

CALL AND REGULATORY BASES OF THE SELECTION PROCESS THROUGH COMPETITION FOR THE HIRING OF LABOR PERSONNEL FOR 52 POSITIONS (A)

CALL AND REGULATORY BASES OF THE SELECTION PROCESS THROUGH COMPETITION FOR THE HIRING OF LABOR PERSONNEL FOR 3 STABILIZATION POSITIONS (B)

In accordance with the provisions of the AGREEMENT GOV/241/2022, of November 22, which authorizes the increase of the budgetary staff of various public sector entities of the Administration de la Generalitat in application of the labor reform and for the reduction of temporality in public employment, the provisions of Royal Decree-Law 32/2021, of December 28, of urgent measures for labour reform, the guarantee of job stability and the transformation of the labour market, which in its fourth Additional Provision regulates the regime applicable to public sector labour personnel, foreseeing that entities may carry out permanent and permanent discontinuous contracts that are essential for the fulfilment of their purposes in accordance with the specific replacement rate that, where appropriate, authorize the Ministry of Finance and Civil Service, and in order to comply with the objective of reducing temporality in the public sector promoted by Law 20/2021, of December 28, on urgent measures for the reduction of temporality in public employment. Considering article 36.3.b of Law 1/2021, of December 29, on the budgets of the Generalitat de Catalunya for 2022, which establishes that the Government can authorize the expansion of the budget staff due to the expansion of public services.

The Fundació Institut de Recerca en Energia de Catalunya (IREC) proceeds to initiate:

A) CALL AND REGULATORY BASES OF THE SELECTION PROCESS THROUGH COMPETITION FOR THE HIRING OF LABOR PERSONNEL FOR 52 POSITIONS	Page
The procedure for the coverage of the Replacement Rate of labor personnel through the call of 52 positions of labor personnel through the competitive system. This call is part of the public offer of employment of foundations corresponding to the year 2021.	2-10
B) CALL AND REGULATORY BASES OF THE SELECTION PROCESS THROUGH COMPETITION FOR THE HIRING OF LABOR PERSONNEL FOR 3 STABILIZATION POSITIONS	Page
The procedure for the recruitment of labor personnel through the call for 3 labor personnel positions through the competitive system for the stabilization of long-term temporary employment.	11-18
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In accordance with the provisions below:



A) CALL AND REGULATORY BASES OF THE SELECTION PROCESS THROUGH COMPETITION FOR THE HIRING OF LABOR PERSONNEL FOR 52 POSITIONS

1. PURPOSE OF THE CALL

The purpose of this call is to cover 52 positions through the competition system. These 52 positions, which have been occupied by temporary staff, have become structural via replacement rate or structural ones that have been covered by temporary staff.

The call will be governed by these rules, in accordance with the provisions of article 61.7 of Royal Legislative Decree 5/2015, of October 30, which approves the revised text of the Law on the basic statute of public employees and article 37 of Decree 28/1986, of January 30, of the Regulations for the selection of personnel of the Administració de la Generalitat de Catalunya, and in addition to the provisions of the Talent Attraction Code, which can be consulted on the IREC website (www.irec.cat), and by the principles of *The Code of Conduct for the Recruitment of Researchers HR EXCELENCE IN RESEARCH* that can be consulted regarding the places related to research on the https://euraxess.ec.europa.eu/jobs/charter website.

Likewise, the guiding principles established in article 55 of Royal Legislative Decree 5/2015, of October 30, which establishes that:

- 1. All citizens have the right to access public employment in accordance with the constitutional principles of equality, merit and capacity provided for in the Basic Statute of Public Employees.
- 2. The Public Administrations, entities and bodies referred to in Article 2 of the Basic Statute of Public Employees will select their civil servants and labour personnel through procedures in which the aforementioned constitutional principles are guaranteed, as well as the one provided for below:
 - a) Publicity of the calls and their bases.
 - b) Transparency.
 - c) Impartiality and professionalism of the members of the selection bodies.
 - d) Independence and technical discretion in the actions of the selection bodies.
 - e) Adequacy between the content of the selection processes and the functions or tasks to be carried out.
 - f) Agility, without prejudice to objectivity, in the selection processes.

In order to guarantee these principles, the following rules will apply:

- In general, the principle of advertising will be understood to have been complied with by publishing the call in the Official Journal of the Generalitat de Catalunya, and on the IREC website, without prejudice to the use of other means of advertising, in those cases in which it is deemed appropriate.
- No condition that involves discrimination will be imposed.
- The gross salary for each of the places offered will be subject to the amounts regulated by the salary levels established in the professional categories provided for in the Career Plan for IREC staff.



2. CHARACTERISTICS OF THE POSITIONS OFFERED

Category position	Location (Barcelona work center)	Refe	rence Nb.
S1 Maintenance/General Services (S.1.1		-	106/2022
R1 Project Engineer (R.1.6)	Thermal Group		107/2022
R1 Project Engineer (R.1.6)	Thermal Group	Ref.	108/2022
R2 Recognised Researcher (R.2.1.4)	Thermal Group	Ref.	109/2022
R2 Recognised Researcher (R.2.1.4)	Thermal Group	Ref.	110/2022
R2 Recognised Researcher (R.2.1.3)	Thermal Group	Ref.	111/2022
R2 Recognised Researcher (R.2.1.3)	Thermal Group	Ref.	112/2022
R2 Recognised Researcher (R.2.1.1)	Thermal Group	Ref.	113/2022
R2 Recognised Researcher (R.2.1.3)	Nanoionics Group	Ref.	114/2022
R2 Recognised Researcher (R.2.1.5)	Nanoionics Group	Ref.	115/2022
R2 Recognised Researcher (R.2.1.2)	Nanoionics Group	Ref.	116/2022
R2 Recognised Researcher (R.2.2.1)	Nanoionics Group	Ref.	117/2022
R2 Recognised Researcher (R.2.1.3)	Nanoionics Group	Ref.	118/2022
S2 Administrative/Accountant (S.2.1.A)	Economic and Systems Area	Ref.	119/2022
S4 Head of Legal Section (S.4.1)	Economic and Systems Area	Ref.	120/2022
S3 Computer Science (S.3.1.B)	Economic and Systems Area	Ref.	121/2022
S4 Head of Section (S.4.1)	PRIMA	Ref.	122/2022
S4 Head of Section (S.4.1)	PRIMA	Ref.	123/2022
S3 Plant Engineer (S.3.3.B)	PRIMA	Ref.	124/2022
S1 Project Managers UGE (S.1.2.A)	Economic and Systems Area	Ref.	125/2022
S2 Project Managers UGE (S.2.2)	Economic and Systems Area	Ref.	126/2022(1)
S2 Project Managers UGE (S.2.2)	Economic and Systems Area	Ref.	127/2022(1)
S2 Project Managers UGE (S.2.2)	Economic and Systems Area	Ref.	129/2022
S3 Project Managers UGE (S.3.2)	Economic and Systems Area	Ref.	130/2022
S3 Promoters KTT (S.3.2.A)	Economic and Systems Area	Ref.	131/2022
S3 Promoters KTT (S.3.3.A)	Economic and Systems Area	Ref.	132/2022
S3 Promoters KTT (S.3.2.B)	Economic and Systems Area	Ref.	133/2022
S4 Head of Section KTT (S.4.2)	Economic and Systems Area	Ref.	134/2022
R1 Engineer Project (R.1.8)	ESA Group	Ref.	135/2022
R2 Recognised Researcher (R.2.1.1)	ESA Group	Ref.	137/2022
R2 Recognised Researcher (R.2.1.1)	ESA Group	Ref.	138/2022
R2 Recognised Researcher (R.2.1.1)	ESA Group	Ref.	139/2022
R2 Recognised Researcher (R.2.2.3)	ESA Group	Ref.	140/2022
R3 Recognised Researcher (R.3.2)	ESA Group	Ref.	141/2022
R1 Engineer Project (R.1.6)	Power Group	Ref.	142/2022
R1 Engineer Project (R.1.8)	Power Group	Ref.	143/2022
AL Laboratory Assistant (AL.2.1)	Power Group	Ref.	144/2022
R2 Recognised Researcher (R.2.1.1)	Power Group	Ref.	145/2022
R2 Recognised Researcher (R.2.2.4)	Power Group	Ref.	146/2022
R2 Recognised Researcher (R.2.1.1)	Power Group	Ref.	147/2022
R3 Recognised Researcher (R.3.1)	Power Group	Ref.	149/2022
TL Laboratory Technician (TL.2.1)	Nanomaterials Group		150/2022
R2 Recognised Researcher (R.2.2.6)	Nanomaterials Group	Ref.	151/2022



R2 Recognised Researcher (R.2.1.3)	Solar Group	Ref. 152/2022
R2 Recognised Researcher (R.2.2.1)	Solar Group	Ref. 153/2022
R2 Recognised Researcher (R.2.1.1)	Solar Group	Ref. 154/2022
R2 Recognised Researcher (R.2.2.6)	Solar Group	Ref. 155/2022
R2 Recognised Researcher (R.2.1.1)	Storage Group	Ref. 156/2022
R2 Recognised Researcher (R.2.2.1)	Storage Group	Ref. 157/2022
R2 Recognised Researcher (R.2.2.1)	Storage Group	Ref. 158/2022
R2 Recognised Researcher (R.2.2.1)	Storage Group	Ref. 159/2022
R2 Recognised Researcher (R.2.1.1)	Storage Group	Ref. 160/2022

(1) The positions published with references 126/2022 and 127/2022 will be evaluated jointly regardless of what reference of place the candidate in question has applied, since both places belong to the same category and requirements.

3. REQUIREMENTS FOR PARTICIPATION

To take part in this call, applicants must meet each and every one of the following requirements and present the supporting documentation within 20 working days from the day of publication of the call for applications for the selection process in the Official Journal of the Generalitat de Catalunya:

GENERAL REQUIREMENTS

Applicants must provide documentary evidence of the following requirements a, b and c at the time of applying:

- a. Be in possession of the minimum compulsory education qualification necessary to carry out the functions established in each of the positions offered (Baccalaureate, Diploma, Degree, Master's, or Doctorate).
- b. Have reached the age of 18 and be under 65 years of age.
- c. Proof of having completed and signed the Responsible Statement attached to the call for applications.

ESSENTIAL REQUIREMENTS

The following requirements d and e will be verified during the phases of the call process:

- d. Have sufficient knowledge of the co-official languages of the Autonomous Community to be able to adequately carry out the functions of the place object of the call.
- e. Demonstrate to the Evaluating Tribunal a knowledge of the English language equal to or greater than the First Certificate (B2).

Failure to comply with requirement "e" will mean the exclusion of candidates as long as the place offered requires compliance.



SPECIFIC REQUIREMENTS

According to the profile of the positions under this call, it is considered as specific requirements that the candidates meet the following conditions. Failure to comply with them will be excluded from participation in this call:

To have the necessary academic qualification to develop the specific functions of each position.
 Provide documentary evidence of the minimum professional experience required by each position offered, and experience in the functions of the position offered.

OTHER CONSIDERATIONS REGARDING THE REQUIREMENTS

If during the call the **falsehood is identified in any documentation or information provided** by the applicant, this circumstance **will be considered sufficient reason for the exclusion of the person from the process**. If this circumstance is known to the IREC once the hiring of the selected person has been formalized and during their trial period, it will be sufficient reason to claim that they have not passed this period. If that is discovered after this period is ended, it will be considered a breach of contractual good faith, as well as an abuse of confidence in the development of work, in accordance with the provisions of article 54.2 of the Workers' Statute, and the reason for dismissal. In all cases, the person will be allowed to exercise their right of clarification and defence by opening a period of allegations of 5 working days. In the event of not obtaining a response or confirming the falsehood, the person will be definitively excluded from the process, or the dismissal will be carried out, the IREC reserving the right to take legal action against him, and without prejudice to the actions that the person considers legitimate to use in the defense of their interests.

If candidates are required to submit degrees, certificates, or any type of supporting documentation from abroad, it is mandatory to be in possession of the corresponding validation or credential that accredits it, or where appropriate its homologation. This accreditation will not be necessary for persons who have obtained recognition of their professional qualification under the Provisions of Community Law.

The IREC may request candidates at any time of the process to provide documentation accrediting their merits and requirements. In any case, the candidates who are selected will have to provide before hiring copies of the titles that prove compliance with the requirements of the call.

In all cases, the protection of the personal data of the persons who have submitted to the call is guaranteed, regardless of whether they have been elected or not.

4. EVALUATION TRIBUNAL

For each position there will be an evaluation panel validated by the IREC management formed by at least three expert members in the field of the position to be filled.

Presidency	Holder	Group Leader
Vocal 1	Holder	External Expert
Vocal 2	Holder	Expert of the center or external



This Evaluating Tribunal will be the body in charge of evaluating the applicants and proposing the choice of those it considers most appropriate to occupy the places object of the call.

The Evaluating Tribunal is authorized to resolve all doubts that may arise in the development of the bases of this call, as well as the form of action in cases not provided for therein.

5. STAGES OF THE SELECTION PROCESS

1.- START OF THE SELECTION PROCESS

This process has its origin in the AGREEMENT GOV/241/2022, of November 22, which authorizes the increase of the budgetary staff of various public sector entities of the Administració de la Generalitat in application of the labor reform and for the reduction of temporality in public employment that provides for the number of available positions. In accordance with, IREC proceeds to draw up and define the profile of the positions offered.

2.- PREPARATION AND APPROVAL OF THE BASES REGULATING THE CALL FOR APPLICATIONS

The regulatory bases of this call have been drawn up by Human Resources Direction of IREC with the approval of the General Directorate of IREC.

The evaluation of the candidates will be carried out in two phases:

- 1. A written test consisting of two exams: a test type exam of 30 questions and the development of two questions (50% of the overall score).
- 2. An assessment of curricular merits, according to the requirements detailed in the profile of each position (50% of the overall score).

3.- CONSTITUTION OF THE EVALUATING TRIBUNAL

The Evaluating Tribunal shall be constituted in the terms indicated in section 4 of these rules.

4.- PUBLICATION OF THE CALL

The terms and conditions of this call will be published on the IREC website and by submission of an announcement that will be made in the Official Journal of the Generalitat de Catalunya.

The information can be consulted on the IREC website (www.irec.cat) in the *JOBS>Open call for public job offers 2022*. Regarding those positions that are within the field of research itself, they can also be consulted on the https://euraxess.ec.europa.eu/jobs website.

5.- SUBMISSION OF APPLICATIONS

Candidates interested in participating in this selection process must submit the following documentation within 20 working days from the day of publication of the call for applications for the selection process in the Official Journal of the Generalitat de Catalunya:

- The "Application for Admission to Selective Tests" form, in accordance with the official form attached to these rules, duly completed, and signed.
- Photocopies justifying the curricular merits (Annex 2 of this document).
- The documentation that accredits the access requirements indicated in section 3 of this document.



The "Application for Admission to Selective Tests" form together with all the documentation justifying the merits and access requirements must be submitted to the Human Resources attention in working days and working hours, or via certified postal mail at the IREC reception at the IREC headquarters on carrer Jardins de les Dones de Negre 1, 2ª pl. CP. 08930 Sant Adrià del Besòs (Barcelona).

Only those applications that duly justify compliance with the requirements will be accepted access to participate in this call.

At the time of registering each candidate's application for admission, they will be assigned a reference number.

Generic and ordinary communications related to this call will be made through the IREC website (www.irec.cat).

By default, and to safeguard the privacy of candidates, in the publications of the minutes of the call will appear the reference number assigned to each of the candidates as a personal identifier, except when the name and surname of the person to whom the contest is assigned is published.

In accordance with data protection regulations, the personal data provided with the consent of the candidates will be processed by the data controller, which is Fundació Institut de Recerca en Energia de Catalunya (IREC) with NIF G-64946387 and headquarters carrer Jardins de les Dones de Negre 1, 2ª pl. CP. 08930 Sant Adrià del Besòs (Barcelona), to manage your participation in the development and resolution of this call and will be kept exclusively for your disposal in case of participation in future selection processes. Subsequently, if as candidates the data are selected, they will also be used, where appropriate, for the management and formalization of the eventual hiring. Unless legally required, the data provided will not be transferred to third parties. They have the right to access, rectify, delete, oppose, as well as to exercise the other rights recognized by current regulations on data protection through a written communication to <u>dpo@irec.cat</u>. Additional information can be found on the IREC website https://www.irec.cat/ca/politica-de-privacitat/.

6.- VERIFICATION OF COMPLIANCE WITH ACCESS REQUIREMENTS

Applicants who meet all the requirements detailed in section 3 of this document of the participation conditions required in the call for applications will pass this phase, provided that they have been duly justified and documented. Those candidates who are IREC employees and who meet the specific access requirements with their experience in the research center itself or with the training of the Institutional Training Plan (PIF) promoted by the IREC, will not need to be provided with documentation, as the information can be checked with the information available in the IREC's internal database.

Once the deadline for submitting applications has ended, the Evaluating Court will check the requirements of the people and a provisional list of admitted and excluded applicants will be published on the IREC website, indicating for each person who has been the reason(s) for their exclusion. There will be 5 working days counted from the publication of the list of accepted candidates to present the allegations in writing, by the same procedure by which the request was presented accompanied by the necessary documentation in the case to be excluded.



