



**MELiSSA PILOT PLANT**  
**at**  
**Universitat Autònoma de Barcelona**  
**(Spain)**

**VACANCY ANNOUNCEMENT**

**Position: Bioprocess Engineer**

***Aim of the position***

The MELiSSA Pilot Plant is a common and long term effort leaded by the European Space Agency and Universitat Autònoma de Barcelona, focused in the development and demonstration of technology for closed Life Support system. These systems will enable future long term manned missions in Space, such as a mission to Mars. The MELiSSA Pilot Plant is part of the MELiSSA Consortium, in which several Universities and Companies from Europe and Canada are collaborating to develop the necessary technology.

The Pilot plant is the facility where all the technologies are integrated and serves to demonstrate the feasibility of its operation under controlled conditions. The MELiSSA Pilot Plant is becoming progressively an international facility, where all the advancement of the MELiSSA Consortium and other related technologies are brought together. It is now recognised as the major laboratory on this field in Europe.

The activities developed in the MELiSSA Pilot Plant include the characterization and operation of the different type of bioreactors of each compartment, as well as the associated instrumentation, and control aspects. This is an important step first to complete the knowledge of each individual compartment, and second to achieve the complete integration of the MPP.

To complete these tasks, a Bioprocess Engineer is required to complete the technical team of the MELiSSA Pilot Plant, with a strong focus in the daily operation of the different Compartments of the facility and associated tasks. The tasks developed in the MELiSSA Pilot Plant are indeed in an international scope, in a multidisciplinary team, with many challenges to accomplish due to the relevance of the final goal to achieve. Among them, the long term operation of pilot scale bioreactors in axenic conditions.

***Qualifications and experience required***

- BSc or MSc degree
- Consolidated background in Biotechnology, Bioprocess Engineering
- Experience in Bioprocess Engineering, during a period of 3-5 years in pilot plant installations, either in public institutions or private companies, especially in sterile/clean room conditions
- English, advanced level. Good writing skills
- Experience in quality aspects (ISO, GLP, GMP) will be appreciated
- Spanish knowledge, although not requested, will be also considered

***Situation and organizational relationship of the position***

Reports to:

- MPP Technical Manager
- ESA Operational Representative
- MPP Overall Manager

Subordinates:

None

Relates mainly to:

MPP management team, MPP technical team, MELiSSA consortium scientists and engineers, MPP subcontractors, MPP suppliers, personnel in UAB Chemical Engineering Department, personnel in ETSE, personnel in UAB

***Salary (gross)***

**30.000-35.000 Euros/year**

***Main duties and specific tasks:***

- Understanding of the characteristics of the equipment associated to each compartment, including the associated instrumentation
- Understanding of the functions of each compartment of the MELiSSA Pilot Plant, and of the complete MELiSSA loop
- Understanding of the operation conditions of each compartment, including nominal values, operational ranges, etc.
- Understanding of all aspects related to Quality, Safety and Environment in the MPP, and especially those associated to the operation of the various compartments
- Understanding of the control system in the MELiSSA Pilot Plant at the level of user
- Starting from the work outlined in the different Call-off Orders related to the operation of the MPP Compartments; participate in the definition and elaboration of the corresponding test plans.
- Coordination of the tests defined in the previous point, including practical work when required.
- In the execution of the tests, and in general in the operation of the Compartments at the MPP, the Bioprocess Engineer will interact with the technicians of the MPP at two different levels: operation and maintenance. For the operation part, the Bioprocess Engineer will be responsible of the supervision of a number of tasks (i.e., analysis, media preparation, etc.) performed by the Laboratory Technicians of the MPP. For the maintenance part, the Bioprocess Engineer will coordinate with the Instrumentation and Maintenance Technician of the MPP.
- Compilation of all results obtained in the tests
- Elaboration of the corresponding test reports
- Elaboration of other technical documents: quality, operation protocols, technical notes, etc. in English
- Participation in coordination meetings

***IMPORTANT NOTICE***

- Present you CVs directly to Prof. Francesc Gòdia, at: [francesc.godia@uab.cat](mailto:francesc.godia@uab.cat), **before 12<sup>th</sup> March 2010**
- Selected candidates should be available for a personal interview on 23<sup>rd</sup> of March 2010, in the MELiSSA Pilot Plant in Barcelona.