



Assignment Brief
for the position of
Staff Scientist Process Engineer
AQ 1873

Prepared by:

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The Organization

Philip Morris International, based in Lausanne, Switzerland, is one of the largest tobacco companies in the world. We currently hold a 15% share of the international cigarette market and employ more than 70,000 people worldwide. Our brands are made in more than 50 factories around the world and sold in over 160 countries.

With its employees representing over 100 nationalities and 80 languages, PMI's diverse web of people are linked by a singular commitment to excellence.

The company believes in hiring, training and promoting the best global talent in all its business functions.

PMI provides ongoing training to employees throughout the organisation, as well as an opportunity for many employees to work outside their home markets and thereby gain the sort of global experience the company seeks.

Along with its portfolio of leading brands, the company's employees are its most critical and valued assets.

PMI is committed to selling and marketing its products in a responsible way. This includes:

- ✧ Being open about the health effects of smoking and working to address society's concerns about its products
- ✧ Supporting strong and effective tobacco regulation for both its products and the industry
- ✧ Supporting worldwide minimum wage laws and backing youth smoking prevention programs across the globe
- ✧ Maintaining high standards of safety wherever the company operates
- ✧ Continuing to take environmental measures on waste, recycling and the protection of resources around the world

PMI's values guide its day-to-day operations. Its goals for doing business and interacting with society, both locally and globally are:

- ✧ Listening to society's concerns about its products
- ✧ Seeking common ground with its critics and implementing real solutions
- ✧ Acknowledging and embracing its role as a responsible citizen and an active member of the community
- ✧ Being open and transparent with its stakeholders and society as a whole
- ✧ Acting with integrity, respect, trust and a collaborative spirit

The company maintains high standards of safety wherever it operates, continually monitoring its production practices in its factories around the world to identify and share possible improvements.

The company supports strong and effective regulation for its products and its industry, and is committed to working with governments and the public health community to achieve that goal.

Context of the Role

The primary mission of the PMI Research & Development Centre is to research and develop a new generation of products with the potential to reduce the risks of smoking. Today PMI Research & Development employs over 300 professionals.

PMI R&D is also assessing adjacent opportunities, i.e. product options that can potentially support the development of alternative uses of tobacco, a need fulfilled by the Tobacco Adjacent Technologies (TAT) department based in Neuchatel, Switzerland. Among these opportunities, TAT is looking at Plant Molecular Farming (PMF).

PMF is the production of valuable compounds in plants. It provides the ability to develop complex molecules that cannot for either technical or economic reasons be produced in the established and heavily utilised mammalian, yeasts or bacteria cell culture systems that are currently well established in Pharmaceutical research and drug development.

More information on PMF can be found at:

<http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=15995674>

http://www.wiley-vch.de/templates/pdf/3527305521_c01.pdf

http://www.pharma-planta.org/resources_documents/COPB_2004.pdf

To support PMI R&D aspirations in PMF, a TAT organization has been set up in functional units that include Upstream and Downstream Technology, Technology and Product Integration, IP Management and Business Valuation:

TAT's culture is therefore similar to one of an entrepreneurial and rapidly developing biotechnology company combining a pioneering spirit with a passion for plant biotechnology, employing individuals from a wide variety of backgrounds and cultures including the pharmaceutical and biotechnology industries.

Critical to the business strategy is to recruit a **Staff Scientist Process Engineer** who will enjoy a wide brief incorporating the conception and implementation of innovative downstream technologies and processes that can yield proteins for human use from plants in a cost effective way.

Primary Requirements

- ✧ Conceive, plan and develop innovative extraction and purification technologies and processes, which reliably gives high, fast and cost effective processes to purify proteins from tobacco.
- ✧ Conceive, plan and develop pilot scale extraction and purification solutions and capabilities with external partners
- ✧ Assist in the development of analytical methods for the characterization and quality control of extracted proteins in line with regulations and guidelines
- ✧ Deliver a tool for optimal design of downstream processing and to predict cost and yield of proteins extraction and purification from tobacco
- ✧ Interface and promote communication with other groups inside the Tobacco Adjacent Technologies department.
- ✧ Maintain broad knowledge of state-of-the-art principles and theory.

Experience

- ✧ You have a MS in Engineering or Science and demonstrated downstream processing experience in the biotechnology field in a commercial environment with cumulated minimum 8 years experience.
- ✧ You have track record of several years of cutting edge research in of downstream processing in biotechnology.
- ✧ Experience in production of recombinant proteins or monoclonal antibodies at industrial level in living systems is for the production of clinical grade proteins is required
- ✧ Demonstrated experience with plant biotechnology is an advantage
- ✧ Preferably strong commercial and industrial experience.
- ✧ Broad Biotechnology knowledge and experience desirable.
- ✧ Familiarity with managing projects in a pilot scale environment.
- ✧ Fluency in English is essential; spoken French and/or German would be an asset.

Skills

- ✧ Have to ability to apply advanced theories, concepts and technologies to problem solving in the area of expertise.
- ✧ Exhibit a high degree of resourcefulness and possess excellent organizational and team-leading skills.
- ✧ Engineer by background with sound knowledge and understanding of downstream processing.
- ✧ Excellent communication skills both internally and externally.
- ✧ Self-motivated with the ability to work autonomously.
- ✧ Ability to work as part of a team.
- ✧ Ability to work in a dynamic environment.
- ✧ Analytical.
- ✧ Attention to detail.
- ✧ Consultative yet able to make decisions.
- ✧ Enthusiasm.
- ✧ Patience.
- ✧ Desire to make a difference.

Package

- ✧ Competitive base salary, dependent upon experience
- ✧ Additional benefits to include:
 - ✧ Health Insurance
 - ✧ Life Insurance
 - ✧ Loss of Income Insurance
 - ✧ Family Allowance
 - ✧ Pension

The package is negotiable, based upon the level of experience of the individual.