The estimation or not of allegations by the Evaluation Committee will end with the publication on the IREC website of the final list of the candidates admitted to the process.

7.- WRITTEN TEST

In this first phase, the Evaluating tribunal will determine the completion by the candidates of two written tests. The first will consist of a test type exam of 30 questions and the second in the realization of a written test with two questions where candidates will have to develop two topics in which their professional career will be deepened, their competences and professional abilities considering what professional contributions the candidates can contribute as well as what aspects are expected regarding the place called, in accordance with the agendas that are stated for each position called. Specifically:

- a. Evaluate the strengths and weaknesses of the candidate in relation to the functions and responsibilities of the position object of the call.
- b. Contrast and clarify whether the candidate has the technical and professional skills necessary to satisfactorily perform the functions of the position object of the call.
- c. Detect possible deficiencies in relation to desirable requirements specified in the bases of the call.
- d. Know, in a motivated way, the main professional achievements achieved by the candidate throughout their professional career.
- e. And, in general, to know any information that the Evaluating Tribunal considers necessary for the correct curricular assessment of the applicant.

The written test may be done in any of the co-official languages of the Autonomous Community or in English. In the case of deciding to do it in one of the two co-official languages, candidates will be obliged to answer in writing one of the two questions in English whenever the profile of the position of the call requires it.

Each place may have a different date of completion of the written test; therefore, it will not be mandatory that the written tests of the different places coincide on the same day. In order to avoid deviations and inequities due to potential subjectivities in the assessment, the members of the Evaluating Tribunal will assess the answers to the questions carried out following a pattern of evaluation of the answers according to the following assessment scale:

QUALIFICATION DESCRIPTION OF THE RESPONSES OF THE DEVELOPMENT TESTS

0 INSUFFICIENT: Basic answers, without knowledge of the relevant details.

1 SUPERFICIAL: Schematic and superficial responses although with details, but only of the most relevant.

2 STANDARD: Answer in detail. Knowledge of the object of the functions and their ability to provide it is evidenced with a guarantee of a correct level of quality.

3 NOTABLE: Detailed response, knows the content, the way of executing, generates confidence, the answers show the guarantee of an adequate provision of the functions of the place offered in accordance with what is required.

4 EXCELLENT: Detailed response, with full knowledge of the content, good exposure, intelligible, security, trust, empathy.

Once the Evaluation Board has evaluated all the tests carried out by the candidates, a provisional list of the candidates qualified for the next phase will be published on the IREC website. In case



of disagreement with the qualification obtained, excluded candidates may file an appeal with the President of the Evaluating Tribunal within 3 working days from the publication of said provisional list, by the same procedure in which the application for participation in the call has been submitted accompanied by the documentation deemed necessary. The evaluating tribunal will resolve this appeal within a maximum period of 3 working days from receipt of the appeal.

The estimation or not of the allegations of the appeal will end with the publication on the IREC website of the final list. The Evaluation Committee, if deemed necessary, may conduct a personalized interview with the qualified candidates for the next phase in order to delve deeper into the knowledge and conditions of the candidate depending on the position requested.

8.- ASSESSMENT OF MERITS

Once the phase of the written test has been passed, the Evaluating Tribunal will proceed to carry out the assessment of the merits as indicated below. In the event that there are no candidates who pass this phase, the place will be declared deserted.

The evaluation criteria of the merits, which will be evaluated in accordance with the provisions of the call for each position called, are:

1. The merits of training will be assessed considering: a) academic degrees, b) continuing and/or complementary training carried out related to the profile and functions of the position convened and duly justified, and c) languages.

2. The merits of professional experience will be assessed considering what is planned for each position called.

3. Curricular suitability with the profile and functions of the position announced in accordance with the documentation provided and duly justified.

4. Any other complementary merit related to the profile of the position called.

5. The merits of professional experience prior to a job equal to or similar to that of the position called will be valued.

The evaluation of the merits will entail 50% of the overall grade, of this 50%, 25% will be established by the adequacy of the candidate to the position where previous experience must be accredited to a job equal to or similar to that of the position called.

INDIVIDUAL PERSONAL INTERVIEW

In the event of a tie, the Evaluating Tribunal will invite the candidates involved to an individual personal interview at least 48 hours in advance of the working day and time when the interview must take place, in the event that the candidate convened accepts it, this period may be reduced. The interview will deal with: a) the person's motivations for aspiring to the position; b) the possible contributions of the person to the position called and to the internal unit or department where the position is framed, as well as to the IREC; c) In the specific case of strictly research positions, the necessary means that the person expects to enjoy to carry out the activities related to the profile of the position called.

The value of this interview will be scored by the Evaluating Tribunal with an additional 15%.

9.- FINAL RESULT

Once the two phases of the process have been completed, the Evaluating Tribunal will publish the minutes of resolution of the call signed by all its members with the list of candidates ordered from highest to lowest score of the qualifications obtained in both phases.



Once the selection process has been completed, the document for the allocation of positions with the name and surnames of the selected people will be published on the IREC website. Against this, where appropriate, an appeal may be filed with the President of the Evaluating Tribunal within 3 working days from the publication of said document, by the same procedure in which the application for participation in the call has been submitted accompanied by the documentation deemed necessary. The Evaluating Tribunal will decide the appeal within a maximum period of 3 working days, from receipt of the appeal.

10.- ASSIGNMENT OF POSITIONS

Within 7 working days, counting from the publication of the award document without an appeal having been submitted by the finalists and after 12 days from the publication of the award once the deadline for the resolution of the appeals has elapsed, the position will automatically be assigned and awarded to the selected candidate.

Each position may have a different date and time of incorporation that will be informed at the time of assignment.

In the case of professionals in an employment situation who win the position, they will leave their job of origin definitively, they must be in a situation of being able to be hired and registered with Social Security by the IREC on the business day and time indicated.

The non-presence on the working day and time indicated for incorporation will be equivalent to the waiver of the award of the position and will be passed directly to the next finalist candidate in the award list.

11.- CONTRACTING AND BOOKING LIST

Once the allocation of position has been completed, the Evaluating Tribunal will draw up the final list of the assigned positions that will be published on the IREC website.

Candidates who have passed both tests but have not obtained a position will go on to constitute a reservation list based on the positions offered, which will respect the priority according to the score obtained in the selection tests.

This will constitute the reservation list with people who have obtained a minimum overall score of 70% between the two tests passed and accredit the requirements requested based on the position offered. People who do not reach this score will be discarded from the reservation list. This reservation list will be for the coverage of the positions, in the case of the selected candidates who do not occupy the position or who leave it within 30 days from the beginning of their employment relationship at the IREC.

A trial period will be established for the people hired as a result of the process of selection of this call, in the terms established in the Workers' Statute.



B) CALL AND REGULATORY BASES OF THE SELECTION PROCESS THROUGH COMPETITION FOR THE HIRING OF LABOR PERSONNEL FOR 3 STABILIZATION POSITIONS

1. PURPOSE OF THE CALL

The purpose of this call is to cover 3 places through the competition system via the stabilization process.

The call will be governed by these rules, in accordance with the provisions of article 61.7 of Royal Legislative Decree 5/2015, of October 30, which approves the revised text of the Law on the basic statute of public employees and article 37 of Decree 28/1986, of January 30, of the Regulations for the selection of personnel of the Administració de la Generalitat de Catalunya, and in addition to the provisions of the Talent Attraction Code, which can be consulted on the IREC website (www.irec.cat), and by the principles of *The Code of Conduct for the Recruitment of Researchers HR EXCELENCE IN RESEARCH* that can be consulted regarding the places related to research on the https://euraxess.ec.europa.eu/jobs/charter website.

Likewise, the guiding principles established in article 55 of Royal Legislative Decree 5/2015, of October 30, which establishes that:

- 1. All citizens have the right to access public employment in accordance with the constitutional principles of equality, merit and capacity provided for in the Basic Statute of Public Employees.
- 2. The Public Administrations, entities and bodies referred to in Article 2 of the Basic Statute of Public Employees will select their civil servants and employees through procedures in which the aforementioned constitutional principles are guaranteed, as well as the one provided for below:
 - g) Publicity of the calls and their bases.
 - h) Transparency.
 - i) Impartiality and professionalism of the members of the selection bodies.
 - j) Independence and technical discretion in the actions of the selection bodies.
 - k) Adequacy between the content of the selection processes and the functions or tasks to be carried out.
 - I) Agility, without prejudice to objectivity, in the selection processes.

In order to guarantee these principles, the following rules will apply:

- In general, the principle of advertising will be understood to have been complied with by publishing the call in the Official Journal of the Generalitat de Catalunya, and on the IREC website, without prejudice to the use of other means of advertising, in those cases in which it is deemed appropriate.
- No condition that involves discrimination will be imposed.
- The gross salary for each of the places offered will be subject to the amounts regulated by the salary levels established in the professional categories provided for in the Career Plan for IREC staff.



2. CHARACTERISTICS OF THE POSITIONS OFFERED

Category Position	Location (Barcelona work center)	Reference Nb
S2 Project Managers UGE (S.2.2)	Economic and Systems Area	Ref. 128/2022
R2 Recognised Researcher (R.2.1.5)	ESA Group	Ref. 136/2022
R2 Recognised Researcher (R.2.1.1)	Power Group	Ref. 148/2022

3. REQUIREMENTS FOR PARTICIPATION

To take part in this call, applicants must meet each and every one of the following requirements and present the supporting documentation within 20 working days from the day of publication of the call for applications for the selection process in the Official Journal of the Generalitat de Catalunya:

GENERAL REQUIREMENTS

Applicants must provide documentary evidence of the following requirements a, b and c at the time of applying:

- a. Have the necessary academic qualifications to carry out the specific functions established in each of the places offered (Baccalaureate, Diploma, Degree, Master's or Doctorate).
- b. Have reached the age of 18 and be under 65 years of age.
- c. Proof of having completed and signed the Responsible Declaration attached to the call for applications.

ESSENTIAL REQUIREMENTS

The following requirements d i e will be verified during the phases of the call process:

- c. Have sufficient knowledge of the co-official languages of the Autonomous Community to be able to adequately carry out the functions of the place object of the call.
- d. Demonstrate to the Evaluating Tribunal a knowledge of the English language equal to or greater than the First Certificate (B2).

Failure to comply with requirement "d" will mean the exclusion of candidates as long as the place offered requires compliance.

SPECIFIC REQUIREMENTS

In accordance with the profile of the places covered by this call for applications, applicants meet the following requirements are considered as specific requirements. Non-compliance with them will be excluded by participation in this call:

- To hold the academic qualifications required to carry out the specific functions of each place.

- Provide documentary evidence of the minimum professional experience required for each of the places offered, and this experience in the functions of the position offered.



OTHER CONSIDERATIONS REGARDING THE REQUIREMENTS

If during the call the **falsehood is identified in any documentation or information provided** by the applicant, this circumstance **will be considered sufficient reason for the exclusion of the person from the process**. If this circumstance is known to the IREC once the hiring of the selected person has been formalized and during their trial period, it will be sufficient reason to claim that they have not passed this period. If that is discovered after this period is ended, it will be considered a breach of contractual good faith, as well as an abuse of confidence in the development of work, in accordance with the provisions of article 54.2 of the Workers' Statute, and the reason for dismissal. In all cases, the person will be allowed to exercise their right of clarification and defence by opening a period of allegations of 5 working days. In the event of not obtaining a response or confirming the falsehood, the person will be definitively excluded from the process, or the dismissal will be carried out, the IREC reserving the right to take legal action against him, and without prejudice to the actions that the person considers legitimate to use in the defense of their interests.

In the event that candidates are required to present degrees, certificates or any type of supporting documentation from abroad, it is mandatory to be in possession of the corresponding validation or credential that accredits it, or, where appropriate, their homologation. This accreditation will not be necessary for applicants who have obtained recognition of their professional qualification under the provisions of Community Law.

In any case, the selected candidates must provide a copy of the qualifications that prove compliance with the requirements of the call before contracting them.

The protection of the personal data of people who have submitted to the call is guaranteed in all cases, regardless of whether they have been chosen or not.

4. EVALUATING TRIBUNAL

For each position there will be an evaluation panel validated by the IREC management formed by at least three expert members in the field of the position to be filled.

Presidency	Holder	Group Leader
Vocal 1	Holder	External Expert
Vocal 2	Holder	Expert of the center or external

This Evaluating Tribunal will be the body in charge of evaluating the applicants and proposing the choice of those it considers most appropriate to occupy the places object of the call. The Evaluating Tribunal is authorized to resolve all doubts that may arise in the development of the bases of this call, as well as the form of action in cases not provided for therein.

5. STAGES OF THE SELECTION PROCESS

1.- START OF THE SELECTION PROCESS

This process has its origin in the AGREEMENT GOV/241/2022, of November 22, which authorizes the increase of the budgetary staff of various public sector entities of the Administration of the Generalitat in application of the labor reform and for the reduction of temporality in public



employment that provides for the number of available places. In accordance with this, the IREC proceeds to draw up and define the profile of the positions offered.

2.- PREPARATION AND APPROVAL OF THE BASES REGULATING THE CALL FOR APPLICATIONS

The regulatory bases of this call have been drawn up by Human Resources Direction of IREC with the approval of the General Directorate of IREC.

The evaluation of the candidates will be carried out in two phases:

- A single written test made up of two individual non-eliminatory exercises: a test-type exercise (theoretical exercise) valued at 25 points and a test-type exercise (practical exercise) valued at 25 points although passing the opposition phase will require a minimum global score of 25 points in the sum of the scores of both exercises (50 points overall maximum score).
- 2. An assessment of curricular merits by the Evaluating Tribunal, in accordance with the requirements indicated in point 8 of this section (50 points maximum overall score).

3.- CONSTITUTION OF THE EVALUATING TRIBUNAL

The Evaluating Tribunal shall be constituted in the terms indicated in section 4 of these rules.

4.- PUBLICATION OF THE CALL FOR APPLICATIONS

The terms and conditions of this call will be published on the IREC website and by submission of an announcement that will be made in the Official Journal of the Generalitat de Catalunya.

The information can be consulted on the IREC website (www.irec.cat) in the JOBS > Open call for *public job offers 2022*. Regarding those positions that are within the field of research itself, they can also be consulted on the https://euraxess.ec.europa.eu/jobs website.

5.- PRESENTATION OF APPLICATIONS

Candidates interested in participating in this selection process must submit the following documentation within 20 working days from the day of publication of the call for applications for the selection process in the Official Journal of the Generalitat de Catalunya:

- The "Application for Admission to Selective Tests" form, in accordance with the official form attached to these rules, duly completed and signed.
- Photocopies justifying the curricular merits (Annex 2 of this document).
- The documentation that accredits the access requirements indicated in section 3 of this document.

The "Application for Admission to Selective Tests" form together with all the documentation justifying the merits and access requirements must be submitted to the Human Resources Department attention in working days and working hours, or via certified postal mail at the IREC reception at the IREC headquarters on carrer Jardins de les Dones de Negre, 1, 2a planta. 08930, Sant Adrià de Besòs (Barcelona).

Only those requests that duly justify compliance with the requirements will be accepted of access to participate in this call.



At the time of registering each candidate's application for admission, they will be assigned a reference number.

Generic and ordinary communications related to this call will be made through the IREC website (www.irec.cat).

By default, and to safeguard the privacy of candidates, in the publications of the minutes of the call will include the reference number assigned to each of the candidates as a personal identifier, except when the name and surname of the person to whom the competitive position is assigned is published.

In accordance with data protection regulations, the personal data provided with the consent of the candidates will be processed by the data controller, which is the Fundació Institut de Recerca en Energia de Catalunya (IREC) with NIF G-64946387 and headquarters at carrer Jardins de les Dones de Negre, 1, 2 pl. 08930, Sant Adrià de Besòs (Barcelona), in order to manage your participation in the development and resolution of this call and will be kept exclusively for your disposal in case of participation in future selection processes. Subsequently, if as candidates the data are selected, they will also be used, where appropriate, for the management and formalization of the eventual hiring. Unless legally required, the data provided will not be transferred to third parties nor are international data transfers foreseen. The right of access, rectification, deletion, opposition, as well as the exercise of the other rights recognized by current regulations on data protection may be exercised through a written communication to dpo@irec.cat. Additional information can be found on the IREC website https://www.irec.cat/ca/politica-de-privacitat/.

6.- VERIFICATION OF COMPLIANCE WITH THE ACCESS REQUIREMENTS

Applicants who meet all the requirements detailed in section 3 of this document of the participation conditions required in the call for applications will pass this phase, provided that they have been duly justified and documented. Those candidates who are IREC employees and who meet the specific access requirements with their experience in the research centre itself or with the training of the Institutional Training Plan (PIF) promoted by the IREC, will not need to be provided with documentation, as the information can be checked with the information available in the IREC's internal database.

Once the deadline for submitting applications has ended, the Evaluating Court will check the requirements of the people and a provisional list of admitted and excluded applicants will be published on the IREC website, indicating for each person who has been the reason(s) for their exclusion. There will be 5 working days counted from the publication of the list of accepted candidates to present the allegations in writing, by the same procedure by which the request was presented accompanied by the necessary documentation in the case to be excluded.

