

JOB PROFILE

CALL FOR RECRUITMENT OF PERSONNEL N° Conv._FIHAC_04_2020

| | |
|--|---|
| POSITION | Predoctoral Researcher |
| MOTIVATION | <input type="checkbox"/> Annual programming |
| | <input checked="" type="checkbox"/> Project: SATURNALIA-Non-Stationary techniques for the analysis of climate impacts |
| ENTITY OF ADMINISTRATIVE DEPENDENCY | <input checked="" type="checkbox"/> Fundación Instituto de Hidráulica Ambiental de Cantabria |
| | <input type="checkbox"/> Universidad de Cantabria |
| DIVISION | Project development and implementation |
| AREA DEPENDENCE | Climate, Energy and Marine Infrastructures |

REQUIRED PROFILE

| GENERAL MISSION | ESSENTIAL JOB FUNCTIONS |
|--|--|
| CONCEPTION OR CREATION OF NEW THEORIES, KNOWLEDGE, PRODUCTS, AND TECHNIQUES PERFORMED ON A DOCTORAL THESIS | <p>GENERAL TASKS Elaborate, under the supervision of the thesis advisor, his/her own doctoral thesis that allows for the broadening of scientific knowledge, creating new theories or modifying existing ones. Collaborate in the area of study, under the supervision of the thesis advisor or the project manager, and assessment of a given project.</p> <p>SPECIFIC TASKS Analysis of optimal integration strategies for the characterization of different hydrometeorological and metoceanic variables and data sources Analysis of several methods to incorporate spatial dependence in the characterization of climatic variables Development of methods to quantify low-probability extreme events (high return period), focused on the evaluation of impacts of environmental variables, accounting for non-stationary behaviour and the climate change challenge</p> |

EDUCATION REQUIREMENTS

| UNIVERSITY DEGREE | FIELD OF STUDY | EXPERIENCE | OTHER QUALIFICATIONS |
|-------------------|--|------------|----------------------|
| PhD | Biology, Environmental Science, Civil Engineering. | No | |

ASSESSMENT ELEMENTS

| ASSESSMENT ELEMENTS | |
|---------------------|---|
| | <ul style="list-style-type: none"> -Average grades on the bachelor's degree -Average grades on the master's degree -Awards and grants -Internships, both professional and research-oriented, as well as voluntary services -Specific education on meteorology, oceanography, hydrology or statistics -Specific education on mathematical and statistical techniques -Experience in computer programming -Experience dealing with and processing databases -English level |

CONTRACTING PROPOSAL

| | | | |
|--|--|---------------------------------|--|
| TYPE OF CONTRACT | Predoctoral researcher | | |
| ESTIMATED DURATION ¹ | 12 months | | |
| LOCATION OF WORKPLACE | <input checked="" type="checkbox"/> Santander- Spain (IHCantabria) | <input type="checkbox"/> Other: | |
| REMUNERATION | 17.785,00€/ gross annual salary (12 payments) | | |
| COMMENCEMENT DATE | September 21, 2020 | | |



CHARACTERISTICS OF THE RECRUITMENT AND SELECTION PROCESS

| | | | |
|----------------------------|---|-----------------------------|---------------------------------|
| TYPE OF PROCESS | Open competition | Código: Conv. FIHAC_04_2020 | |
| POSITIONS | 1 (initially planned) | | |
| RECRUITMENT PROCESS | Ad publication in FIHAC webpage: July 24, 2020 | | |
| | Recruitment process closing date: September 08, 2020 at 13:00 hours | | |
| PRE-SELECTION | Expected date for pre-selection: September 08, 2020 | | |
| SELECTION TEST | <input type="checkbox"/> Date for the test | Maximum of applicants: | |
| JOB INTERVIEW | Expected date for job interviews: September 10, 2020 | Maximum of applicants: 10 | Minimum score ² : 25 |
| REPORT | Expected date for final report: September 10, 2020 | | |
| FINAL DECISION | Expected date for final decision: September 10, 2020 | | |

