

May 14, 2017

**Sensor, control and software expert or PostDoc candidate  
– SME Innovation Associate 38,5 h/week –**

### Institute

alchemia-nova GmbH ([www.alchemia-nova.net](http://www.alchemia-nova.net)) has brought forward innovations in the fields of phytochemistry & closed loop processes for over 15 years. We are looking for support of our development team by hiring a full-time technician based on the INNOSUP-02-2016: European SME innovation associate- pilot. The fellowship includes a fixed-term employment for 12 months starting September 1<sup>st</sup> 2017. Subsequent employment is aspired. While the programme facilitates core training on innovation and entrepreneurial skills, we offer a working environment in pioneering research, innovation and application in the market. Annual gross salary of € 50,000 (full time) is negotiable depending on skills and experience.

### Project

Within the FP7 project [demEAUmed](#) alchemia-nova has developed a building-integrated vertical ecosystem, [vertECO®](#). Its main purpose is to treat and clean greywater as well as industrial wastewaters. For commercialisation purposes, the system is to be equipped with a customised, computerised control unit combined with sensors that generate information about the quality of inflow and outflow water and intelligently regulates the system. In a second step, an integrated energy generation systems that ensure broad energy autonomy of the sensors and control units should be included. This development work may also support a facade-integrated ecosystem for the H2020 project [Green INSTRUCT](#).

### Tasks

The IA is responsible of carrying out following tasks autonomously:

- Setup of an intelligent/adaptive control unit (low or ultra-low power requirements)
- Setup of a customised sensor system, continuously providing water quality parameters
- Hard- and software integration/development (including DAQ interface, data logging and cloud connectivity, remote communication and user interface)
- Installation of on-site power generation (microbial fuel cells technology is given preference)
- Setup, implementation and documentation of calibration and qualification tests
- Involvement in communication, dissemination & exploitation activities
- Support during patent application processes if applicable

### Requirements

Candidates should have a proven experience and proficiency in following fields:

- Multiplatform software development
- Soft and hardware integration
- Sensor systems and data loggers
- Control/regulation interfaces
- On-site power generation (e.g. photovoltaics, thermocouples, microbial fuel cells, etc.)
- Advanced English skills (German is an advantage)
- Willingness to travel
- Team-oriented

**NOTE: The applicant must not have resided or carried out his/her main activity (work, studies, etc.) in Austria for more than 12 months between 01/09/2014 and 31/08/2017, science4refugees programme participants eligible.**

We are looking forward to receiving your application documents, including letter of motivation, CV, education certificates, recommendation letters by e-mail ([office@alchemia-nova.net](mailto:office@alchemia-nova.net)) until 11/06/2017.