The estimation or not of allegations by the Evaluating Court will end with the publication on the IREC website of the final list of the people admitted to the process.

7.- WRITTEN TEST

In this first phase, the evaluating tribunal will determine the completion by the candidates of the written test composed of the two test type tests, one theoretical and one practical where the candidates will have to apply the concepts corresponding to the syllabus that is determined in the profile of each place.



a) Theoretical assumption

It consists of answering a questionnaire of 30 test questions with 4 alternative answers, of which only one is correct, on the content of the part of the syllabus that is detailed in the profile of each place.

Questions that are unanswered or with more than one answer are not taken into account.

The maximum grade for the exercise is 25 points.

b) Practical assumption

It consists of two questions where candidates will have to develop two topics in which their professional career will be deepened, their competences and professional abilities considering what professional contributions the candidates can contribute as well as what aspects are expected regarding the place called, in accordance with the agendas that are stated for each position called.

The maximum grade for the exercise is 25 points.

The written test can be done in any of the co-official languages of the Autonomous Community.

Each position may have a different date for the written test; therefore it will not be mandatory for the written tests of the different positions to coincide on the same day. In order to avoid deviations and inequities due to potential subjectivity in the evaluation, the members of the Evaluation Court will evaluate the answers to the questions asked while following a pattern of evaluation of the answers according to the following evaluation scale:

Once the Evaluation Tribunal has evaluated all the tests carried out by the candidates, a provisional list of the candidates qualified for the next phase will be published on the IREC website. In case of disagreement with the qualification obtained, excluded candidates may file an appeal with the President of the Evaluating Tribunal within 3 working days from the publication of said provisional list, by the same procedure in which the application for participation in the call has been submitted accompanied by the documentation deemed necessary. The evaluating tribunal will resolve this appeal within a maximum period of 3 working days from receipt of the appeal.

The estimation or not of the allegations of the appeal will end with the publication on the IREC website of the final list.

8.- ASSESSMENT OF MERITS

Once the phase of the written test has been passed, the Evaluating Tribunal will proceed to assess the merits of the candidates as indicated below. In the event that there are no candidates who pass this phase, the place will be declared deserted. The IREC reserves the right to call for this place in future calls.

The merit assessment criteria are as follows: a. The services provided (maximum score of 42 points).



The merit assessment criteria are as follows:

a. The services provided (maximum score of 42 points).

a.1 Services provided with the same affiliation, on a temporary basis, in the same professional category at the IREC in respect of which the advertised position is requested (0.97 points per full month with a maximum of 35 points).

a.2 Services provided with the same affiliation, on a temporary basis in the same research center or in other public sector entities or research centers or universities, in professional categories equal or similar to the professional category in the IREC of which the requested position is requested (0.19 points per full month with a maximum of 7 points).

b. Formation considering: a) academic degrees, b) continuous and/or complementary training carried out related to the profile and functions of the position called and duly justified (maximum score of 5 points).

In general, the qualifying tribunals will take into account the training trajectory of the applicant who can revert in the development of the tasks of the job of the position called.

c. Knowledge of Catalan or English (maximum score 3 points)

Certificate of level of knowledge of the Catalan language higher	1 5 points
	1,5 points
than that required, as a requirement for participation, in the call.	
Certificate of level of knowledge of the English language higher	1,5 points
than that required, as a requirement for participation, in the call.	

The evaluation of the merits will entail 50% of the overall grade.

TIEBREAKER CRITERIA

In case of a tie in the total score, the order will be established in favor of the applicant:

a. Being in active service or in the following assimilated situations, in the same professional category of labor personnel with respect to which they request participation, computing for this purpose all the days of provision of services object of the call:

- Leave of absence derived from Law 8/2006 on conciliation (voluntary leave of absence for the care of children, voluntary leave to care for relatives, voluntary leave of absence for the maintenance of coexistence and voluntary leave of absence for gender violence).

- Leave of absence due to terrorist violence.

- Forced leave of absence.

b. More time of services provided in jobs in the same professional labor category of the position in respect of which the participation is requested, computing for the purpose, all the days of service provision.

c. Higher score on the merit of services provided at IREC.

d. Higher score in the opposition phase.

e. If the tie is maintained, it will be resolved by conducting an interview by the Evaluating Tribunal.

The Evaluating Tribunal will invite the candidates involved to an individual personal interview at least 48 hours in advance of the working day and time when the interview must take place, in



the event that the candidate convened accepts it, this period may be reduced. The interview will deal with: a) the person's motivations for aspiring to the position; b) the possible contributions of the person to the place called and to the internal unit or department where the place is framed, as well as to the IREC; c) In the specific case of strictly research places, the necessary means that the person expects to enjoy to carry out the activities related to the profile of the place called.

9.- FINAL RESULT

Once the two phases of the process have been completed, the Evaluating Tribunal will publish the minutes of resolution of the call signed by all its members with the list of candidates ordered from highest to lowest score of the qualifications obtained in both phases.

Once the selection process has been completed, the document for the allocation of positions with the name and surnames of the selected people will be published on the IREC website. Against this, where appropriate, an appeal may be filed with the President of the Evaluating Tribunal within 3 working days from the publication of said document, by the same procedure in which the application for participation in the call has been submitted accompanied by the documentation deemed necessary. The Evaluating Tribunal will decide the appeal within a maximum period of 3 working days, from receipt of the appeal.

10.- ASSIGNMENT OF POSITIONS

Within 7 working days, counting from the publication of the award document without an appeal having been submitted by the finalists and after 12 days from the publication of the award once the deadline for the resolution of the appeals has elapsed, the place will automatically be assigned and awarded to the selected candidate.

Each place may have a different date and time of incorporation that will be informed at the time of assignment.

In the case of professionals in an employment situation who win the position, they will leave their job of origin definitively, they must be in a situation of being able to be hired and registered with Social Security by the IREC on the business day and time indicated.

The non-presence on the working day and time indicated for incorporation will be equivalent to the waiver of the award of the place and will be passed directly to the next finalist candidate in the award list.

And, in order for it to appear for the appropriate purposes, this agreement is signed in Sant Adrià de Besòs on the date stated in the electronic signature.

JOAN RAMON MORANTE i LLEONART - DNI 38768724Q (TCAT)

Firmado digitalmente por ICAN RAMON MORANTE ILLONATT- DNI 3956740 (TCAT) Nombre de reconocimiento (DN):-c=5, o=FIVDACIO SINTUT RECERCEA RANGRA CATALUNYA (IREC), 25.497-VATE-SC4046339 out=Testallador public de nivile mina, titel=Director, sm-MORANTE ILLEONART-DNI 387687240, gurenname-JOAN BRANON, sertilMumber-DICES-38787340, cm-JOAN 84000 MCRATRE ILLEONART-DNI 387687240, (TCAT) Fecha: 2021; 22074132 + 01000

Joan Ramon Morante Lleonart Director de la Fundació Institut de Recerca en Energia de Catalunya



Segell i data d'entrada a Direcció de Recursos Humans

ANNEX 2 APPLICATION FORM FOR ADMISSION TO THE SELECTION OF LABOR PERSONNEL

The undersigned person requests his admission to the process of selection of labor personnel by competition of this application and declares that: has read the bases of this call, that meets the requirements, that the data consigned are true and that undertakes to accredit the documentation that is required.

NAME AND REFERENCE OF THE CALL FOR APPLICATIONS			
Name of the position:	Reference Number:		

PERSONAL DATA OF THE APPLICANT

DNI/NIE:	
1st. Surname:	
2nd. Surname:	
Name:	
Address:	
Postal Code:	City:
Province:	Phone:
E-mail:	

DOCI	IMENTATION PROVIDED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CALL (mark with an X the documents you provided and add the complementary ones)
1	Copy of the official academic qualification required
2	Copy of DNI/NIE
3	Copy of supporting documents for the curriculum vitae
4	Responsible Statement filled and signed
5	Certificate of services provided*
6	
7	
8	

*Only if you have worked in institutions outside IREC

SIGNATURE



Sant Adrià de Besos,

ANNEX 3 GENERAL INFORMATION ON THE POSITION

Position:	
Reference Number:	

CANDIDATE SELECTED

Date Incorporation:

RERSERVE:

Legal Representatives Signature		Date:
Director of IREC	Finance and Management Director of IREC	President of the Evaluation Committee
Sign.	Sign.	Sign.



ANNEX 4 POSITIONS OFFERED AND SYLLABUS



Publish Date: December 28th 2022 N. Ref.: 106/2022

Area : Economica i Sistemes Area leader: Jaume Marfà Sánchez Group: Manteniment Head of Group: Francesc Valls Mariscal

Position: Facility Support Maintenance Assistant

Description of the job position:

IREC is looking for a Maintenance Assistant, to be part of the current team that supports the research center.

The candidate must perform general preventive and corrective maintenance tasks of the refrigeration and air conditioning facilities of the Corporate Center applying current regulations, quality protocols, safety and prevention of occupational risks established, and in accordance with the guidelines set by their Head of Services.

It will carry out general plumbing, industrial electricity and load handling among other assigned jobs. It will work on the daily replacement and verification of the general service of the gas system, such as its control and preventive and corrective maintenance of the plant.

The candidate must identify possible breakdowns in the facilities and apply the relevant correctives, to minimize future repairs to equipment.

Collaborate in the management of purchases derived from the maintenance of facilities. Ensure health and safety in the workplace, properly using machinery, tools or substances related to its activity, as well as the means and protective equipment made available to it, in accordance with the procedures established by the corporation and current regulations on the prevention of occupational risks.

Willingness to give support during non-school hours, of emergencies detected in the center.

Collaborate in the collection of information and the obtaining of data necessary for the writing of studies and reports on facility maintenance.

Select and archive information regarding machinery, tools, clothing, etc.

Any other function analogous to those set out above or any of those specific to his professional category that is assigned by his or her boss.

Requeriments:

Essential:

- FP Intermediate degree in electrical and automatic installations
- Knowledge of technical laboratory gases
- Knowledge of electrical installations
- Knowledge of repair and general maintenance
- Language skills: Catalan, Spanish, French.

Advantageous:.

- Knowledge of English.
- Worked in the maintenance area in a public sector institution



Personal Skills:

- Self-motivated and open-minded
- Good communication skills
- Team worker.

Topics included in the exam:

- . Basic electricity
- . Fontaneria general
- . Welding and Boilermaking
- . Court Machines
- . Prevention and occupational risks (technical gases and laboratories)

Proposed Jury:

Presidency	Titular Francesc Valls Mariscal	
Vocal 1	Titular	Albert Llorente
Vocal 2	Titular	Jesús Casado Mola

More information about the selection process in:

CONVOCATORIA Y BASES REGULADORAS DEL PROCESO DE SELECCIÓN POR CONCURSO PARA LA CONTRATACIÓN DE PERSONAL LABORAL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022

Ref.: 107/2022	
Area:	Energy Efficiency in Systems, Buildings and Communities
Group:	Thermal Energy and Building
Group Leader:	Jaume Salom Tormo
Position:	Researcher - Enginyea de Projectes - First-stage – R1
	Energy efficiencyin Mediterranean buildings

Description

The Thermal Energy and Building Research Group announces a position as **First Stage Project Engineer (R1)** in the field of Energy Efficiency in Buildings in the Mediterranean Area. The research will be integrated into the Thermal Energy and Building Group, which focuses its research on integrated and systemic transformation towards buildings and communities of positive energy. The group's vision is to investigate solutions and strategies that accelerate and reduce greenhouse gas emissions in the building sector through human-centered design, energy efficiency measures, integration and management of energy systems, especially distributed renewable sources, in the built environment as part of urban communities.

The candidate will participate by supporting the principal investigator in projects in the Mediterranean area (MED) as the main activity. The projects encompass the topics of energy efficiency, integration of renewable energy sources and sustainability in buildings, working together with public bodies, owners and managers of buildings in order to design and implement best energy efficiency practices and energy sustainability plans. Within the framework of the Community of Efficient Buildings established in the MED area, the candidate will participate in the promotion of innovative solutions at national and community level to influence policies and establish a new national and European regulatory framework that takes into account MED specificities. The activities in which it will participate are networking activities with international partners, analysis of technical results, reports and communication of results, as well as verifying and ensuring the quality of the project results.

Requisits

We are looking for excellent and highly motivated candidates with a Master's degreeand training related to energy in buildings. Experience as a professional in the energy sector of at least two years, experience in national or European R+D projects and/or in the public sector related to the energy field is valued. The candidate must be a methodical and rigorous person with a scientific spirit, abilities to workin a team, results-oriented and with high communication skills.

Essencial:

- Bachelor's degree in Architecture, Building Engineering and/or Energy Engineering
- Master's Degree in Building Physics, Sustainability and/or Energy Efficiency in the Building Sector
- 2 years of professional experience in sustainability in buildings
- 1 year of professional experience in EU projects in the MED area
- Knowledge of Spanish energy certification systems and related programari: HULC, CE3X, etc.
- Fluent English at all levels. Catalan and/or Spanish are essential



Preferred

- Associated with an International System of Certification in Sustainability. LEED, BREAM, etc.
- Advanced knowledge of CAD and building design software. Autodesk / AutoCad, REVIT, SketchUp,...
- Experience and knowledge in TRNSYS energy system simulation tool
- Design of solar thermal/PV installations with software (Transol / PVSyst)
- Knowledge of Aanalysis of Cicle of Vida (ACV) in building materials

Topics included in the exam:

- Simulation of the energy behaviour of buildings in their design and operation
- Analysis of energy behaviour in buildings
- Life cycle analysis in buildings
- Indoor Environmental Quality in Buildings
- Post-onal occupancy evaluation in buildings
- Energy performance indicators and metrics for buildings
- Measuring instruments in buildings
- EU and national policies for energy efficiency in buildings
- Efficient Building Projects in the MED region

Proposed Jury

Presidència	Titular	Dr. Jaume Salom Tormo
Vocal 1	Titular	Dr. Joan Grau Barceló
Vocal 2	Titular	Francesc Torregrosa Mora

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date:

Ref.: 108/2022	2	
Area:	Energy Efficiency in Systems, Buildings and Communities	
Group:	Thermal Energy and Building Performance	
Head of Group	Head of Group: Jaume Salom Tormo	
Position:	First-stage Project Engineer – R1	
	Energy Modelling in Buildings	

Description

The Thermal Energy and Building Performance Group announces a position of a **First-stage Project Engineer (R1) specialized in Energy Modelling of Buildings.** The research will be embedded in the Thermal Energy and Building Performance Group which main research subject is the integrated and systemic approach towards positive energy buildings and communities. The group's vision is to investigate in solutions and strategies that accelerates the reduction of greenhouse gas emissions in the building sector through human-centred design, energy efficiency measures, integration and management of energy systems, particularly distributed renewable sources in the built environment as part of urban communities.

The candidate will participate as research/project engineer in technical work of research projects in fields related with different levels of energy models (white-box models and reduced-order / grey-box models) for the built environment and integration in computational tools. Activities will include modelling of energy systems in buildings, renewable energy systems and calibration of models. Focus will be in residential building stock and extension to USEM (Urban Scale Energy Models). Properly elaboration of technical reports and participation and leadership in scientific publications will be also carried out.

Requirements

We are looking for a methodical, excellent team-player and results-oriented candidate with good communication skills. Mastery of English on all levels will be essential.

Essential:

- Degree in Mechanical / Energy / Industrial Engineering
- Master Sciences Degree in Sustainable Energy / Renewables in Energy and/or Industrial Engineering
- 2 years of professional/research experience in projects involving energy modelling of Energy Efficiency in Buildings and/or Renewable Energy Systems
- Good programming skills: Python, C++ and/or R
- Experience in TRNSYS
- Fluent English and Spanish are essential

Preferred:

- Knowledge of HVAC and RES systems
- Experience/skills in Design and 3D GUI: SketchUp, Autocad, Solidworks, Catia, Ansys
- Experience in energy systems simulation tools (Transol, PVSyst, SIMSEN, etc.)
- Knowledge in time-series data analysis methods and tools
- Initiative in Research and Innovation



- Synthesis and Scientific Reporting capabilities

Topics included in the exam

- HVAC Systems and Equipment
- Building Performance Simulation for Design and Operation
- Building Performance Analysis
- Net/nearly Zero Energy Buildings
- Reduced Order Models for Building Simulation
- Buildings Performance Metrics and Indicators
- Indoor Environmental Quality in buildings
- TRNSYS Software

Proposed Jury

Presidency	Titular	Dr. Jaume Salom Tormo
Vocal 1	Titular	Dr. Joan Grau Barceló
Vocal 2	Titular	Francesc Torregrosa Mora

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022

Ref.: 109/2022

Area:	Energy Efficiency in Systems, Buildings and Communities	
Group:	Thermal Energy and Building Performance	
Head of Group: Jaume Salom Tormo		
Position:	Recognised Researcher/Engineer – R2 Consolidated	
	Energy systems integration for low energy cities and Green IT	

Description

The Thermal Energy and Building Performance Group announces a position of **Consolidated Recognised Researcher (R2) in the field of Energy systems integration for low energy cities and Green IT** The research will be embedded in the Thermal Energy and Building Performance Group which main research subject is the integrated and systemic approach towards positive energy buildings and communities.