¹In cases of temporary contracts

²Score obtained by the assessment of merit, minimum (threshold) required for a / a candidate / a pass to the phase of the interview

| SCORING INFORMATION/ CANDIDATE MERITS | | | | |
|--|------------|-------------------------------|----------------|-----------|
| MERITS | EVALUATION | ASSESSMENT | | MAXIMUN |
| AVERAGE GRADES ON THE BACHELOR'S DEGREE | CV VITAE | COMPLIANCE REQUIREMENTS | 10 Point(s) | 10 |
| An academic cv must be presented, showing the grades obtained in the degree. Average grades below 7 over 10 (In the case of degrees obtained abroad, the table of equivalences of the Resolution of July 16, 2008, of the Directorate General of Universities will be applied) do not grant any points. Averages between 7 and 8 get 3 points; between 8 and 9 get 6 points; between 9 and 10 get 9 points; an average of 10 gets 10 points) | | Maximum points: 10 | | |
| AVERAGE GRADES ON THE MASTER'S DEGREE | CV VITAE | COMPLIANCE REQUIREMENTS | 10 Point(s) | 10 |
| An academic cv must be presented, showing the grades obtained in the degree. Average grades below 7 over 10 (In the case of degrees obtained abroad, the table of equivalences of the Resolution of July 16, 2008, of the Directorate General of Universities will be applied) do not grant any points. Averages between 7 and 8 get 3 points; between 8 and 9 get 6 points; between 9 and 10 get 9 points; an average of 10 gets 10 points) | | Maximum points: 10 | | |
| AWARDS AND GRANTS | CV VITAE | NUMBER OF AWARDS/GRANTS | 2 Point(s) | 2 |
| They must be certified by the company or the institutions granting the award or the grant. (1 point per element) | | Maximum: 2 | | |
| INTERNSHIPS, BOTH PROFESSIONAL AND RESEARCH-ORIENTED, AS WELL AS VOLUNTARY SERVICES | CV VITAE | NUMBER OF INTERNSHIPS | 12 Point(s) | 12 |
| They must be certified by the Institution where the Internship was developed. Two points will be granted for every month of internship | | Maximum: 6 | | |
| SPECIFIC EDUCATION ON METEOROLOGY, OCEANOGRAPHY, HYDROLOGY OR STATISTICS | CV VITAE | NUMBER OF SUBJECTS OR COURSES | 4 Point(s) | 4 |
| The merit must be certified by means of courses of at least 20h. Each course will grant one point for courses until 30h, and two points above that threshold | | Maximum: 4 | | |
| SPECIFIC EDUCATION ON MATHEMATICAL AND STATISTICAL TECHNIQUES | CV VITAE | NUMBER OF SUBJECTS OR COURSES | 4 Point(s) | 5 |
| The merit must be certified by means of courses of at least 20h. Each course will grant one point for courses until 30h, and two points above that threshold. Some examples for this merit would be extreme value analysis, data mining, machine learning, deep learning, etc. | | Maximum: 4 | | |
| EXPERIENCE IN COMPUTER PROGRAMMING | CV VITAE | COMPLIANCE REQUIREMENTS | 5 Point(s) | 5 |
| The different programming languages used must be listed and the experience certified by the institutions where the developments took place or by sending codes developed by the candidate. Specific courses on programming, of at least 30h will be considered. The maximum evaluation is achieved certifying one year of experience in programming or 120h of courses | | Maximum points: 5 | | |
| EXPERIENCE DEALING WITH AND PROCESSING DATABASES | CV VITAE | COMPLIANCE REQUIREMENTS | 5 Point(s) | 5 |
| Any task related to the processing of data, climatic or other kinds, and working with databases will be considered. The experience will be certified by the institutions where the developments took place or by sending the results developed by the candidate. The maximum evaluation is achieved certifying one year of experience or by certifying at development of at least two tasks of, at least, a duration of one month | | Maximum points: 5 | | |
| ENGLISH COMMUNICATION SKILLS | CV VITAE | COMPLIANCE REQUIREMENTS | 5 Point(s) | 5 |
| English Skills will be certified by a recognized institution and CEFR accreditation levels (C1: 3 points; C2: 5 points) | | Maximum points: 5 | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| MAXIMUM SCORE SPECIFIC ASSESSMENT | | | | 57 |
| MAXIMUM SCORE IN THE INTERVIEW | | | | 29 |
| MAXIMUM TOTAL SCORE | | | | 86 |

| GUARANTEE AND ASSESSMENT COMMISSION FOR THE RECRUITMENT PROCESS | |
|---|---|
| Signature: |   |
| Date: July 24, 2020 | Approved: Raul Medina Santamaria, Vice president |