

Postdoctoral Research Position at iBET

In transfer of knowledge in process and products development on extraction and formulation intensification processes for natural actives of wine.

Information:

iBET participates in WineSense project as partner, under the coordination of Doctor Catarina Duarte, head of the Nutraceuticals and Controlled Delivery group (<http://www.ibet.pt/>), and director of the Food and Health unit.

iBET is a private non-profit research institute that provides cutting edge applied research and supports collaboration with the industry in Life Sciences and Biotechnology. Our partners are private pharmaceutical and agro-industrial companies and public institutions, being 60% of our funds private. The research activities are based on six infrastructural areas, including the Nutraceuticals & Delivery Group. Our team has strong expertise on isolation of bioactive ingredients (as polyphenols) from natural sources, including by-products of agro-food industry. Green technologies are applied for the production of enriched bioactive natural ingredients, formulation of adequate delivery systems and bioactivity evaluation using pre-clinical assays.

We offer one Postdoctoral Research position for 12 months to work on WineSense project at iBET.

Description:

The position is funded by the European Commission under the Marie Curie Industrial and Academia Partnership and Pathway (IAPP) PIAP-GA-2013-612208, project WineSense (<http://hpp.uva.es/winesense/>).

The WineSense project proposes to improve the extraction process to catch most of the active parts of the polyphenols (presents in grapes), to define a suitable formulation for pharmaceutical applications, food, and cosmetics additives based on Solvent Free Microwave Extraction (SMFE), Microwave Assisted Extraction (MAE), and emulsion-Template techniques combining high pressure and antisolvent effects. Those are techniques developed for analytical purposes that are being implemented in production processes.

New solutions for conventional extraction processes and new solutions for new products are needed to increase process efficiency and product properties. Intensification is a common objective of the extraction and formulation as it reduces operating time, while improving the quantity and quality of the extracts.

Nr of positions available : 1

The candidate will participate in the knowledge and technology transfer of the process and product development for the intensification of extraction and formulation processes of natural active substances from wine.

The selected researcher will contribute in: (a) Product characterization and process monitoring, namely in the characterization of samples: determination of morphological, composition and activity properties of the formulations, according to the product specifications provided by the industrial partners and on the objective of solubilisation of insoluble compounds and stabilization of water-soluble compounds, (b) evaluation of the influence of processing conditions on the morphological properties, composition

and activity of the products, (d) the widest dissemination of the knowledge generated during its execution and (c) enabling the partners (SME) with the opportunity of increasing revenues by using WineSense outputs.

Terms of Employment: This is a full-time post-doctoral position for 12 months. iBET strives to be a work place that is free from discrimination and with equal opportunities for all.

The job location is iBET, Portugal and the management institution of work contract will be the administrative department of iBET. (contact: lmorais@ibet.pt)

Lisbon is the capital and the largest city of Portugal. It is the western most large city located in continental Europe, as well as its westernmost capital city and the only one along the Atlantic coast.

Lisbon enjoys a Mediterranean climate. Among all the metropolises in Europe, it has the warmest winters, with average temperatures 15 °C (59 °F) during the day and 8 °C (46 °F) at night from December to February. The typical summer season lasts about six months, from May to October, although also in November, March and April temperatures sometimes reach around 25 °C (77.0 °F).

Career Stage

Successful candidates must hold a PhD (<10 years experienced researcher) in chemical engineering or other relevant discipline.

We are especially looking for candidates (f/m) with research experience in:

- 1 Synthesis of particulate delivery systems by supercritical fluids and micro-emulsion technologies
- 2 Physical-chemical characterization of particulate systems through state-of art techniques (e.g. QLS, FTIR, DSC)
3. Evaluation of in vitro particles-cells interaction using human cell cultures

Furthermore, other demonstrable experience would be highly desirable in:

1. Full economics to enable subsequent exploitation and business plans
2. Processing of natural products with nutraceutical and cosmetical applications
3. Knowledge and technology transfer in product development

Other skills: interest in quantitative research, strong analytical skills, ability for independent and critical thinking, and excellent communication and writing skills in the English language are a prerequisite

For further information, please contact Doctor Catarina Duarte, cduarte@ibet.pt

Benefits

Marie Curie fellows enjoy good salaries and working conditions, career development opportunities for training and develop other skills.

Starting date

Starting date for the positions is as soon as possible. Candidates must be able to secure a residency and work permit in Portugal.

Salary

Living allowance: 39.639,17 € gross amount per year for full time dedication. Furthermore, monthly the candidate will receipt a mobility allowance that it will depend on his/her family status. Those values are pending to apply the national taxes and medical insurance (social security charges).

To apply

Interested candidates should send their applications by email to cduarte@ibet.pt

The application is to be marked with the project name (WineSense) and must include:

- CV with list of publications, patents, academics awards/honors or other interesting issues.
- Relevant transcript of Grades, Diplomas and Certificates.
- A cover letter (1 page) explaining your motivation and how your skills and experience relate to the research focuses of the position you apply for.
- References letters from at least 2 researchers of different institutions or companies.

Eligibility Criteria

According to Marie Curie rules, to be eligible the researcher must simultaneously fulfill the following criteria at the time of appointment:

- Nationality: The researcher may be a national of a Member State of the Community, of an Associated State or of any other third country.

- Mobility: The candidates must not have resided or carried out his/her main activity (work, studies, etc) in Portugal for more than 12 months in the 3 years immediately prior to his/her recruitment. Short stays, such as holidays, are not taken into account.

Application deadline

We will accept applications received by **16th January 2015** or till the position is filled.

Selection criteria

Selection will be based on the curricular evaluation (CV) according to the admission criteria. In case the jury finds it necessary, the better-ranked candidates will be interviewed. In this case, the final classification will take into account 50% for the curricular evaluation and 50% for the interview.

For further information:

Please look the information up on Website project <http://hpp.uva.es/winesense/>