The group's vision is to research solutions and strategies that accelerates the reduction of greenhouse gas emissions in the building sector through human-centred design, energy efficiency measures, integration and management of energy systems. The latter making special attention to distributed renewable sources in the built environment as part of urban communities. The Research line of Energy Infrastructures and Green IT works on the development of the energy system integration (electricity, heating, and cooling generation and distribution) in urban systems. Special focus is held on integration of district heating and cooling (DHC) networks and energy concepts for Data Centres as prosumers for Climate Neutral Communities. Topics addressed in this research line are:

- Simulation models integrating energy infrastructures (thermal and electrical networks) with building stochastic loads
- District Heating and Cooling networks integrating renewables: design and operation
- Energy efficiency and integration of renewable in Data Centres and IT processes.
- Exploitation of local thermal sources and sinks to cover thermal demands from/to buildings or DHC networks
- Heat reuse from IT Data Centres

The candidate will be involved in research activities and projects in the field of energy consumption of data centers (DC), integration of renewable energy sources in DC, District Heating and Cooling networks and waste heat reuse in the urban environment. Integrated in a multi-disciplinary team, the candidate is expected to lead research activities on the defined topics as part of international projects or projects with industrial partners. He/she will also have to lead and collaborate in preparing proposals for submission to national and European R&D funding programs, and in the search for partners such as companies, universities and research centres for project development. The candidate has to be used to plan resources and ensure deadlines as well of reporting and communication of technical / research results.



Requirements

We are looking for a methodical and rigorous person with a scientific spirit, excellent team-player and results-oriented candidate with high communication skills.

Essential:

- PhD degree in Mechanical Engineering / IT Engineering / Information Technologies
- 5 years of experience in research projects in energy systems in Buildings, energy concepts for data centres, waste heat recovery and/or district heating and cooling.
- Experience and knowledge in computational energy systems simulation tools
- Advanced knowledge in TRNSYS
- Knowledge in programming languages: Python, Fortran and/or C++
- Experience in EU and/or international research projects
- Lead of WP in EU projects and/or projects with Industry
- Good track of scientific publications and participation in Conferences
- Fluent English on all levels. Catalan and/or Spanish are essential

Preferred:

- Experience in transferring research results to industry or public bodies.
- Experience in optimization tools
- Knowledge in time series data analysis methods and tools
- Have been awarded with competitive scholarship o other grants for the development of R&D&I Calls
- Control, supervision and guidance of first-stage researchers/engineers

Topics included in the exam

- HVAC Systems and Equipment
- Building Performance Simulation for Design and Operation
- Building Performance Analysis
- District Heating and Cooling networks: design and operation
- Advanced Concepts for Renewable Energy Supply of Data Centres
- Heat Reuse from Urban Data Centres
- Fuel Cells in the IT sector

Proposed Jury

Presidency	Titular	Dr. Jaume Salom Tormo
Vocal 1	Titular	Dr. Joan Grau Barceló
Vocal 2	Titular	Francesc Torregrosa Mora

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022

Ref.: 110/2022

Area:	Energy Efficiency in Systems, Buildings and Communities	
Group:	Thermal Energy and Building Performance	
Head of Group: Jaume Salom Tormo		
Position:	Recognised Researcher/Engineer – R2 Consolidated	
	Architect specialized in Sustainability and Energy Efficiency in Buildings	

Description

The Thermal Energy and Building Performance Group announces a position of **Consolidated Recognised Researcher/Engineer (R2) in the field of Sustainability and Energy Efficiency in Buildings with background as Architect.** The research will be embedded in the Thermal Energy and Building Performance Group which main research subject is the integrated and systemic approach towards positive energy buildings and communities. The group's vision is to investigate in solutions and strategies that accelerates the reduction of greenhouse gas emissions in the building sector through human-centred design, energy efficiency measures, integration and management of energy systems, particularly distributed renewable sources in the built environment as part of urban communities.

The candidate will be involved in research activities and projects in the field of Decarbonization of the Building sector through retrofitting strategies of the building stock and the design of new areas within the concept of Positive Energy Buildings and Communities. The candidate should have a background in Architecture as well a deep knowledge of energy simulation tools, Energy labelling tools and Environmental certification processes in the building sector. Applied research will include upscaling decarbonization pathways at municipality, regional and national level. Integrated in a multi-disciplinary team, the candidate is expected to run and increasingly lead research activities as part of international projects or projects with industrial partners. The candidate has to be used to plan resources and ensure deadlines as well of reporting and communication of technical / research results.

Requirements

We are looking for a methodical, excellent team-player and results-oriented candidate with good communication and management skills.

Essential:

- Degree in Architecture and/or Building Engineer
- Master Science in Energy Efficiency and Sustainability in Buildings, Building Phsysics and/or Building Management
- At least 5 years of experience in architecture projects, both for new and retrofitted projects in the private and/or public sector
- At least 3 years of experience in consultancy projects involving building performance analysis through energy building simulations and Energy labelling software
- Experience and knowledge in computational energy systems simulation tools
- Advanced knowledge in TRNSYS
- Advanced knowledge of Spanish Energy Labelling Systems and related software: HULC, CE3X, Cerma, etc



- Experience in EU and international research projects
- Fluent English on all levels. Catalan and/or Spanish are essential

Preferred:

- Have initiated a PhD programme in the field of Sustainability in Buildings
- Experience in applying International Sustainable Rating Systems: EED, BREAM, etc.
- Advanced knowledge of CAD & Building Design Software. AutoCAD, REVIT, SketchUp,
- Experience and knowledge in computational energy systems simulation tools: TRNSYS, Energy Plus. Etc
- Management skills (e.g; responsible of small teams (more than 3 persons), coordination of teaching activities, etc.)
- Scientific publications and Public technical reports

Topics included in the exam

- Building Performance Simulation for Design and Operation
- Building Performance Analysis
- Detailed and Large-scale retrofit scenarios and policies
- EU and national policies for the Energy Efficiency in Buildings
- Sustainability instruments: SECAPs and SDGs
- Net/nearly Zero Energy Buildings
- Indoor Environmental Quality in buildings
- Buildings Performance Metrics and Indicators
- Measurement instruments in buildings

Proposed Jury

Presidency	Titular	Dr. Jaume Salom Tormo
Vocal 1	Titular	Dr. Joan Grau Barceló
Vocal 2	Titular	Francesc Torregrosa Mora

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 111/2022

Area:Energy Efficiency in Systems, Buildings and CommunitiesGroup:Thermal Energy and Building PerformanceHead of Group:Jaume Salom Tormo

Position:Recognised Researcher/Engineer – R2 Pre-consolidatedIEQ and Energy Management in Buildings

Description

The Thermal Energy and Building Performance Group announces a position of **High-skilled Pre-Consolidated Recognised Researcher/Engineer (R2) in the field of Urban Modelling with significant experience in Python developments**. The research will be embedded in the Thermal Energy and Building Performance Group which main research subject is the integrated and systemic approach towards positive energy buildings and communities. The group's vision is to investigate in solutions and strategies that accelerates the reduction of greenhouse gas emissions in the building sector through human-centred design, energy efficiency measures, integration and management of energy systems, particularly distributed renewable sources in the built environment as part of urban communities.

The candidate will participate as software developer engineer in technical work of research projects in fields related with different levels of energy models for the built Environment and integration in computational tools. Activities where he/she will be involved are programming of codes applied to dynamic simulation of buildings integrated in smart infrastructures. Focus will be in residential building stock, Local Energy Communities and UBEM (Urban Building Energy Models). The candidate will work in EU international projects within the subject of Retrofitting of Buildings, Positive Energy Districts and Local Energy Communities. Properly elaboration of reporting reports and collaboration in articles for scientific publication will be also carried out.

Requirements

We are looking for a methodical and rigorous person with a scientific spirit, excellent team-player and results-oriented candidate with high communication skills.

Essential:

- Degree in Mechanical / Energy Engineering
- Master Sciences Degree in Mechanical / Energy / Industrial Engineering
- At least 5 years of experience in professional/research projects in Energy Efficiency in Buildings
- At least 2 years of experience managing small technical teams (3-4 persons)
- At least 1 years of Experience in EU and/or international research projects
- Advanced knowledge in TRNSYS
- Advanced knowledge in programming languages Python
- Advanced knowledge in PostGresSQL+PostGis and GIS-tools (e.g, QGIS, ARCGIS)



- Advanced knowledge of CityGML information system and 3D City Database for CityGML
- Experience in data science tools: R, Python (NumPy, SciPy)

Preferred:

- Advanced knowledge of HVAC systems, especially Heat Pumps
- Knowledge of Indoor Environmental Quality assessment methods
- Knowledge in time series data analysis methods and tools
- Intellectual Property titles/registers derived from research results
- Initiative in Research and Innovation
- Fluent English is essential

Topics included in the exam

- HVAC Systems and Equipment
- Building Performance Simulation for Design and Operation
- Building Performance Analysis
- Net/nearly Zero Energy Buildings
- Buildings Performance Metrics and Indicators
- Design and Simulation of Local Energy Communities
- CityGML Information system
- PostgreSQL, PostGIS and MongoDB
- Agile Software Development: Principles, models and best practices.

Proposed Jury

Presidency	Titular	Dr. Jaume Salom Tormo
Vocal 1	Titular	Dr. Joan Grau Barceló
Vocal 2	Titular	Francesc Torregrosa Mora

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022

Ref.: 112/2022

Area:	Energy Efficiency in Systems, Buildings and Communities	
Group:	Thermal Energy and Building Performance	
Head of Group: Jaume Salom Tormo		
Position:	Recognised Researcher/Engineer – R2 Pre-consolidated	
	HVAC Systems and Laboratory experimental techniques	

Description

The Thermal Energy and Building Performance Group announces a position of **Pre-Consolidated Recognised Researcher/Engineer (R2) in the field of HVAC Systems Performance in Buildings with significant experience in experimental work in laboratory environments.** The research will be embedded in the Thermal Energy and Building Performance Group which main research subject is the integrated and systemic approach towards positive energy buildings and communities. The group's vision is to investigate in solutions and strategies that accelerates the reduction of greenhouse gas emissions in the building sector through human-centred design, energy efficiency measures, integration and management of energy systems, particularly distributed renewable sources in the built environment as part of urban communities.

The research group is managing the **Semi-Virtual Energy Integration Laboratory** (SEILAB) which provides advanced expertise to assess the development and integration of renewable energy solutions and innovative thermal and electrical equipment that are designed to improve energy efficiency in buildings and energy systems. The laboratory is provided with cutting-edge technology comprising systems for energy generation, heat and cool storage and state-of-the-art facilities for testing HVAC equipment and the interaction of energy systems with the grid. The laboratory operation is based on a semi-virtual testing approach, which allows for real equipment to be operated as a function of the behaviour of a dynamic virtual model. The laboratory is pioneer in addressing the smart integration of electrical and thermal components and aims to become a leading experimental facility for improving the development of Net Zero Energy Buildings.

The candidate will be involved in research activities and projects in the field of integration of HVAC equipment and renewable energies in buildings and/or systems, energy management and Fault-Detection and Diagnosis for HVAC equipment and experimental work related to HVAC systems in buildings (data analysis, leading and running experimental tests). Integrated in a multi-disciplinary team, the candidate is expected to run and increasingly lead research activities as part of international projects or projects with industrial partners. The candidate will be, specially, in charge of managing Labview environment in SEILAB, its adaptation to several experimental works and performing and testing novel control and Faut Detection and Diagnosis (FDD) systems in HVAC, both in the Lab environment and in field tests. The candidate must be used to plan resources and comply with deadlines as well of reporting and communication of technical / research results.

Requirements

We are looking for a methodical and rigorous person with a scientific spirit, excellent team-player and results-oriented candidate with high communication skills.



Essential:

- PhD degree in Energy/Mechanical Engineering, Automatic Control and/or Building Physics Science
- 5 years of experience in research projects in building performance, thermal renewable systems and generally speaking energy systems in buildings
- 4 years of experience in laboratory experiments based in the hardware-in-the-loop concept
- Advanced knowledge in Labview
- Experience in Fault Detection and Diagnosis applied to HVAC systems
- Knowledge in programming languages: Python, Fortran and/or C++
- Experience in the use of data acquisition systems in experiments and communication protocols with HVAC systems
- Experience in EU and international research projects
- Fluent English on all level. Catalan and/or Spanish are essential

Preferred:

- Experience in transferring research results to industry
- Experience in calibration of models
- Advanced knowledge in TRNSYS
- Experience in optimization tools
- Knowledge in time series data analysis methods and tools
- Scientific publications and Public technical reports

Topics included in the exam

- HVAC Systems and Equipment
- Building Performance Simulation for Design and Operation
- Building Performance Analysis
- Experimental Techniques and Data acquisition in Laboratories
- Hardware-in-the loop experiments in Mechanical Engineering Laboratories
- Fault Detection and Diagnosis systems in HVAC
- Building operation, Control and Management

Proposed Jury

Presidency	Titular	Dr. Jaume Salom Tormo
Vocal 1	Titular	Dr. Joan Grau Barceló
Vocal 2	Titular	Francesc Torregrosa Mora

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022

Ref.: 113/2022

Area:	Energy Efficiency in Systems, Buildings and Communities
Group:	Thermal Energy and Building Performance
Head of Group: Jaume Salom Tormo	
Position:	Recognised Researcher/Engineer – R2 Pre-consolidated
	IEQ and Energy Management in Buildings

Description

The Thermal Energy and Building Performance Group announces a position of **Pre-Consolidated Recognised Researcher/Engineer (R2) in the field of IEQ and Energy management in Buildings with significant experience in simulation environments**. The research will be embedded in the Thermal Energy and Building Performance Group which main research subject is the integrated and systemic approach towards positive energy buildings and communities. The group's vision is to investigate in solutions and strategies that accelerates the reduction of greenhouse gas emissions in the building sector through human-centred design, energy efficiency measures, integration and management of energy systems, particularly distributed renewable sources in the built environment as part of urban communities.

The research group is also managing the **Semi-Virtual Energy Integration Laboratory** (SEILAB) which provides advanced expertise to assess the development and integration of renewable energy solutions and innovative thermal and electrical equipment that are designed to improve energy efficiency in buildings and energy systems. The laboratory is provided with cutting-edge technology comprising systems for energy generation, heat and cool storage and state-of-the-art facilities for testing HVAC equipment and the interaction of energy systems with the grid. The laboratory operation is based on a semi-virtual testing approach, which allows for real equipment to be operated as a function of the behaviour of a dynamic virtual model. The laboratory is pioneer in addressing the smart integration of electrical and thermal components and aims to become a leading experimental facility for improving the development of Net Zero Energy Buildings.

The candidate will be involved in research activities and projects in the field of IEQ and Energy management in Buildings, integration of HVAC equipment and renewable energies in buildings and building performance simulation. Integrated in a multi-disciplinary team, the candidate is expected to run and increasingly lead research activities as part of international projects or projects with industrial partners. The candidate will be performing simulation of Buildings and integrated Systems (HVAC & Renewables), comparing results from simulations with monitored data to reduce the known Building Performance gap, and programming energy management systems for Buildings. The candidate must be used to plan resources and ensure deadlines as well of reporting and communication of technical / research results.

Requirements

We are looking for a methodical and rigorous person with a scientific spirit, excellent team-player and results-oriented candidate with high communication skills.

Essential:

- Master Sciences Degree in Mechanical / Energy Engineering
- At least 4 years of experience in professional/research projects in Energy Efficiency in Buildings



- At least 2 years of Experience in EU and/or international research projects
- Knowledge of control basics for HVAC systems and IoT integration
- Advanced knowledge in TRNSYS
- Experience in the use of data acquisition systems in experiments
- Advanced knowledge in programming languages: Python, Fortran and/or C++
- Fluent English is essential

Preferred:

- Experience in data science tools: R, Python (NumPy, SciPy)
- Knowledge of Indoor Environmental Quality assessment methods
- Experience in transferring research results to industry
- Experience in optimization tools
- Knowledge in time series data analysis methods and tools
- Scientific publications and Public technical reports
- Initiative in Research and Innovation

Topics included in the exam

- HVAC Systems and Equipment
- Building Performance Simulation for Design and Operation
- Building Performance Analysis
- Monitoring of IEQ and energy performance in Buildings
- Net/nearly Zero Energy Buildings
- Buildings Performance Metrics and Indicators
- Measurement instruments in buildings
- Control of HVAC systems and model predictive control

Proposed Jury

Presidency	Titular	Dr. Jaume Salom Tormo
Vocal 1	Titular	Dr. Joan Grau Barceló
Vocal 2	Titular	Francesc Torregrosa Mora

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 114/2022

Area Advanced Materials for EnergyGroup:Nanoionics and Fuel CellsHead of Group:Albert Tarancón

Position: Recognized Researcher (R2) Big data and machine learning for advanced materials for energy

Description of the job position

The Nanoionics and Fuel Cell Group announces a position of recognized researcher (R2) in the field of advanced materials for energy applications. The research will be dedicated to the development of predictive modelling methods to accelerate the design of novel compounds for different energy technologies developed in the group. The group's vision is to combine high-throughput screening technologies with machine learning capabilities to explore complete families of materials with application in electrochemical devices like solid oxide cells, solid-state batteries, switchable devices, etc. The research will include the synthesis of materials' libraries, the development of high-throughput screening of structural and functional properties (especially employing non-destructive optical methods and operando characterization) and the design and application of predictive modelling employing experimental (and theoretical) datasets.

