

CHE006247/Sr. Scientist, High-Throughput Experimentation and Lead Discovery Capabilities

Position Description

Merck is currently seeking an exceptional Senior Scientist for a position within the High-Throughput Experimentation and Lead Discovery Capabilities group in Kenilworth, NJ. The successful candidate will join a multidisciplinary, highly collaborative discovery chemistry team to invent novel medicines through a combination of innovative synthetic chemistry and reaction engineering to enable discovery. The successful candidate will be expected to apply science driven decision making working at the interface of chemistry and engineering.

As a Senior Scientist, you must be collaborative and able to effectively participate in and/or lead cross-functional teams working in a variety of projects. These cross-functional teams will explore, develop, optimize, test, and implement robust, scalable, innovative synthesis/screening solutions for the High-Throughput Experimentation group's workflows. This will require integration of instrument components, unit testing and troubleshooting with attention to understanding business and user requirements and improving efficiency, throughput, and quality.

Success across this spectrum of activities will necessitate the application of the latest advances in chemistry and engineering to realize the potential for automation to revolutionize the practice of medicinal chemistry. Furthermore, the successful candidate must exhibit excellent interpersonal, collaboration and communication skills in a team environment.

Position Qualifications:

Education Minimum Requirement: Master's degree in Chemistry, Chemical Engineering or related field with a minimum of 4 years of relevant experience; or Ph.D. in above disciplines with relevant experience. Anticipated attainment of Ph.D. in 2018-2019 matching noted criteria is also acceptable.

Required Experience and Skills: Experience with developing, optimizing, and validating automation systems for use in chemical high throughput experimentation. A proven track record of solving complex problems.

Preferred Experience and Skills: Experience in synthesis, purification and analytical characterization of new chemical entities including HPLC, MS, NMR, and biophysical methods.

Experience with operating and programming liquid handling robotics platforms (e.g., Hamilton, TECAN, Agilent Technologies, Mosquito, Thermo Matrix/ Versette).

Familiarity with streamlining workflows and developing automated laboratory processes and instrumentation systems, including collecting and documenting requirements, developing concepts, design, testing/validation, implementation, and training. A familiarity with design software (AutoCAD or similar) and documented (e.g. Github) automation tools, such as Node, OpenPLC, node-red (open source) or similar systems is desirable.

Familiarity with multi-dimensional data analysis tools, including Spotfire or equivalent.

Demonstrated ability in programming and debugging with VBAscript, Python, Pipeline Pilot, PERL and/or JavaScript, relational databases, SQL, LIMS or other relevant enterprise software packages; also, embedded systems using languages such as C, LabView, Python, DeltaV or similar; and familiarity with Linux OS on embedded systems.

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