

El Centre de Ciència i Tecnologia Forestal de Catalunya (CTFC) és un centre de recerca adscrit a la Generalitat de Catalunya, i s'hi relaciona mitjançant el Departament competent en matèria de boscos.

És un centre CERCA i està acreditat com agent TECNIO per la Generalitat (desenvolupador de tecnologia públic).

Té concedida la menció de "Human Resources Excellence in Research" de la Comissió Europea, que la reconeix com a institució de recerca europea que promou un ambient de treball favorable i motivador.

## POST-DOCTORAL OFFER IN ECOHYDROLOGICAL MODELLING AND FOREST MANAGEMENT

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Reference: 24-05-00025

We are seeking to appoint a post-doctoral researcher to lead and conduct fundamental and applied research related to:

- Modelling in forest dynamics and ecohydrological processes.
- Water-oriented forest management practices.
- Optimization of Ecosystem services for landscape planning.
- Performance of forest restoration actions mediated by water availability

The candidate will be part of the Forest and Water team of the CTFC. He/she will be working in the framework of the ForH2O project, funded by the Catalan Research Agency (AGAUR). ForH2O aims at contributing to the design of strategies, plans and guidelines to water efficient forest planning.

The Forest Science and Technology Centre of Catalonia (CTFC), located in Solsona (Pre-Pyrenees, 120 km from Barcelona), Spain, employs app. 160 staff, produces >100 scientific articles annually and has a turnover of app. 7 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 (p. ex. water generation and regulation functions) is crucial for ensuring the persistence of the ecosystems and the future provision of the associated goods and services. In this regard, ecohydrological models and optimisation tools are useful tools to assess the effects of multiple management itineraries under climate change scenarios on ecosystem services, such as water provision, and orientate the design of forest management guidelines and planification.

### TERMS OF THE APPOINTMENT

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- The contract will start between June and September 2024.
- It is a full-time position with a duration of 1.5 years (with possibility of contract extension).
- The candidate will be based in Solsona (CTFC), although the option to be based in Lleida (UdL) could also be considered. The candidate will be part of the Forests and Water team from CTFC's Multifunctional Forest Management Program.

- 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 29,000 – 34,000 €/year.
- Working day: full time, 37.5 hours per week, with remote working options according to the institution norms (max. 20 h/week).
- 23+6 days of holidays per year. Good family-work balance conditions

## **TASKS**

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Key tasks and responsibilities will include:

- Apply forest dynamic and ecohydrological models to calculate water and carbon balance in Catalan watersheds under different climatic and forest management scenarios.
- Develop water availability maps and priority areas to water-oriented forest management under climate change scenarios.
- Combine ecohydrological models with optimisation algorithms or tools to design water-oriented territorial plans.
- Analyse large datasets to infer: i) the impact of different forest management practices in water availability and water provision, and ii) the factors explaining the performance of forest restoration actions mediated by water availability, tree species, site features and planting techniques.
- Definition of ecohydrological forest management guidelines to achieve more resilient systems to drought.
- Publication and dissemination of results in scientific journals, technical meetings and knowledge transfer activities.

## **REQUIREMENTS**

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- A completed PhD on Forestry, Environmental Sciences or another discipline related to the main topic of this call.
- Proficiency in programming and in using forest and landscape modelling techniques.
- Expertise in statistical analysis of big datasets.
- Expertise in GIS and spatial data analysis.
- Advanced knowledge of English and proficiency in Spanish, both spoken and written.
- Readiness to work in multi-disciplinary teams.
- Experience in national or international research projects is an asset.
- Authorship of relevant publications in high impact journals is an asset.
- Good communication skills and the ability to interact with stakeholders is an asset.
- Knowledge of Catalan is an asset.

## **SOFT COMPETENCES / SKILLS**

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- Planning and organisational capacity.
- Capacity for team working in multidisciplinary and multicultural environments.
- Communication abilities and relationship with the internal and external staff.
- Responsible person with high degree of involvement and initiative.
- Flexibility and adaptability to different type of tasks.
- Proactive and independent worker.

## CONTACT

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CTFC guarantees an open, transparent, and merit-based recruitment process (OTM-R) to all registered candidacies, thereby avoiding any bias related to gender, origin, age, ideology, or other circumstances that could be discriminatory. Integration policy: Candidates who have a recognized disability and accredited equal to or greater than 33%, will be prioritized, provided that the disability is compatible with the proper performance of the job.

## SELECTION PROCESS AND CRITERIA

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

1. **Admission of candidates:** applicants must submit a curriculum vitae and motivation letter addressed to [borsa.treball@ctfc.cat](mailto:borsa.treball@ctfc.cat), until **20<sup>th</sup> June 2024**, indicating the reference code of the offer.
2. **Pre-selection:** verification of compliance with the minimum requirements of the offer.
3. **Selection (June 2024):** 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: [borsa.treball@ctfc.cat](mailto:borsa.treball@ctfc.cat)

Indicative Calendar	
15 working days	Publication and dissemination of the job offer: CTFC website, SOC Office and other dissemination channels.
Next 2 working days	Preselection: determination of compliance with the minimum requirements of the offer. Evaluation of the pre-selected candidacies, through a score based on objective criteria, and suitable pre-selected CVs are forwarded to the Selection Committee for review .  Sending informative mail to CVs not suitable to continue in the process.
Next 2 working days	Selection committee celebration: Interview with the selected suitable candidates.

	<p>Selection Committee Minutes with the selected candidate and the reasons for the selection. Publication in the CTFC job board of the resolution identifying the elected person.</p> <p>Sending informational Mail to suitable CVs interviewed not selected.</p>
Next 1 working day	Sending to Human Resources the official documentation necessary to process the employment contract, and coordination with the start date of the contract.
June-September 2024 (approximately)	Start of the contract.