The candidate will be involved in tasks such as managing related projects, supervising master and PhD students and leading projects as well as performing laboratory research. The aim of the group is to cover different levels of TRL, covering from the innovation in materials to the prototyping of disruptive solutions based on outputs from predictive modelling. In this regard, the candidate will integrate and characterize electrochemical devices based on novel materials.

Integrated in a multi-disciplinary team, it is also expected a candidate able to lead research activities as part of international projects (especially regarding National and EU programmes on "Excellence"). The candidate should be used to plan resources and ensure deadlines as well of reporting and communication of research results.

Requirements

We are looking for a methodical, excellent team player and results-oriented candidate with high communication skills suitable to become a future leader in the field of machine learning. The candidate has to fulfill all the requirements of R2 pre-consolidated researchers level of the internal IREC

evaluation including the following ones:

Essential:

- Master in Energy Technologies or similar.
- PhD degree in Chemistry/ Physics/Engineering with special focus on energy materials.
- A number of publications in indexed scientific journals and/or books indexed with ISBN.
- Scientific publications as first/corresponding author in papers published in journals of the materials (for energy) field.
- More than 5 years of hands-on experience on fabrication/characterization/predictive modelling of materials for energy applications.
- More than 5 years months experience in international research projects.
- Relevant contributions to international conferences on the field of materials for energy.
- Master students' supervision.
- Management of projects (at least at WP level).
- Fluent English.

Preferred:

• International stage on a different country of the one where the PhD was hold for at least 24 months.



- Invited contributions to conferences and/or other international recognitions.
- Experience and knowledge in operando characterization.
- Proven experience in big data/data mining and predictive modelling (applied to materials for energy).
- Proven experience in funding search (at the individual level)
- Clear view in "Research and innovation funding attraction" (regional, national and international levels)
- Proven experience and motivation for outreach and dissemination activities.
- Fluent Catalan and Spanish

Topics included in the exam:

The exam will cover the following topics related to big data and machine learning for energy:

- Solid State Physics
- Advanced Materials for Energy
- Energy devices (including solid oxide cells, solid state batteries and switchable devices)
- Big Data and Data Mining
- Machine learning algorithms: supervised learning, unsupervised learning and reinforcement learning
- Structural/surface characterization methods applied to materials for energy
- Electrochemical characterization methods applied to materials for energy and energy devices (including operando characterization techniques)
- Funding sources at regional, national and international levels

Proposed Jury:

Presidency	Titular	Albert Tarancón
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Mónica Burriel

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 115/2022

Area Advanced Materials for EnergyGroup:Nanoionics and Fuel CellsHead of Group:Albert Tarancón

Position: Recognised Researcher (R2) Electrochemical energy storage using All-Solid State Batteries

Description of the job position

The Nanoionics and Fuel Cells Group announces a position of recognized researcher (R2) in the field of electrochemical energy storage using solid-state battery technology. The research will be dedicated to the development of All-Solid State Batteries (ASSBs) with the focus on materials science and engineering, as well as on the electrochemical characterization and optimization of the developed devices. The group's vision is to investigate new materials and architectures (especially thin films) for developing a proprietary ASSB technology to be used in the Internet of Things (IoT) sector.

The research will include the use of thin film deposition technology (mainly Pulsed Laser Deposition, PLD, thermal evaporation and Atomic Layer Deposition, ALD) on technologically relevant substrates. Microfabrication tools will be employed to define novel architectures and proof disruptive approaches. ASSB batteries will be based on complex oxides and metals. Structural and electrochemical characterization of materials and devices will be carried out, with especial emphasis in *operando* methods.

The candidate will be involved in tasks such as managing related projects, supervising master and PhD students and leading projects as well as performing laboratory research in the activities of thin film batteries projects. The aim of the group is to cover different levels of TRL for the described technology, covering from the innovation in materials and fabrication processes to the prototyping.

Integrated in a multi-disciplinary team, it is also expected that the candidate lead research activities as part of international projects or projects with industrial partners, including multi-partners project. The candidate should be used to plan resources and ensure deadlines as well of reporting and communication of technical / research results on the battery field.

Requirements

We are looking for a methodical, excellent team player and results-oriented candidate with high communication skills suitable to become a future leader in the battery field.

The candidate has to fulfill all the requirements of R2 pre-consolidated researchers level of the internal IREC evaluation including the following ones:

- Master in Materials/Energy Technologies or similar.
- PhD degree in Chemistry/ Physics/Engineering with special focus on energy materials.
- A number of publications in indexed scientific journals and/or books indexed with ISBN.
- Scientific publications as first/corresponding author in papers published in journals of the materials (for energy) field.
- More than 5 years of hands-on experience on fabrication/characterization/predictive modelling of materials for energy applications.
- More than 5 years of experience in international research projects.



- Relevant contributions to international conferences on the field of materials for energy.
- Technology transfer actions and/or patents in the field of batteries.
- Master students' supervision.
- Management of projects (at least at WP level).
- Fluent English.

Preferred:

- International stay on a different country of the one where the PhD was hold for at least 24 months.
- Invited contributions to conferences and/or other international recognitions.
- Experience and knowledge in ASSB materials
- Proven experience in thin film fabrication (by PLD, ALD and thermal evaporation)
- Proven experience in structural and electrochemical operando characterization (including ellipsometry, Raman and impedance spectroscopy)
- Proven experience in technology transfer
- Proven experience in funding search
- Clear view in "Research and innovation funding attraction" (regional, national and international levels)
- Proven experience and motivation for outreach and dissemination activities
- Fluent Catalan and Spanish

Topics included in the exam:

The exam will cover the following topics related to solid-state batteries:

- Fundamentals of Solid State Ionics
- Fundamentals of Solid-solid interfaces
- Fundamentals of Solid State Batteries (including solid state electrochemistry)
- Thin film deposition tools (applied to ceramic materials)
- Structural characterization tools for advanced functional oxides (including Spectroscopic Ellipsometry and Raman Spectroscopy)
- Electrochemical characterization tools for advanced solid state ionics devices (including Electrochemical Impedance Spectroscopy)
- Operando characterization of electrochemical devices
- Microfabrication tools and methods
- Funding sources at regional, national and international levels

Proposed Jury:

Presidency	Titular	Albert Tarancón
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Monica Burriel

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 116/2022

Area Advanced Materials for Energy Group: Nanoionics and Fuel Cells Head of Group: Albert Tarancón

Position: Recognized Researcher (R2) Advanced ceramic materials for solid state energy devices

Description of the job position

The Nanoionics and Fuel Cells Group announces a position of recognized researcher (R2) in the field of advanced ceramic materials and related energy technologies. The research will be focused on synthesis, processing and advanced characterization of ceramic materials and devices. The group's vision is to investigate new materials, architectures and microstructures as well as to develop novel methodologies for advanced characterization of ceramics to improve performance, durability and efficiency of solid-state energy devices. The topics of the group include Solid Oxide Cells (SOCs), All-Solid State Batteries (ASSBs) and Thermoelectric Generators (TEGs).

The research will include the synthesis, characterization and device integration of advanced ceramic materials for SOCs, ASSBs and TEGs. The research will put the focus on the materials side through the development of new compounds to be integrated in disruptive devices. Special attention will be dedicated to advanced tools for structural and electrochemical characterization. In this regard, novel materials and devices will be characterized (using X-ray diffraction, synchrotron diffraction, atom probe tomography, high-resolution transmission and scanning electron microscopy, X-ray photoelectron spectroscopy, glow discharge optical spectroscopy, spectroscopic ellipsometry and Raman and tip-enhanced Raman spectroscopy, among others) and electrochemically tested (V-I, electrochemical impedance spectroscopy, cyclic voltammetry, Van der Paw and mass transport numbers, among others). Development of new measurement setups will be part of the research to be carried out.

The candidate will be involved in tasks such as managing related projects, supervising master and PhD students and leading projects as well as performing laboratory research in the activities of advanced ceramic materials for solid-state energy devices developed in the group. The aim of the group is to integrate these materials at different TRL level, which could eventually include scaling up their production. Integrated in a multi-disciplinary team, it is also expected a candidate able to lead research activities as part of international projects or projects with industrial partners, including multi-partners project. The candidate should be used to plan resources and ensure deadlines as well as to report and communicate results.

Requirements

We are looking for a methodical, excellent team player and results-oriented candidate with high communication skills suitable to become a future leader in the field of advanced ceramic materials for solid-state energy devices developed in the Nanoionics and Fuel Cells group at IREC.

The candidate has to fulfill all the requirements of R2 pre-consolidated researchers level of the internal IREC evaluation including the following ones:

- Master in materials or energy technologies
- PhD degree in Chemistry/Physics or Materials Engineering.



- > Have a number of publications in indexed scientific journals and/or books indexed with ISBN.
- Scientific publications as first author in papers published in journals of the energy field.
- More than 5 years of hands-on experience on advanced ceramics (synthesis, structural and electrochemical characterization).
- More than 5-years' experience in international research projects.
- Technology transfer actions and/or patents in the field of advanced materials.
- Contributions to international conferences in the field of advanced materials.
- Master and PhD student supervision and management.
- Fluent English.

Preferred:

- International stay on a different country of the one where the PhD was hold for at least 24 months.
- Invited contributions to conferences and/or other international recognitions.
- Proven experience and knowledge in advanced ceramics synthesis and characterization.
- Proven experience in advanced ceramic manufacturing tools.
- Proven experience and knowledge in advanced ceramic integration in SOCs/ASSB/TEGs.
- Proven experience in developing testing methods and monitoring.
- Clear view in "Research and innovation funding attraction" (regional, national and international levels).
- Proven experience and motivation for outreach and dissemination activities.
- Fluent Catalan and Spanish.

Topics included in the exam:

The exam will cover the following topics related to advanced materials for energy applications:

- Advanced ceramics synthesis methods
- Advanced ceramics manufacturing technologies
- Advanced ceramics characterization techniques (structural, composition, morphological and electrochemical)
- Advanced ceramics with application in SOC, ASSB and TEG
- Fundamentals and principles of SOC, ASSB and TEG energy technologies.
- Funding sources at regional, national and international levels

Proposed Jury:

Presidency	Titular	Albert Tarancón
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Mónica Burriel

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 117/2022

Area Advanced Materials for EnergyGroup:Nanoionics and Fuel CellsHead of Group:Albert Tarancón

Position: Recognized Researcher (R2) Solid Oxide Cells and All-Solid State Batteries Technologies

Description of the job position

The Nanoionics and Fuel Cells Group announces a position of recognized researcher (R2) in the field of energy chemical storage and power generation using solid oxide cells (SOCs) and all-solid state batteries (ASSB) technologies. The research will be focused on ceramic materials and devices (up to the stack level) towards the development of proprietary technology. The group's vision is to investigate new materials, architectures and microstructures that allows the improvement of performance, durability and efficiency using complex geometries and nanostructures.

The research will include the use of advanced manufacturing technologies and rapid thermal treatments as enabling fabrication tools to achieve innovative and complex devices and microstructures that promote the commented targets on efficiency and durability. The research will put the focus on the materials side through the development of SOCs (new materials for cells, interconnects, coatings and sealants) and ASSBs (solid electrolytes, high-voltage cathodes and anode-less configurations). Materials, devices and stacks will be structural and electrochemically characterized using multiple techniques including electrochemical impedance spectroscopy (EIS). Development of new measurement setups will be part of the research to be carried out.

The candidate will be involved in tasks such as managing related projects, supervising master and PhD students and leading projects as well as performing laboratory research in the activities of SOC and ASSBs development projects. The aim of the group is to cover different levels of TRL for the described technology, covering from the innovation in materials and fabrication processes to the prototyping. Integrated in a multi-disciplinary team, it is also expected a candidate able to lead research activities as part of international projects or projects with industrial partners, including multi-partners project. The candidate should be used to plan resources and ensure deadlines as well as to report and communicate results.

Requirements

We are looking for a methodical, excellent team player and results-oriented candidate with high communication skills suitable to become a future leader in the field of materials for solid-state energy devices.

The candidate has to fulfill all the requirements of R2 pre-consolidated researchers level of the internal IREC evaluation including the following ones:

- Master in materials or energy technologies
- PhD degree in Chemistry/ Physics or Materials Engineering with special focus on energy technologies.
- > Have a number of publications in indexed scientific journals and/or books indexed with ISBN.
- Scientific publications as first author in papers published in journals of the energy field.
- More than 5 years of hands-on experience on conducting ceramics (synthesis, structural and electrochemical characterization and integration in SOC/ASSB devices).



- More than 5-years' experience in international research projects.
- Technology transfer actions and/or patents in the field of SOC/ASSB.
- Contributions to international conferences on the field of SOC/ASSB technologies.
- Master and PhD student supervision and management.
- Fluent English.

Preferred:

- International stay on a different country of the one where the PhD was hold for at least 24 months.
- Invited contributions to conferences and/or other international recognitions.
- Experience and knowledge in stack-level performance of SOC technologies.
- Experience and knowledge in glove-box methodologies for ASSB technologies.
- Proven experience in developing testing methods and monitoring.
- Proven experience in prototyping.
- Clear view in "Research and innovation funding attraction" (regional, national and international levels).
- Proven experience and motivation for outreach and dissemination activities.
- Fluent Catalan and Spanish.

Topics included in the exam:

The exam will cover the following topics related to solid oxide cells and batteries:

- Fundamentals of Solid Oxide Cells and All-Solid State Batteries
- Fundamentals of ceramics and glasses
- Advanced materials for solid electrolytes, SOC and ASSB electrodes, coatings and sealing.
- Advanced manufacturing tools for functional ceramics (including additive manufacturing and rapid thermal treatments)
- Structural characterization tools for advanced functional oxides
- Electrochemical characterization tools for SOC and ASSB
- EIS modelling
- Stacking methodologies and testing tools at stack level
- Funding sources at regional, national and international levels

Proposed Jury:

Presidency	Titular	Albert Tarancón
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Mónica Burriel

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 118/2022

Area Advanced Materials for EnergyGroup:Nanoionics and Fuel CellsHead of Group:Albert Tarancón

Position: Recognized Researcher (R2) Fundamentals and Application of Solid State Ionics for Energy Devices

Description of the job position

The Nanoionics and Fuel Cells Group announces a position of recognized researcher (R2) in the field of Solid State Ionics (SSI) for Energy Devices. The research will be dedicated to the development of existing and new technologies based on Solid State Ionics, more specifically, the candidate will focus in ionic and Mixed Ionic-Electronic Conductor (MIEC) ceramic materials. The group's vision is to investigate non-trivial phenomena taking place at the nanoscale, which is covered by Nanoionics, and the control of electronic properties by using ions, which recently gave rise to the emerging field of Iontronics. The research will include the fabrication of nanostructured ionic and MIEC materials (especially as thin films), their structural characterization using multiple techniques (especially optical methods that allow operando studies like ellipsometry or Raman spectroscopy) and their electrochemical characterization as active layers in devices.

The candidate will be involved in tasks such as managing related projects, supervising master and PhD students and leading projects as well as performing laboratory research in the activities of SSI-related projects. The aim of the group is to cover different levels of TRL for the related technologies, covering from the innovation in materials to the prototyping of disruptive concepts.

Integrated in a multi-disciplinary team, it is also expected a candidate able to lead research activities as part of international projects (especially regarding National and EU programmes on "Excellence"). The candidate should be used to plan resources and ensure deadlines as well of reporting and communication of research results.

Requirements

We are looking for a methodical, excellent team player and results-oriented candidate with high communication skills suitable to become an emerging leader in the field of SSI.

The candidate has to fulfill all the requirements of R2 pre-consolidated researchers level of the internal IREC evaluation including the following ones:

- Master in Energy Technologies or similar.
- PhD degree in Chemistry/ Physics/Engineering with special focus on Solid State Ionics.
- A number of publications in indexed scientific journals and/or books indexed with ISBN.
- Scientific publications as first/corresponding author in papers published in journals of the materials (for energy) field.
- More than 5 years of hands-on experience on ionic and/or MIEC conducting ceramics (synthesis, structural and electrochemical characterization and integration in devices).
- More than 5-years' experience in international research projects.



- Relevant contributions to international conferences on the field of SSI and materials for energy.
- Master and PhD student supervision.
- Management of projects (at least at WP level).
- Technology transfer actions and/or patents in the field of SSI.
- Fluent English.

Preferred:

- International stay on a different country of the one where the PhD was hold for at least 24 months.
- Invited contributions to conferences and/or other international recognitions.
- Experience and knowledge in defect chemistry and modeling of SSI materials and devices.
- Proven experience in developing operando characterization methods.
- Proven experience in microfabrication of devices in clean room facilities.
- Proven experience in funding search
- Clear view in "Research and innovation funding attraction" (regional, national and international levels).
- Proven experience and motivation for outreach and dissemination activities.
- Fluent Catalan and Spanish.

