

JOB POSITION

Project Engineer in environmental studies about forest ecosystems

The French National Research Institute for Agriculture, Food, and the Environment (INRAE) is a public research establishment. It is a community of 12,000 people with more than 200 research units and 42 experimental units located throughout France. The institute is among the world leaders in agricultural and food sciences, in plant and animal sciences, and is 11th in the world in ecology and environment. INRAE's main goal is to be a key player in the transitions necessary to address major global challenges. In the face of the increase in population, climate change, scarcity of resources and decline in biodiversity, the institute develops solutions for multiperformance agriculture, high quality food and sustainable management of resources and ecosystems.

WORKING ENVIRONMENT AND ACTIVITIES

• You will be welcomed in the research unit ISPA, within the research team of the project SWATCH (international programme PRIMA) led by Pr J.-C. Domec and Dr D. Loustau. The ISPA unit is located close from the Bordeaux city and belongs to the INRAE centre Bordeaux-Nouvelle Aquitaine. The SWATCH project aim at monitoring and modelling the water and CO₂ flux in Mediterranean environments. The field work will be mainly located in two stations at 45 and 15 km from the lab. The Salles station is a Pine forest that is part of the ICOS Ecosystem station network (station labelled in 2019) and the Xylosylve station is a large-scale experiment comparing innovative forest management strategies and including 8 management strategies. Both stations are instrumented with an ensemble of sensors and gas analysers monitoring the energy, water and CO₂ fluxes exchanged with the soil and the atmosphere based on eddy covariance, sap-flow or chambers. They are completed by ancillary measurements on vegetation, soil and microclimate.

• You will be in charge of:

- Developing, testing, calibrating new multi-sensors systems and fixed or mobile platforms.
- Field maintenance of acquisition and transmission systems.
- Data quality assessment
- Contributing to the definition of new protocols and techniques
- Contributing to the data analysis, publications and communication of the results obtained
- Contributing to the support of external teams

Special conditions of activity: weekly travels to the sites by car, work on elevated tripods (20 m height), occasional travels to national and international meetings and workshops.

TRAINING AND SKILLS REQUIRED

• Recommended training: Measurements, acquisition and data transmission techniques in environmental studies. Environmental data analysis.

Knowledge required: Baccalauréat + 3 years graduate, professional licence, masters, or equivalent

Appreciated experience: Field work in environmental studies / projects, gas analysers, anemometers, micrometeorology, hydrology, English.

• Skills sought: working in a team with scientists, Ph D students, engineers and technicians, openmindedness, professionalism and responsability.

☑ Reception modalities

- Unit: ISPA
- Postal code + city: 33140 Villenave d'Ornon
- Type of contract: Fixed term
- Duration of the contract: 18 months (extendable by 6 months)
- Starting date: 1st October 2020
- Remuneration: 2020 to 2280 € per month tax
- deducted according to experience

Preselection: Send a motivation letter end a CV to : Denis Loustau <u>By e-mail</u>: denis.loustau@inrae.fr

X Deadline for applications: 31^h August 2020

• Final selection: Virtual interviews will be organized following a pre selection of 4-6 applicants