Research Chemist Job Description

- Plan and implement experiments to assess properties, composition, and behavior of several chemical substances
- Facilitate the growth and refinement of research methodologies, instrumentations, tools and software to improve the capabilities of the research community
- Examine research findings using complex computational and statistical tools to spot patterns, trends and reach conclusions
- Derive conclusions from research observations to formulate hypothesis that guide future investigations
- Come up with improved experimental protocols, analytical tools, and instrumentation to enhance the efficiency and accuracy of your research
- Closely follow the advancement in published literature as well as attend conferences, and collaborate with colleagues
- Draft meticulous reports of research activities, manuscripts and grant proposals that document results and procure resources to sustain ongoing projects
- Make presentations of research results to internal teams, industry stakeholders and the broader scientific community via presentations, lectures and publications
- Undertake the patent procurement procedure, work with intellectual property attorneys to protect the groundbreaking advancements, and pioneer creations that stem from work
- Devise and certify groundbreaking measurements methodologies such as chromatography, spectroscopy, and mass spectrometry to improve the accuracy and efficiency of research
- Serve as a role model to educate and coach junior researchers, laboratory technicians, and undergraduate students
- Oversee comprehensive research initiative to ensure timely completion, budget adherence and safety and ethical compliance

- Work cooperatively with inter-disciplinary teams, including subject matter experts, engineers, and material scientists to address research issues
- Take part in crafting and delivering research grant submissions to get funding for current and future projects
- Foster and strengthen cross-functional working relationships with industry partners, academia and government agencies to turn research results into practical solutions
- Diagnose and refine research apparatus to ensure reliability and reproducibility of research data
- Keep comprehensive records of investigative work, including methodology, data, and observations to steer future research and peer review
- Deploy expertise to help develop new products, processes or technologies
- Diligently handle and store hazardous chemicals in line with safety regulations
- Work collaboratively with regulatory agencies and industry stakeholders to stay informed on the standards, guidelines, and best practices
- Be updated on all things in the field, including emerging trends, new technologies, and regulatory updates, that way you can adapt your research strategies appropriately.