Topics included in the exam:

The exam will cover the following topics related to Fundamental and Applied Solid State Ionics for Energy Devices:

- Defect Chemistry
- Fundamentals of oxide ionic conduction and mixed ionic-electronic conduction
- Solid-solid interfaces
- Nanoionics
- Iontronics
- Fundamentals of Solid State Energy Devices (including Solid Oxide Cells and Solid State Batteries)
- Modelling tools in Solid State Ionics
- Structural characterization tools in Solid State Ionics (including Spectroscopic Ellipsometry and Raman Spectroscopy)
- Electrochemical characterization tools in Solid State Ionics (including Electrochemical Impedance Spectroscopy)
- Sample fabrication tools in Solid State Ionics (including conventional manufacturing and thin films)
- Funding sources at regional, national and international levels

Proposed Jury:

Presidency	Titular	Albert Tarancón
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Mónica Burriel

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: 28 de desembre de 2022 / December 28th 2022 N. Ref.: 119/2022

Area : Econòmica I Sistemes Area leader: Jaume Marfà Sánchez Group: Comptabilitat Head of Group: Yolanda Lara Position: S-2.1.B Administratiu /va - Comptable

Descripció del lloc de treball /Description of the job position

Tramitació de comandes / Order processing Comptabilització de factures / Invoice accounting Reconciliacions pagaments-factures / Payment-invoice reconciliation Apertura de proveïdors / Supplier openings Reclamació de factures / Invoice claims Pagaments de factures - comandes de proveïdors / Payment of supplier invoices-orders Confecció de liquidacions de despeses / Preparation of expense statements

Requirements

Nivell d'anglès bàsic / Basic level of English Coneixements amplis de comptabilitat financera: Pla de comptabilitat de Fundacions / Extensive knowledge of financial accounting - General Chart of Accounts for Foundations

Essential:

Diplomatura

Experiència mínima de 15 anys en comptabilitat de Proveïdors i tramitació de comandes / Minimum 15 years experience in supplier accounting and order processing.

Experiència mínima de 3 anys en entitat de l'Administració Pública de la Generalitat / Minimum experience of 3 years in the Public Administration of the Generalitat de Catalunya.

Coneixements de comptabilitat pública (Generalitat) (equivalències Pla Comptable General – Pla comptable Generalitat de Catalunya) / Knowledge of public accounting (Equivalences between the accounts of the general accounting plan and the accounts of the Generalitat de Catalunya's accounting plan).

Català natiu / Native Catalan

Coneixements nivell alt i experiència del programa de comptabilitat SAP BUSINESS ONE / High level knowledge and experience with Sap Business One accounting software.

Topics included in the exam:

Pla General de Comptabilitat: composició del balanç i comptes de pèrdues i guanys / General chart of accounts: composition of balance sheet and income statement accounts

Pla General de comptabilitat de Fundacions / General Accounting Plan for Foundations

Macroeconomia, microeconomía i administració d'empreses / Macroeconomics, microeconomics and business administration

Equivalències pla comptable general – Administració Generalitat / General Chart of Accounts and Generalitat de Catalunya's accounting plan equivalences

Fiscalitat avançada: impostos, confecció, presentació de les declaracions, tipus d'IVA, tractament d'importacions, etc / Advanced taxation: tax preparation, VAT rates, treatment of imports, presentation of tax forms, etc.

Tractament d'actius: adquisició, amortitzacions, baixes, etc. / Treatment of fixed assets: acquisition, depreciation, disposal, etc.



Càlcul de període mitjà de pagament i pendent de pagament / Calculation of the average payment period and pending payment

Càlcul del romanent de Tresoreria / Calculation of cash flow

Proposed Jury:

President/Presidency	Titular	Yolanda Lara Bejar
Vocal 1	Titular	Jaume Marfà Sánchez
Vocal 2	Titular	Horacio Estevez

More information about the selection process in/ Mes informació del procés de selecció: CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 120/2022

Area:EconomicGroup:LegalHead of Group:Jaume Marfà Sánchez

Position: Legal Service Lawyer

Position description

Objective of the position: To develop the tasks assigned to it in order to provide support and advice at the legal level to the Foundation.

Functions:

- Comprehensive legal advice and support to the departments and the Management of IREC, attending to the legal aspects of the Foundation in order to ensure the legality of all acts of the same.
- Preparation, review, negotiation and validation of legal documents, among other contracts, technological contracts, agreements, co-ownership agreements, call bases, consortium agreements, licenses, assignments in matters related to intellectual property rights, confidentiality, image rights, transfer, exploitation of R+D+i results, support in the creation of spin-off companies and, in general, any other type of instrument or legal document in which IREC intervenes or is a party.
- Management and review of procurement files (minors and tenders) according to Law 9/2017 on public sector contracts, in all its phases of design, preparation, preparation, award and execution of contracts and derived documentation.
- Exercise legal control over public procurement carried out by the Foundation and be part of the contracting board exercising the function of secretary.
- Prepare and write reports, as well as any other legal documentation that is necessary within its scope of competence.
- Supervision, monitoring and surveillance of the Foundation's portfolio of trademarks, patents, industrial designs and domain names.
- Monitor changes, regulatory modifications and new legislation that affect IREC and prevent the effects on the activity of the Foundation by reviewing and updating internal regulations.
- Make proposals for improvement for standardization and better compliance with legal criteria in the procedures and internal documentation that govern the performance of IREC.
- Supervision and coordination with external lawyers who provide legal support.
- Any other function assigned by the Direction in matters related to its field of competence.



Requirements:

Personal skills and competencies:

- Autonomy, planning and organization.
- Communication and negotiation skills.
- Analytical capacity.
- Decision making and responsibility.
- Orientation to objectives and detail.
- Management and teamwork skills.
- Proactivity and flexibility.
- Commitment.

Essencials:

Bachelor's degree or university degree in Law. Master's Degree in Intellectual and Industrial Property. Postgraduate or equivalent.

Training or improvement courses directly related to the functions of the job and specifically in the subjects: technological contracting and transfer of results, software, image rights, data protection and public procurement.

Minimum professional experience of 5 years in entities of the public sector and / or field of research with the functions of the job offered.

Minimum professional experience of 4 years in the participation and / or review of tender specifications, minor contracting and other documentation of public procurement files .

Minimum professional experience of 5 years in the drafting and review of contracts, agreements, consortium agreements (national and European), collaboration agreements, licenses or assignments that regulate aspects related to the exploitation, transfer and protection of technology and results of R + D + I projects (intellectual property and industrial property), copyright in general, image rights, confidentiality, support in the creation of spin-off companies, new technologies and data protection.

Oral and written fluency in English, Catalan and Spanish. Knowledge of another language will be valued.

Optional/Valuable:

Experience in commercial contracts.

Knowledge related to new technologies.

Experience with the Public Procurement Services Platform (PSCP).



Creditable work experience abroad in any of the subjects that are part of the functions of the job offered.

Items included in the exam:

Protection of personal data. The legal regime of the protection of personal data. Rights, duties and guarantees derived from the legal regime of the protection of personal data.

Public procurement of works, services and supplies. The recruitment file. Specifications of administrative clauses and specifications of technical prescriptions. Procurement procedures, award criteria and classification of contracts. Framework agreements. Dynamic recruitment systems.

Regulation of foundations and consortia. Special reference to public sector foundations.

Intellectual property: nature and legal regime. The protection and transfer of intellectual property rights. The software.

Industrial property: nature and legal regime. The protection and transfer of industrial property rights. Patents and domain names.

Regime for the transfer of technology and knowledge. Contracts, agreements and agreements in the field of research.

Calls for funding for national or European research, development or innovation projects. Formalization. Consortium agreements and associated legal documentation.

Proposed Jury:

Presidency	Titular	Jaume Marfà
Vocal 1	Titular	Francesc Torregrosa
Vocal 2	Titular	Marta Pons de Vall

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 N. Ref.: 121/2022

Area :EconomicArea leader:Jaume Marfà SánchezGroup:ITHead of Group:Jaume Marfà Sánchez

Position: Senior Technician of ICT (Information and Communication Technologies) and Cybersecurity Section

Position description:

IREC is looking for a computer scientist to lead his Information and Communication Technologies (ICT) and Cybersecurity team.

The candidate must have a 360^o global vision of the ICT systems and infrastructure of a research center.

You must have human resources management skills to monitor the evolution of your team on a professional and personal level. You must be able to understand the internal processes of the Center and must propose improvements that increase the internal efficiency of the team, as well as the infrastructure.

The professional must prove experience in the administration of ICT and Cybersecurity systems and infrastructures. Due to the recent increase in computer attacks on public infrastructures, it will be necessary to have experience in the control and management of the Microsoft 365 security platform and the *compliance* section.

Specialization in the field of energy or research will be of added value.

The candidate must have the ability to work in a team, flexibility, and a sense of innovation. You must be a communicative person, with self-initiative and problem-solving skills.

The candidate will report to and report to the Economic and Management Director.

Requirements:

Essential:

- Minimum training in higher level cycle in Telecommunications Systems and Informatics.

- Be in possession of Official Certificates in the technological providers that we have in the center. (must be current) Microsoft SC-900, MS900, Fortinet NSE1, NSE2.

- Creditable experience of at least one year as IT Manager in a public institution or a research and technological development entity.

- Creditable experience in a helpdesk service to support users with service to a minimum of 100 people.

- High experience with physical infrastructure, servers and virtualization, firewalls, switches, NAS, VPN.

- Experience in the management of DC, DNS, DHCP.

- Experience in control and management of backup systems against ransomware.

- Experience in managing and protocolizing computer security policies and computer incidents.

- Creditable experience in supplier management, guarantees, RMAs, material purchases, IT warehouse and

IT inventory management, domain management and web page hosting.

- Very high knowledge in Azure and Microsoft 365 tools
- Knowledge ISO 27001 Standard

- Fluent level in Spanish, Catalan.



Desirable:

- Training in university degree in Telecommunications or Computer Science.

Experience in computer support and consulting and communications to research and technological development groups in relation to their specific needs in their computer infrastructure of their laboratories.
Be in possession of Official Certificates or Diplomas higher than those required in the section (Essential requirements MS-XXX, SC-XXX, AZ-XXX)

- Be in possession of Official ICT Certificates issued by the state police forces.
- Experience in incident resolution with SAP, A3 and Siltra software.
- Experience in using Fortinet Firewall.
- Experience in the use and administration of CMS Wordpress and configuration of backups.
- Extensive knowledge of SEO positioning websites and analysis of visits.
- Fluent in English (B2/C1 minimum)

Personal Skills:

-Self-motivated and open-minded

- -Good communication skills
- -Teamwork
- -Goal-oriented
- -Analytical Capabilities
- -Negotiation skills
- -Leadership and encourage communication in the team

Topics included in the exam:

-Computer Networks -Safety -Operating Systems -Virtualization -Backup Systems -Microsoft 365 -Microsoft Azure -Computer Security, Information Security and Cybersecurity -Public Procurement Law

Proposed Jury

Presidency	Holder	Jaume Marfà Sánchez
Member 1	Holder	Francesc Torregrosa Mora
Member 2	Holder	Ramon Mesalles

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATORIA Y BASES REGULADORAS DEL PROCESO DE SELECCIÓN PARA LA CONTRACTACIÓN DE PERSONAL LABORAL 2022



Publication date: December 28th 2022 Ref. Nb.: 122/2022

Area Manager: Sr. Jaume Marfà Sánchez Group: PRIMA Group Leader:Dra. Ester Coma Bassas

Position: Business Manager Plataforma PRIMA

Description:

IREC is looking for a Business Manager for the design, programming and execution of the business plan and stakeholder management of a platform of pilot plants for validation and demonstration of renewable energy and storage technologies, in the field of decarbonization, sustainable mobility and energy efficiency, within the framework of the energy transition.

The professional will work with the PRIMA Platform team, and will collaborate with the Department of Knowledge and Technology Transfer and the IREC research teams. Therefore, we are looking for a professional who knows the energy sector having worked with a wide range of technologies and applications and at the same time with experience in the field of R + D + i in the participation of renewable energy projects of European and State programs. In particular, in i) vision and identification of expectations of companies in the energy sector, ii) market analysis and study of technological benchmarks, iii) development of business and exploitation models, and dissemination and communication activities, iv) collaborations with technology centers and definition and implementation of proposals and management of major technological projects at European and National level, vi) drafting of preliminary projects and support for the design and definition of PRIMA, and vii) development of initiatives and pilot projects of new technologies and solutions for their introduction to the market or mass deployment.

The professional must be highly qualified and have proven experience in the energy sector and its value chain, and in the promotion and development of R + D + i activities with close collaboration with the industry and technological agents. It requires teamwork skills, flexibility, results orientation, as well as skills in communication, negotiation and problem solving.

Requirements:

- Bachelor's degree in engineering or equivalent. In the case of applicants who do not have Spanish nationality, they must accredit the homologation of the degree required by the Ministry of Education and Vocational Training. In order to present a degree equivalent to that required, a certificate issued by a competent body attesting to its equivalence must be attached. Foreign applicants must be in possession of one of the degrees recognized by the State, in accordance with the provisions of the regulations in force in the matter, which are homologated to the equivalence of the required studies.
- Minimum accredited professional experience of 8 years within the energy sector, in positions of
 responsibility in the fields of technology management or business development. It is necessary to
 demonstrate a long trajectory in projects of the energy sector that allows to demonstrate a wide
 knowledge of technologies and areas of activity of the sector, from the generation to the use through
 the transport and distribution of energy.



- Proven experience in the promotion and implementation of R+D+i projects nationally and internationally. Participation in initiatives and pilots projetcs must be demonstrated or demonstration projects of new technologies and solutions, as well as the implementation of collaborations with industry and technological agents (technology centers, research centers, universities, associations, platform, etc.).
- Proven experience in project financing schemes in the field of aid programs for R+D+i or infrastructure development, both at National and European level. It is necessary to demonstrate contacts and experience in management with organisms and agencies of the Administration such as ACCIÓ, CDTI, IDAE, etc. and public-private collaborations such as JTI, PPP, etc.
- Participation and experience in projects in three or more areas of energy transition and decarbonization such as: hydrogen systems, digitalization and integration of renewable energies, flexibility and energy storage, sustainable buildings and energy rehabilitation, sustainable mobility, bioenergy.
- Persona innovadora con experiencia de trabajo en equipo y en la creación de nuevas soluciones e ideas a partir de dinámicas de grupo.
- Persona con alta capacidad de comunicación y negociación.
- Persona con oriend a objetivos y resultados, con una alta capacidad de auto motivación y flexibilidad en la gestión de las actividades.
- Alto conocimiento de paquete MS Office (Excel, Word y PowerPoint).
- Alto dominio, escrito y hablado, de la lengua catalana, castellana e inglesa.

Preferable:

- MBA or post-graduate studies in business management.
- Participation and experience in sectoral committees and associations that promote public-private collaboration, the development of a normative and regulatory framework, and dissemination and communication activities, both at the international and national levels.
- Professional experience in research or technology centers.
- Professional experience in engineering or consulting in the energy sector.
- Professional experience in training tasks within master's degrees or specialized courses.

Characteristics of the job:

This position may require occasional jobs outside of working hours or a modified schedule to ensure that the needs of the position are met.

The IREC offices are in Barcelona and the headquarters of the PRIMA platform in Gurb (Osona). Regarding the location of the job, the candidate will have their job located in the PRIMA Osona offices, initially in Vic and later in Gurb.

Topics included in the exam:

- Hydrogen systems (fuel cells, electrolyzers, etc.).
- Digitalization of distribution networks (electricity and gas) and integration of renewable energies (wind, solar, hydraulic, geothermal, etc.).
- Energy storage, flexibility and demand aggregation.
- Sustainable buildings, energy rehabilitation and air conditioning systems.
- Electric vehicles and sustainable mobility.



- Bioenergy and renewable gases (biogas, biomethane, etc.).

Jury proposal:

Presidency	Sr. Jaume Marfà Sanchez
Vocal 1	Dr. Albert Tarancon Rubio
Vocal 2	Dra. Belen Fernandez Garcia

Salary:

The salary will be defined based on the salary policy and the IREC Career Plan based on the qualifications and professional experience of the candidate.

Nomination:

Application deadline: In accordance with the terms and conditions of the call for applications. Send application by email to irecjobs@irec.cat indicating the reference "Business Manager PRIMA Platform"

(ref. 122/2022) and including the following information:

- Motivation letter with reasons for the application, relevant experience, qualifications and value proposition related to the vacancy. Clear demonstration of how all the essential criteria are met. Whenever possible, examples should be given of how, when and where the specific experience, knowledge, skills and abilities that they conceive with those necessary for this function have been used.
- Curriculum Vitae with personal, academic and professional data.
- Note: the response to the request must be written in Spanish or Catalan.

This position could be co-financed by the European Union through the European Regional Development Fund (ERDF) or other public funding programmes.

More information about the selection process at:

CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/C



Publish date: December 28th 2022 Ref. : 123/2022 Area: Head of Area: Sr. Jaume Marfà Sánchez Grup: PRIMA Head of Gruo: Dra. Ester Coma Bassas ??

