**Job title: Research Assistant in GIS and Remote Sensing**
*Application deadline: Monday 9th December 2024*

**Job description:**
We are seeking a highly motivated Research Assistant (Level M2 public salary scale) to join our team at the Institute for Economy, Geography and Demography of the Spanish National Research Council (IEGD-CSIC). The successful candidate will play a pivotal role in advancing our research project focused on the detection and modelling of land use and land cover changes in natural protected areas in Spain. The position involves the use of state-of-the-art remote sensing and spatial modelling tools, methods and products to identify vulnerabilities in the national network of protected areas, and evaluate ecological condition based on key indicators. The contract is offered at 66.6% Full Time Equivalent (FTE) (25 hours per week for a duration of 15 months, gross salary 1283.85€ per month). Further reduction to 50% FTE (18 hours 45' per week for a duration of 20 months gross salary 962.61€ per month) could be considered at the request of the candidate.

**Key responsibilities:**

- Build, document and maintain a GIS database of Green Infrastructure in Spain.
- Help develop an innovative assessment approach for priority vulnerable areas in the national GI network.
- Apply high-resolution Sentinel-2 imagery and land condition products (2dRUE) to characterize key indicators like vegetation productivity, phenology, plant functional diversity and land conservation status.
- Evaluate landscape structure and ecological connectivity with out-of-the-box software tools (e.g. Linkage Mapper), and bespoke script routines in R, python or shell scripting languages.
- Help develop a land use simulation model for the whole national territory to project future land use and land cover changes to highlight key vulnerabilities in national GI.
- Disseminate research findings through publications in peer-reviewed journals and presentations at conferences and workshops.

**Key skills:**

- Independent thinking and autonomous problem-solving ability.
- Experience working with earth observation data, and remote sensing tools and methods.
- Geographical Information Systems knowledge, especially QGIS, R and GRASS.
- Excellent communication skills and the ability to work effectively in a multidisciplinary team environment.
- Experience in the production of written reports and publications.
- Excellent level of English.

**Qualifications:**
Undergraduate degree in an environmental science-related discipline: Environmental Science, Geography, Agronomy, Geology, Archaeology or other relevant subject. Proven technical ability will be considered more important than the specific degree qualification.

**Procedure:**
In the first instance, applicants should write a short letter of interest directly to Richard Hewitt (richard.hewitt@cchs.csic) and enclose a brief CV.