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## RECURSOS HUMANS – CONVOCATÒRIA DE VACANT

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### CONTRACTACIÓ D'UN TÈCNIC O TÈCNICA DEL GRUP I, A TEMPS COMPLET

#### ■ **PROJECTE:** 2019PROD00113- INSPECTION-DETECCIÓ IN SITU DE CONTAMINANTS EN CONTINU-IU68-017223

*Contractació vinculada a l'ajut 2019 PROD00113- INSPECTION-DETECCIÓ IN SITU DE CONTAMINANTS EN CONTINU-IU68-017223, concedit en el marc de la convocatòria dels ajuts d'Indústria del Coneixement per a l'any 2019 (Llabor i Producte), susceptibles de ser cofinançats pel Fons Europeu de Desenvolupament Regional (FEDER), Modalitat B. Ajuts Producte destinats a l'obtenció de prototipus i a la valorització i transferència dels resultats d'investigació generada per equips de recerca de Catalunya.*

#### ■ **DESCRIPCIÓ DEL LLOC DE TREBALL:**

In the frame of the project INSPECTION, funded by the Fons Europeu de Desenvolupament Regional (FEDER), the tasks of this position will include:

- The development of a low-cost in-situ monitoring device able to check in continuous water quality of rivers and outflows of WWTP, especially in case of water reuse.
- The evaluation of the risk of mixtures in rivers and waste waters under realistic exposure scenarios linking field measurements, laboratory toxicity tests and ecotoxicological modelling.
- The implementation of single micro contaminants and mixtures toxicity tests with PAM (Pulse Amplitude Modulated) fluorometry on river biofilm to improve the calibration of biofilm sensitivity to relevant contaminants testing different types of biofilms and different water flow rates.
- The implementation of time variable exposure tests.
- The identification of the key micro contaminants mixtures responsible for observed toxic effects and potentially point out the presence of other key toxicants
- The calibration of the mixture toxicity models for acute and chronic micro contaminants toxicity in river biofilm based on laboratory and field tests.
- The investigation of micro contaminants effects in river biofilm across time, different exposure regimens and different boundary conditions.
- The test of the device in the relevant environment and verify the efficiency.
- The analysis of biofilm effects in relation with contaminants detected using passive sampling (POCIS and DGT) and other environmental variables (e.g. nitrates, phosphates, turbidity).
- The analysis of the link between contaminants and effects on biofilm community using advanced modelling techniques (neural networks and classification tools).

- The evaluation of the efficiency, standards and market of the device.
- The dissemination of the results obtained in this study.

The hired person will regularly take part in international congresses as well as in collaborations with foreign research groups and will be coached by senior researchers and professors.

## ■ PERFIL DE LA PERSONA CANDIDATA

- Researcher with professional/academic experience. Msc in Biology or Environmental Sciences and phd in Ecology or related fields.

## ■ REQUISITS

- Master degree Biology, Environmental Sciences, or related fields and PhD in Ecology or related fields and a good background in Ecotoxicology are compulsory.
- Good background in Ecotoxicology and Ecological Modelling, biostatistics, experience in laboratory ecotoxicological tests, experience in PAM fluorometry, experience in passive sampling (POCIS, DGT).
- Idiomes: Fluent in English, and Spanish and/or Catalan speaking and understanding.
- Experience in Matlab use and programming, use and programming in SQL, use of Microsoft Office package. Experience in integrated diagnostic models for the identification of probable causes of impairment (eco-epidemiology approach) as well as predictive component models for the prediction of effects of individual toxicants and mixtures. Experience in regression, classification (clustering, regression trees) and ordination methods (PCA, CCA) as well as more complex non linear approaches (Artificial Neural Networks). Experience in the use of Geographical Information System (G.I.S.) software.
- Strong organizational skills and ability to manage an intense work plan including field, laboratory and modelling activities.
- Excellent ability to cooperate and communicate at national and international level with scientific community as well as stakeholders.

## ES VALORARÀ

Experience in the development, test and validation of analytical methods, sampling and monitoring strategies for micro contaminants in the environment.

## ■ CONDICIONS LABORALS

- Tipus de jornada: completa (100% jornada).
- Lloc de treball: ETSEQ
- Contracte o'obra i servei. Grup I del Conveni d'oficines i despatxos.
- Durada 15 mesos.
- Retribució mensual: 3.702,80 €/mes bruts (12 pagues)
- Incorporació: 01/10/2020

■ ENVIAR CV A/e: [nora.exposito@urv.cat](mailto:nora.exposito@urv.cat) i [rrhh@fundacio.urv.cat](mailto:rrhh@fundacio.urv.cat)