Position: Project Manager Plataforma PRIMA

Description:

IREC is looking for a Project Manager for the design, construction, commissioning and management of a pilot plant platform for the validation and demonstration of renewable energy and storage technologies, in the field of decarbonization, sustainable mobility and energy efficiency, within the framework of the energy transition.

The professional will lead and manage the PRIMA Platform, and will collaborate with the Department of Knowledge and Technology Transfer and the IREC research teams. Therefore, we are looking for a professional who knows the energy sector having worked with a wide range of technologies and applications and at the same time with experience in the field of R+D+i in the design and construction of pilot renewable energy plants. In particular, in i) vision and identification of expectations of companies in the energy sector, ii) market analysis and study of technological benchmarks, iii) definition and drafting of preliminary projects and functional and technical specifications, iv) tendering, contracting and monitoring of architecture and sustainable engineering works v) commissioning, operation and maintenance of pilot plants or equivalent facilities, vi) subsequent direction and management of the PRIMA Platform, and vii) development of initiatives and pilot projects of new technologies and solutions for their introduction to the market or mass deployment.

The professional must be highly qualified and have proven experience in the energy sector and its value chain, in the development of R+D+I activities in close collaboration with industry and technological agents, and in the management of sustainable architecture and engineering projects. It requires initiative and leadership, ability to work in a team, flexibility, orientation to results, as well as skills in communication, negotiation and problem solving.

Requirements:

- Bachelor's degree in architecture or equivalent qualification. In the case of applicants who do not have Spanish nationality, they must prove the homologation of the degree required by the Ministry of Education and Vocational Training. If a qualification equivalent to that required must be presented, a certificate issued by a competent body proving its equivalence must be attached. Foreign applicants must hold one of the qualifications recognised by the State, in accordance with the provisions of current regulations on the matter, which are homologated to the equivalence of the required studies.
- PhD in a field related to energy (renewable energies and energy efficiency).
- Minimum accredited professional experience of 8 years in the energy sector, in positions of responsibility in project management of pilot plants or equivalent industrial facilities. It is necessary to demonstrate a long history in R+D+i projects in the energy sector that allows to demonstrate a wide knowledge of technologies and areas of activity in the sector, from generation to use through transport and distribution of energy.



- Proven experience in the design, coordination, supervision and management of architecture and engineering projects: design of technological platforms including the building, its facilities and its surroundings, definition of functional and technical specifications, management and monitoring of work, commissioning, operation and maintenance. It is necessary to demonstrate participation in initiatives and projects pilot or demonstration of new technologies and solutions, as well as the implementation of collaborations with industry and technological agents (technology centers, research centers, universities).
- Knowledge and experience in the energy sector in three or more areas of energy transition and decarbonisation such as: hydrogen systems, digitization and integration of renewable energies, flexibility and storage of energy, sustainable buildings and energy rehabilitation, sustainable mobility, bioenergy.
- Person with a high capacity for leadership, communication and negotiation.
- Innovative person with experience of teamwork, and in the creation of new solutions and ideas from group dynamics.
- Person with a focus on objectives and results, with a high capacity for self-motivation and flexibility in the management of activities.
- High knowledge of project planning and management tools, CAD tools (Autocad and Sketchup), MS Office package (Excel, Word and PowerPoint), graphic design and image (Photoshop, Illustrator).
- High written and spoken command of Catalan, Spanish and English.

Preferred:

- Post-graduate studies in a field related to sustainability.
- Participation and professional experience in research/industry collaboration projects, programs and services.
- Professional experience in research or technology centres.
- Professional experience in architecture or consulting in the energy sector.
- Professional experience in training tasks within master's degrees or specialized courses.

Characteristics of the workplace: :

This position may require occasional work outside of working hours or a modified schedule to ensure that the needs of the position are met.

The IREC offices are in Barcelona and the headquarters of the PRIMA platform in Gurb (Osona). Regarding the location of the job, the candidate will have his/her job located in the offices of PRIMA Osona, initially in Vic and later in Gurb.

Topics included in the exam:

- Hydrogen systems (fuel cells, electrolysers, etc.).
- Digitization of distribution networks (electricity and gas) and integration of renewable energies (wind, solar, hydraulic, geothermal, etc.).
- Energy storage, flexibility and aggregation of demand.
- Sustainable buildings, energy rehabilitation and air conditioning systems.
- Electric vehicles and sustainable mobility.
- Bioenergy and renewable gases (biogas, biomethane, etc.).



Jury proposal:

Presidency	Holder	Sr. Jaume Marfà Sanchez	
Vocal 1	Holder	Dr. Albert Tarancon Rubio	
Vocal 2	Holder	Dra. Belen Fernandez Garcia	

Salary:

The salary will be defined based on the salary policy and the IREC Career Plan based on the qualifications and professional experience of the candidate.

Submission of the candidacy:

Application deadline: In accordance with the terms and conditions of the call for applications. Send application by email to irecjobs@irec.cat indicating the subject "Project Manager PRIMA Platform" (ref. 123 /2022) and including the following information:

- Letter of motivation with reasons for the application, relevant experience, qualifications and value proposition related to the vacancy. Clearly demonstrate how all essential criteria are met. Whenever possible, you should give examples of how, when, and where you used your specific experience, knowledge, skills, and abilities to match those needed for that particular role.
- Curriculum Vitae with personal, academic and professional data.
- Note: The response to the request must be written in Spanish or Catalan.

This position could be co-financed by the European Union through the European Regional Development Fund (ERDF) or other public funding programs.

More information about the selection process at:

CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/C



Publication Date: N. Ref.: 124/2022

Head of Area: Mr. Jaume Marfà Sánchez Group: PRIMA Group leader: Dra. Ester Coma Bassas

Position: Plant Engineer PRIMA Platform

Description:

IREC is looking for a plant Enginyer for the design, construction, commissioning, operation and maintenance of a pilot plant platform for validation and demonstration of renewable energy and storage technologies, in the field of decarbonization, sustainable mobility and energy efficiency, within the framework of the energy transition.

The professional will work with the PRIMA Platform team and will collaborate with the Department of Knowledge and Technology Transfer and the IREC research teams. Therefore, we are looking for a professional who knows the energy sector having worked with a wide range of technologies and applications and at the same time with experience in the field of energy plants. In particular, in i) drafting of preliminary projects for pilot plants or equivalent installations in the energy sector, ii) definition of functional specifications and techniques for energy equipment and technologies, iii) tendering, contracting and monitoring of construction works for energy plants or equivalent facilities, iv) Coordination and supervision of industrialists during the manufacture and assembly of facilities and equipment, v) commissioning, operation and maintenance of pilot plants or equivalent facilities, vi) subsequent management of the pilot plants, and vii) supporting and responding to the technical requirements of customers and stakeholders.

The professional must be highly qualified and have proven experience in the energy sector, specifically in the design, construction and maintenance of pilot plants or equivalent facilities in the energy sector. Teamwork skills, flexibility, results orientation, as well as skills in supervision of work teams and problem solving are required.

Requitrments:

- Bachelor's degree in engineering or equivalent qualification. In the case of applicants who do not have Spanish nationality, they must prove the homologation of the degree required by the Ministry of Education and Vocational Training. If a qualification equivalent to that required must be presented, a certificate issued by a competent body proving its equivalence must be attached. Foreign applicants must hold one of the qualifications recognised by the State, in accordance with the provisions of current regulations on the matter, which are homologated to the equivalence of the required studies.
- Minimum accredited professional experience of 8 years in the energy sector, in positions of
 responsibility in facility design, maintenance and construction of pilot plant projects or equivalent
 industrial facilities. It is necessary to demonstrate a strong trajectory in projects in the energy sector
 that allows to show a highlevel in the preparation and understanding of technical documents such as
 electrical and mechanical drawings, technical specifications, etc.
- Proven experience in the control and monitoring of construction works of pilot plants or equivalent industrial facilities in the energy sector. It is necessary to demonstrate experience in site visits,



knowledge of building standards, health and safety codes and standards, and comply with all applicable laws and regulatory requirements.

- Proven experience in the assembly of pilot plants or equivalent industrial facilities in the energy sector. It is necessary to demonstrate an atlt level of mechanical aptitude and practical skills for workshop work.
- Persona amb capacitat per treballar de manera flexible, orientada a objectius, innovadora i proactiva.
- Persona amb capacitats analítiques i de resolució de problemes, i també amb capacitat per prioritzar i executar eficaçment tasques en un entorn d'alta pressió.
- Persona amb capacitat de treball en equip, incloent comunicació, participació i expressió de respecte mutu, amb bon historial de treball amb una intensa seguretat.
- Alt coneixement d'eines CAD (Autocad, Inventor, Solidworks, etc.), paquet MS Office (Excel, Word i PowerPoint) i d'eines de programació bàsiques (Matlab i C).
- Alt domini, escrit i parlat, de la llengua catalana, castellana i anglesa.

Preferred:

- Post-graduate studies in project management.
- Professional experience in research or technology centres.
- Professional experience in engineering or consulting in the energy sector.
- Ability to assimilate engineering drawings, P&ID, loop sheets, programming of control and control systems.
- Ability to manage pilot plants (safety, organization, cleaning service, etc.) with minimal supervision.

Characteristics of the workplace:

This position may require occasional work outside of working hours or a modified schedule to ensure that the needs of the position are met.

TheIREC offices are in Barcelona and the headquarters of the PRIMA platform in Gurb (Osona). Regarding the location of the job, the candidate will have his/her job located in the offices of PRIMA Osona, initially in Vic and later in Gurb.

Topics included in the exam:

- Hydrogen systems (fuel cells, electrolysers, etc.).
- Digitization of distribution networks (electricity and gas) and integration of renewable energies (wind, solar, hydraulic, geothermal, etc.).
- Energy storage, flexibility and aggregation of demand.
- Sustainable buildings, energy rehabilitation and air conditioning systems.
- Electric vehicles and sustainable moblility.
- Bioenergy and renewable gases (biogas, biomethane, etc.).

Proposed jury:

President	Holder	Sr. Jaume Marfà Sanchez	
Vocal 1	Holder	Dr. Albert Tarancon Rubio	
Vocal 2	Holder	Dra. Belen Fernandez Garcia	



Salary:

The salary will be defined based on the salary policy and the IREC Career Plan based on the qualifications and professional experience of the candidate.

Submission of candidacy:

Application deadline: In accordance with the terms and conditions of the call for applications.

Send application by email to irecjobs@irec.cat indicating the subject "Plant Engineer PRIMA Platform" (ref. 124/2022) and including the following information:

- 1. Motivation letter with reasons for the application, relevant experience, qualifications and value proposition related to the vacancy. Clearly demonstrate how all essential criteria are met. Whenever possible, you should give examples of how, when, and where you used your specific experience, knowledge, skills, and abilities to match those needed for that particular role.
- 2. Curriculum Vitae with personal, academic and professional data.
- 3. Note: The response to the request must be written in Spanish or Catalan.

This position could be co-financed by the European Union through the European Regional Development Fund (ERDF) or other public funding programs.

More information about the selection process at:

CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/C



Publish Date: December 28th 2022 Ref.: 125/2022

Area:Management and finance areaArea leader:Jaume Marfà SánchezGroup:Unitat de GestióHead of Group:Vanessa Vall Baboim

Position: Junior Project Manager (S1)

Description of the job position

IREC-CERCA is looking for a junior Project Manager to join our Project Management Team. We are seeking for a junior profile with some experience in administrative, financial and legal management of EU funded projects (H2020, HE and other programs). Experience and participation managing any other kind of projects (national calls, private projects and others) will be a plus. Some of the main tasks will be:

- Management of administrative, financial and legal aspects of EU research projects. Administrative and financial monitoring of projects once awarded.
- Support to researchers in project management during the post-award phase.
- Support to senior project managers.
- Tasks of support to senior project managers and head of group for internal implementation of new procedures, internal policies and specific software applications.
- Preparation and presentation of financial reports.
- Participation in project audits.
- Participation and support in the preparation of audits of the center.
- Any other task linked to administrative, financial and/or legal management.

Requirements

Essential:

- University Degree in Science, Engineering, Technology or Economy.
- Some experience (around 1 year) in administrative and financial management of EU funded projects, financial reporting and project audits of research projects.
- Knowledge of the European research framework.
- Good level of English (both written and spoken). Good level of Spanish (both written and spoken).
- Advanced level of the Microsoft Office Tools (Excel, Word, Powerpoint).
- Knowledge and experience in the use of SAP as ERP software.
- Proven experience (at least 1 year) working in research and/or technology centers and/or public universities.

Preferred:

- Participation and management of other kind of projects.
- Experience giving support in the implementation of management tools.
- Knowledge of Catalan and other EU languages.
- Self-motivated, open-minded and team worker. Analytical and synthesis capabilities. Good communication skills.
- Official certificate of disability will be a plus.



Topics included in the exam:

- Project management (basics and concepts). Scope, objectives, lifetime/lifecycles, resources, quality, communications, risks and others.
- EU Rules in research projects. Administrative, financial and legal aspects of EU funded projects.
- H2020 Framework Program and HE Framework Program.
- Management of EU funded research collaborative projects.
- Management of national (Spanish and Catalan calls) projects.
- Use of resources and financial reporting.
- Project audits.
- Accounting and financial concepts.
- Basic concepts about work contracts in research.
- LCSP Public sector contracting law.
- Software tools Excel, Powerpoint, Word.
- Software tools ERP software SAP.

Exam will include questions of described topics. Content and complexity will be adapted to the defined requested profile.

Proposed Jury:

Presidency	Titular	Vanessa Vall Vaboim
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	David Sánchez Pernía

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 126/2022

Area:Management and finance areaArea leader:Jaume Marfà SánchezGroup:Unitat de GestióHead of Group:Vanessa Vall Baboim

Position: Project Manager (S2)

Description of the job position:

IREC-CERCA is looking for a Project Manager to join our Project Management Team. We are seeking for a profile who is familiar with the administrative, financial and legal management of EU funded projects (H2020, HE and other programs) and with proven experience in participation and reporting of EU collaborative projects. Experience in coordination of EU projects and experience in National calls (AEI, CDTI and others) and Catalan (AGAUR, ACCIÓ and others) projects will be a plus. Some of the main tasks will be:

- Management of administrative, financial and legal aspects of EU research projects. Administrative and financial monitoring of projects once awarded.
- Support to researchers in project management during the post-award phase.
- Preparation and presentation of financial reports.
- Participation and participation in project audits.
- Participation and support in the preparation of audits of the center.
- Any other task linked to administrative, financial and/or legal management.

Requirements:

- University Degree in Science, Engineering, Technology or Economy.
- At least 2 years of proven experience in administrative and financial management of EU funded projects, financial reporting and project audits of research projects.
- Knowledge of the European research framework.
- Good level of English (both written and spoken). Good level of Spanish (both written and spoken).
- Advanced level of the Microsoft Office Tools (Excel, Word, Powerpoint).
- Knowledge and experience in the use of SAP as ERP software.
- Proven experience (at least 1 year) working in research and/or technology centers and/or public universities.



Preferred:

- Experience in administrative and financial management of EU coordinated projects. Proven experience in organizing project meetings and participation in project meetings, and project reviews.
- Proven experience in the management of national funded projects.
- Proven knowledge of the Catalan and Spanish research frameworks.
- Knowledge of Catalan and other EU languages.
- Self-motivated, open-minded and team worker. Analytical and synthesis capabilities. Good communication skills.
- Official certificate of disability will be a plus.

Topics included in the exam:

- Project management (basics and concepts). Scope, objectives, lifetime/lifecycles, resources, quality, communications, risks and others.
- EU Rules in research projects. Administrative, financial and legal aspects of EU funded projects.
- H2020 Framework Program, HE Framework Program and any other European program (Interreg-MED, etc).
- Management of EU funded research collaborative projects.
- Management of national (Spanish and Catalan calls) projects.
- Use of resources and financial reporting.
- Project audits.
- IP management. Dissemination and exploitation of results in research projects.
- Data management in research.
- Accounting and financial concepts.
- Basic concepts about work contracts in research.
- LCSP Public sector contracting law.
- Software tools Excel, Powerpoint, Word.
- Software tools ERP software SAP.

Exam will include questions of described topics. Content and complexity will be adapted to the defined requested profile.

Proposed Jury:

Presidency	Titular	Josep M. Herrera
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	David Sánchez Pernía

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 127/2022

Area:Management and finance areaArea leader:Jaume Marfà SánchezGroup:Unitat de GestióHead of Group:Vanessa Vall Baboim

Position: Project Manager (S2)

Description of the job position

IREC-CERCA is looking for a Project Manager to join our Project Management Team. We are seeking for a profile who is familiar with the administrative, financial and legal management of EU funded projects (H2020, HE and other programs) and with proven experience in participation and reporting of EU collaborative projects. Experience in coordination of EU projects and experience in National calls (AEI, CDTI and others) and Catalan (AGAUR, ACCIÓ and others) projects will be a plus. Some of the main tasks will be:

- Management of administrative, financial and legal aspects of EU research projects. Administrative and financial monitoring of projects once awarded.
- Support to researchers in project management during the post-award phase.
- Preparation and presentation of financial reports.
- Participation and participation in project audits.
- Participation and support in the preparation of audits of the center.
- Any other task linked to administrative, financial and/or legal management.

