

## Post-Doctoral offer in fluvial dynamics and riparian vegetation

---

Reference: 21-12-00003

**The Forest Science and Technology Centre of Catalonia (CTFC)**, located in Solsona (Pre-Pyrenees, 120 km from Barcelona), Spain, employs app. 100 staff, produces >100 scientific articles annually and has a turnover of app. 6 Mil. €/year. Further institutional information is available at: [www.ctfc.cat/en](http://www.ctfc.cat/en).

CTFC's research activity is organised around three programs: 1) Multifunctional Forest Management; 2) Landscape Dynamics and Biodiversity; 3) Bioeconomy and Governance. As part of the Multifunctional Forest Management Program, CTFC undertakes research on adaptive silviculture to environmental changes, innovation in multi-purpose forest planning at different scales targeting different ecosystem goods and services. The analysis of the influence of forest management on the different processes on natural ecosystems (e.g water generation and regulation functions) is crucial for ensuring the persistence of the ecosystems and the future provision of the associated goods and services. Within this broad context, rivers are dynamic natural systems transferring water and sediments from their headwaters to depositional zones. Any disturbance in their catchments and channels, such as forest management or/and changes in their water and sediment supply and connectivity, has the potential to create a disequilibrium with implications in fluvial processes and dynamics and associated ecosystems including the riparian vegetation.

Within this program, CTFC is seeking to appoint a post-doctoral senior researcher to lead and conduct fundamental and applied research related to:

- River morphology and bed sedimentology
- Fluvial Hydrology and hydraulics
- Multi-scale modelling of river morphodynamics
- Riparian vegetation, floodplains and connectivity
- River management

### TERMS OF THE APPOINTMENT

---

- This contract may start on April 2022.
- It is a full-time position with a duration of 2,5 years (with possibility of contract extension).
- The candidate will be based at CTFC in Solsona (NE Spain), working as member of the Forests and water team from the Multifunctional Forest Management Program.
- The candidate will be part of the team of a new 4-year project related to Forest management, water provision and other ecosystem services (see the specific tasks in the following section).
- Based on CTFC labour categories, annual gross salary will be adjusted to the foreseen role and will be commensurated with the specific profile of the selected candidate (qualifications and experience), ranging between 28,000 – 33,000 €/year.

Key tasks and responsibilities will include:

- Reach scale Hydraulic modelling of targeted flows associated to different climate change and management scenarios, and assessment of the linked dynamics (sediments and riparian vegetation).
- Definition of riparian vegetation management guidelines to achieve more resilient systems.
- Establishment of guidelines for river management.
- Co-ordination of a work package in a starting project on Forest management, water and ecosystem services at the Catalan level, including close interaction with key stakeholders.
- Publication and dissemination of results in scientific and technical meetings and knowledge transfer activities.
- Project proposals preparation and fundraising.
- Contribution to other institutional activities.

## REQUIREMENTS

---

- A completed PhD on Physical Geography or related suitable discipline for the main topic of this call. Master's degree in Environmental Sciences, or equivalent is an asset,
- Expertise in GIS, programming and in using hydrological/hydraulic modelling techniques will be an asset,
- Expertise in field work in rivers (measurements of grain-size distributions of river bed, flow hydraulics, assessment of connectivity and characterization of riparian vegetation),
- Experience in leading and/or managing R+D projects related to the offer topic. Experience in international research projects is an asset,
- Postdoctoral stays in foreign research institutions is particularly relevant,
- Experience in supervising master and PhD students is an asset,
- Authorship of relevant publications in high impact journals,
- Good communication skills. Ability to interact with stakeholders,
- Advanced knowledge of English and proficiency in Spanish, both spoken and written. Catalan is an asset,
- Readiness to work in multi-disciplinary teams.

## SELECTION PROCESS AND CRITERIA

---

The selection process is led by the Human Resources Area of CTFC. This process consists of:

1. **Admission of candidates:** applicants must submit a curriculum vitae and letter of intent addressed to [dep.personal@ctfc.cat](mailto:dep.personal@ctfc.cat), until **15th January 2022**, indicating the reference code of the offer.
2. **Pre-selection:** verification of compliance with the minimum requirements of the offer.
3. **Selection (from January 16<sup>th</sup> to January 31<sup>st</sup> 2022):** assessment of the preselected candidates by scoring based on objective criteria and interview.
4. **Final decision:** in case of finding the suitable person, the election will be formally communicated to him/her, and the identification of the chosen person will be published on CTFC job openings section.

Further information: [dep.personal@ctfc.cat](mailto:dep.personal@ctfc.cat)