

# ANNOUNCEMENT FOR PROVISION OF THE WORKPLACE

## VAC-2021-74 – PhD in E-mobility and the port sector

**Number of vacancies:** 1

**Category:** PhD Student (PHD 1)

**Location:** Split between the offices of the Port of Barcelona and the offices of CENIT, Campus North of UPC, Barcelona

**Yearly salary (gross):** 25.921,26 €

**Working hours:** Full time

**Contract type:** Predoctoral contract

**Duration:** 3 years

**Objective:**

The candidate will be integrated in the Center for Innovation in Transport (<https://cenit.es/>) Research Group of CIMNE, to develop a PhD on the core theme of E-mobility, financed by the Port of Barcelona ([https://www.boe.es/diario\\_boe/txt.php?id=BOE-A-2021-15216](https://www.boe.es/diario_boe/txt.php?id=BOE-A-2021-15216)). The PhD will be completed in collaboration with the Department of Strategy and Innovation of the Port of Barcelona and with continuous interaction with the whole Port Community of Barcelona and other international ports.

**Functions to be developed:**

- Research on new mobility models with an impact on ports. In particular, special attention will be paid to electric mobility in its broadest sense. The transition to renewable energies places electric mobility at the center of the transport industry's greening initiatives, which includes other fuels such as hydrogen that will also be the subject of study. The transition to electric mobility not only affects emissions, but also influences the geography of vehicle production and its value chain. In addition to electric cars, other means of transport such as scooters, mopeds, bicycles, buses, trains and ships also increasingly run on electricity and the impact of this on the port ecosystem and maritime trade will be investigated. The impact of autonomous transport in ports (light, heavy vehicles and boats) will also be included in the research, along with other emerging trends that develop in the course of the doctorate.
- Writing scientific papers in indexed journals and participation in national and international conferences related to the research carried out for the doctoral thesis.
- Publication of articles and White Papers on the innovation platform of the Port of Barcelona, PierNext.

### Required skills:

- Master in civil, industrial, naval or transport engineering.
- Fluent in Spanish and English (written and spoken), other languages are appreciated.

### Other valued skills:

- Scientific publications in the field of transportation.
- Experience in innovation and research projects
- Experience in maritime and/or port sector.
- Knowledge in operational research

### Qualification system:

The requisites and merits will be evaluated with a maximum score of 100 points. The final score will be obtained summing up the following points:

- **Education:** 15%
- **Experience in the field of maritime and port sectors:** 10%
- **Knowledge in operational research:** 5%
- **Scientific publications:** 10%
- **Language skills:** 10%
- **Experience in innovation and research projects:** 10%
- **Interview:** 40%

Candidates must complete the "Application Form" form on our website, indicating the reference of the vacancy and attaching the required documents.

The deadline for registration to the offer ends on December 2, 2021 at 12 noon.

The preselected candidates may be requested to send the documentation required in the "Requirements" and "Merits" sections, duly scanned, and may be called to go through selection tests (which might be of eliminatory nature) and / or personal interviews.