is the instruments and equipment in the lab environment.

Clothing/ Device/ Equipment Required to be Used:

1. Computers. (Constantly)
2. Typical laboratory environments

Hazard Exposure:

Minimal hazard exposures in a common lab with analytical, application, synthesis and scale up activities.