Requirements

Essential:

- University Degree in Science, Engineering, Technology or Economy.
- At least 2 years of proven experience in administrative and financial management of EU funded projects, financial reporting and project audits of research projects.
- Knowledge of the European research framework.
- Good level of English (both written and spoken). Good level of Spanish (both written and spoken).
- Advanced level of the Microsoft Office Tools (Excel, Word, Powerpoint).
- Knowledge and experience in the use of SAP as ERP software.
- Proven experience (at least 1 year) working in research and/or technology centers and/or public universities.

Preferred:

- Experience in administrative and financial management of EU coordinated projects. Proven experience in organizing project meetings and participation in project meetings, and project reviews.
- Proven experience in the management of national funded projects.
- Proven knowledge of the Catalan and Spanish research frameworks.
- Knowledge of Catalan and other EU languages.
- Self-motivated, open-minded and team worker. Analytical and synthesis capabilities. Good communication skills.



• Official certificate of disability will be a plus.

Topics included in the exam:

- Project management (basics and concepts). Scope, objectives, lifetime/lifecycles, resources, quality, communications, risks and others.
- EU Rules in research projects. Administrative, financial and legal aspects of EU funded projects.
- H2020 Framework Program, HE Framework Program and any other European program (Interreg-MED, etc).
- Management of EU funded research collaborative projects.
- Management of national (Spanish and Catalan calls) projects.
- Use of resources and financial reporting.
- Project audits.
- IP management. Dissemination and exploitation of results in research projects.
- Data management in research.
- Accounting and financial concepts.
- Basic concepts about work contracts in research.
- LCSP Public sector contracting law.
- Software tools Excel, Powerpoint, Word.
- Software tools ERP software SAP.

Exam will include questions of described topics. Content and complexity will be adapted to the defined requested profile.

Proposed Jury:

Presidency	Titular	Josep M. Herrera
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	David Sánchez Pernía

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 128/2022

Area:Management and finance areaArea leader:Jaume Marfà SánchezGroup:Unitat de GestióHead of Group:Vanessa Vall Baboim

Position: Project Manager (S2)

Description of the job position

IREC-CERCA is looking for a Project Manager to join our Project Management Team. We are seeking for a profile who is familiar with the administrative, financial and legal management of national (Spanish and Catalan calls from AEI, CDTi, AGAUR, ACCIÓ and others).

Experience in EU funded projects (H2020, HE and other programs) will be a plus. Some of the main tasks will be:

- Support to researchers in project management during the post-award phase.
- Preparation and presentation of financial reports.
- Management of administrative, financial and legal aspects of research projects. Administrative and financial monitoring of projects once awarded.
- Participation in project audits.
- Participation and support in the preparation of audits of the center.
- Any other task linked to administrative, financial and/or legal management.

Requirements

Essential:

- University Degree in Science, Engineering, Technology or Economy.
- At least 2 years of proven experience in administrative and financial management of national funded projects, financial reporting and project audits of research projects.
- Knowledge of the spanish and catalan research framework.
- Good level of Spanish (both written and spoken). Good level of English (both written and spoken).
- Advanced level of the Microsoft Office Tools (Excel, Word, Powerpoint).
- Knowledge and experience in the use of SAP as ERP software.
- Proven experience (at least 1 year) working in research and/or technology centers and/or public universities.

Preferred:

- Experience in administrative and financial management of EU funded projects.
- Knowledge of Catalan and other EU languages.
- Self-motivated, open-minded and team worker. Analytical and synthesis capabilities. Good communication skills.
- Official certificate of disability will be a plus.

Topics included in the exam:



- Project management (basics and concepts). Scope, objectives, lifetime/lifecycles, resources, quality, communications, risks and others.
- Management of national (Spanish and Catalan calls Retos Investigación, Retos Colaboración, PCI, TED, INNOTEC, etc) projects, as well as TECNIO, DOCFAM and other 'Ayudas personal investigador' (Investigo, Ramón y Cajal, FI, etc).
- EU Rules in research projects. Administrative, financial and legal aspects of EU funded projects. H2020 Framework Program, HE Framework Program. Management of EU funded research collaborative projects. Use of resources and financial reporting.
- Project audits.
- Data management in research projects.
- Accounting and financial concepts.
- Basic concepts about work contracts in research.
- LCSP Public sector contracting law.
- Software tools Excel, Powerpoint, Word.
- Software tools ERP software SAP.

Exam will include questions of described topics. Content and complexity will be adapted to the defined requested profile.

Proposed Jury:

Presidency	Titular	Inés Francisco
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	David Sánchez Pernía

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2022/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2022



Publish Date: December 28th 2022 Ref.: 129/2022

Area:Management and finance areaArea leader:Jaume Marfà SánchezGroup:Unitat de GestióHead of Group:Vanessa Vall Baboim

Position: Project Manager (S2)

Description of the job position

IREC-CERCA is looking for a Project Manager to join our Project Management Team. We are seeking for a profile who is familiar with the administrative, financial and legal management of national (Spanish and Catalan calls from AEI, CDTi, AGAUR, ACCIÓ and others).

Experience in EU funded projects (H2020, HE and other programs) will be a plus. Some of the main tasks will be:

- Support to researchers in project management during the post-award phase.
- Preparation and presentation of financial reports.
- Management of administrative, financial and legal aspects of research projects. Administrative and financial monitoring of projects once awarded.
- Participation in project audits.
- Participation and support in the preparation of audits of the center.
- Any other task linked to administrative, financial and/or legal management.

Requirements

Essential:

- University Degree in Science, Engineering, Technology or Economy.
- At least 2 years of proven experience in administrative and financial management of national funded projects, financial reporting and project audits of research projects.
- Knowledge of the spanish and catalan research framework.
- Good level of Spanish (both written and spoken). Good level of English (both written and spoken).
- Advanced level of the Microsoft Office Tools (Excel, Word, Powerpoint).
- Knowledge and experience in the use of SAP as ERP software.
- Proven experience (at least 1 year) working in research and/or technology centers and/or public universities.

Preferred:

- Experience in administrative and financial management of EU funded projects.
- Knowledge of Catalan and other EU languages.
- Self-motivated, open-minded and team worker. Analytical and synthesis capabilities. Good communication skills.
- Official certificate of disability will be a plus.

Topics included in the exam:



- Project management (basics and concepts). Scope, objectives, lifetime/lifecycles, resources, quality, communications, risks and others.
- Management of national (Spanish and Catalan calls Retos Investigación, Retos Colaboración, PCI, TED, INNOTEC, etc) projects, as well as TECNIO, DOCFAM and other 'Ayudas personal investigador' (Investigo, Ramón y Cajal, FI, etc).
- EU Rules in research projects. Administrative, financial and legal aspects of EU funded projects. H2020 Framework Program, HE Framework Program. Management of EU funded research collaborative projects. Use of resources and financial reporting.
- Project audits.
- Data management in research projects.
- Accounting and financial concepts.
- Basic concepts about work contracts in research.
- LCSP Public sector contracting law.
- Software tools Excel, Powerpoint, Word.
- Software tools ERP software SAP.

Exam will include questions of described topics. Content and complexity will be adapted to the defined requested profile.

Proposed Jury:

Presidency	Titular	Inés Francisco
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	David Sánchez Pernía

More information about the selection process in:



Publish Date: December 28th 2022 Ref.: 130/2022

Area:Management and finance areaArea leader:Jaume Marfà SánchezGroup:Unitat de GestióHead of Group:Vanessa Vall Baboim

Position: Senior Project Manager (S3)

Description of the job position

IREC-CERCA is looking for a senior Project Manager to join our Project Management Team. We are seeking for an experienced profile who is familiar with the administrative, financial and legal management of EU funded projects (H2020, HE and other programs) and with proven experience in coordination of EU collaborative projects. Experience in National calls (MICINN, CDTI and others) and catalan (AGAUR, ACCIÓ and others) projects will be a plus. Some of the main tasks will be:

- Support to project coordination of EU research collaborative projects. Complete project monitoring.
- Management of administrative, financial and legal aspects of EU research projects.
- Administrative and financial monitoring of projects once awarded.
- Support to researchers in project management during the post-award phase.
- Preparation and presentation of financial reports.
- Preparation and participation in project audits.
- Participation and support in the preparation of audits of the center.
- Any other task linked to administrative, financial and/or legal management.

Requirements

Essential:

- University Degree in Science, Engineering, Technology or Economy.
- At least 2 years of proven experience in administrative and financial management of EU funded projects, financial reporting and project audits of research projects.
- At least 2 years of proven experience in administrative and financial management of EU coordinated projects. Proven experience in organizing project meetings and participation in project meetings, and project reviews.
- Knowledge of the European research framework.
- Good level of English (both written and spoken). Good level of Spanish (both written and spoken).
- Advanced level of the Microsoft Office Tools (Excel, Word, Powerpoint).
- Knowledge and experience in the use of SAP as ERP software.
- Proven experience (at least 2 years) working in research and/or technology centers and/or public universities.

Preferred:

- Proven experience in the management of national funded projects.
- Proven knowledge of the Catalan and Spanish research frameworks.



- Knowledge of Catalan and other EU languages.
- Self-motivated, open-minded and team worker. Analytical and synthesis capabilities. Good communication skills.
- Certificate of disability will be a plus.

Topics included in the exam:

- Project management (basics and concepts). Scope, objectives, lifetime/lifecycles, resources, quality, communications, risks and others.
- EU Rules in research projects. Administrative, financial and legal aspects of EU funded projects.
- H2020 Framework Program, HE Framework Program and any other European program (Interreg-MED, etc).
- Coordination of EU funded research collaborative projects.
- Management of EU funded research collaborative projects.
- Management of national (Spanish and Catalan calls) projects.
- Use of resources and financial reporting.
- Project audits.
- IP management. Dissemination and exploitation of results in research projects.
- Data management in research.
- Accounting and financial concepts.
- Basic concepts about work contracts in research.
- LCSP Public sector contracting law.
- Software tools Excel, Powerpoint, Word.
- Software tools ERP software SAP.

Exam will include questions of described topics. Content and complexity will be adapted to the defined requested profile.

Proposed Jury:

Presidency	Titular	Josep M. Herrera
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	David Sánchez Pernía

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 131/2022

Area: Economic Area leader: Jaume Marfà Group: Corporate Development and Technology Transfer Head of Group: Marta Fonrodona

Position: S-3.2.A Scientific Communications Officer

Description of the job position

The candidate will be responsible for research results communication and dissemination actions within the IREC's Corporate Development and Knowledge & Technology Transfer team. In particular, tasks will include communication of research results, communication and dissemination of project results, ensuring fulfilling of publicity obligations, as well as promotion of scientific dissemination activities and projects.

This professional must be highly skilled in scientific communication, social networks, organization of dissemination activities, public engagement and must have a deep knowledge of energy related technologies and sector. Capacity to work in a team, flexible, service oriented with initiative and problem-solving skills would be valuable. High level of communication and negotiation skills are mandatory.

Requirements:

Essential:

- University Degree in Science, Engineering or Technology
- Master in Scientific Communication or similar.
- Proven experience in scientific communication in research institutions.
- Proven experience in organization of scientific dissemination activities and projects.
- Knowledge and/or experience on renewable energies, smart grids, energy efficiency and energy sector
- High proficiency in English, Catalan and Spanish
- High proficiency in MS Office tools and edition and design tools (CANVA, etc.)

Preferred:

- PhD in Energy related fields (renewable energy, energy efficiency)
- Proven experience in social media management
- Proven experience in video scripting and editing, preferably in the topics related to energy and energy-related technologies.
- Proven experience in coordination of outreach activities. Experience in coordination with public bodies will be a plus.

Personal skills:

• Autonomy, planning and organization



- Communication and negotiations skills
- Decision-making
- Results-oriented and analytical
- Team worker
- Self-motivated and open-minded

Topics included in the exam:

Scientific communication. Science, society and public engagement. Communication tools and narratives.

Corporate Communication. Communication strategy. Social media management. Creation of multimedia digital content. Web page management. News and press release elaboration.

Promotion of scientific, technological and innovation culture. Calls and opportunities. Proposal preparation. Project management and execution. Public-private collaborations and initiatives.

Communication of research results. Obligations to communicate and disseminate research results. Particularities of European, Spanish and Catalan projects and funding schemes.

Proposed Jury:

Presidency	Titular	Marta Fonrodona
Vocal 1	Titular	José Luis Domínguez
Vocal 2	Titular	Manel Sanmartí

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 132/2022

Area: Econòmica Area leader: Jaume Marfà Group: Corporate Development and Technology Transfer Head of Group: Marta Fonrodona

Position: S-3.3.A Business Developer

Description of the job position

The professional will be responsible for promotion of R&D&i projects and business development within the Corporate Development and Technology Transfer department. In particular, tasks will include promotion of R&D&i competitive projects (national and international), promotion and negotiation of collaborations and contracts with industry, and participation in sectorial associations and platforms.

The professional must be highly skilled and have proven experience in competitive funding schemes and promotion and preparation of competitive proposals. The professional must also have experience in contract negotiation with industry, as well knowledge of the energy industrial sector. Previous experience in participation in clusters and sectorial associations will be valued. Capacity to work in a team, flexible, service oriented with initiative and problem-solving skills would be valuable. High level of communication and negotiation skills are mandatory.

Requirements:

Essential:

- University Degree in Science, Engineering or Technology.
- MBA in business administration, management or similar.
- Proven experience in preparation and management of competitive public funded projects (H2020, HE, AEI, CDTI, ACCIO...)
- Proven experience in negotiation of collaborations and contracts with industry.
- High proficiency in English, Catalan and Spanish.
- High proficiency in MS Office tools and ERP systems (SAP)
- Training courses directly related to the functions of the workplace.

Preferred:

- Knowledge and/or experience on renewable energies, smart grids, energy efficiency and energy sector.
- Experience in BBDD and/or CRM tools.
- Experience in marketing, sales, business Administration or entrepreneurship.
- Participation in clusters or sectorial platforms in the field of Energy.

Personal skills:



- Autonomy, planning and organization
- Communication and negotiations skills
- Decision-making
- Results-oriented and analytical
- Team worker
- Self-motivated and open-minded

Topics included in the exam:

Competitive funding calls for R&D&I projects, at national and European levels. Proposal preparation. Consortia formation. Proposal coordination and budgeting.

Horizon Europe programme. HE proposal preparation. Funding and tenders portal. Budgeting.

National R&D&i funding schemes: AEI, CDTI, ACCIO, AGAUR... Main calls. Characteristics of the funding schemes and impact on research institutions.

Negotiation strategies. Communicating in public. Leadership skills. Market analysis. Commercial processes and technology/services sales. The case of research institutions. Intellectual and industrial property.

Clusters, associations and platforms. Main actors at European, Spanish and Catalan level in the energy sector.

Proposed Jury:

Presidency	Titular	Marta Fonrodona
Vocal 1	Titular	José Luis Domínguez
Vocal 2	Titular	Manel Sanmartí

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 133/2022

Area: Econòmica Area leader: Jaume Marfà Group: Corporate Development and Technology Transfer Head of Group: Marta Fonrodona

Position: S-3.2.B Technology Transfer Officer

Description of the job position

The professional will be responsible for technology transfer and valorization activities within the IREC's Corporate Development and Knowledge & Technology Transfer team. In particular, tasks will include technology transfer activities, technology and exploitable results scouting, valorization, protection and exploitation strategies and follow-up of the institution IP portfolio. Tasks also include support in preparation and execution of technology transfer proposals and projects.

This professional must be highly skilled in technology transfer activities, project preparation and management and must have a deep knowledge of energy related technologies and sector, as well as of valorization strategies and public funding schemes. Capacity to work in a team, flexible, service oriented with initiative and problem-solving skills would be valuable. High level of communication and negotiation skills are mandatory.

Requirements:

Essential:

- University Degree in Science, Engineering or Technology
- PhD in Energy related fields (renewable energy, energy efficiency)
- Proven experience in valorization and technology transfer activities.
- Knowledge and experience in intellectual property, and with IP evaluation and management tools
- Background and proven experience in promotion and management of technology transfer projects.
- Professional experience at industry and research centers
- High proficiency in English, Catalan and Spanish. Knowledge of additional languages will be valued.
- Training courses directly related to the functions of the workplace.



Preferred:

- Knowledge and/or experience on renewable energies, smart grids, energy efficiency and energy sector
- Knowledge and/or experience in strategy, marketing, negotiation with stakeholders
- Proven experience in defining technology transfer programs and strategies.
- Proven experience in broad technology transfer initiatives (networks, ecosystems), preferibly in its management and coordination.

Personal skills:

- Autonomy, planning and organization
- Communication and negotiations skills
- Decision-making
- Results-oriented and analytical
- Team worker
- Self-motivated and open-minded

Topics included in the exam:

Law 14/2011 of Science, Technology and Innovation.

Knowledge and Technology Transfer. Intangible assets valuation. Contracts and licenses.

Industrial and intellectual property. IP protection. IP commercialization. Contracts and licenses. Software and IP.

Technology transfer funding competitive calls (national and European framework). Proposal preparation and project management. Non-disclosure agreements and collaboration/consortium agreements.

Proposed Jury:

Presidency	Titular	Marta Fonrodona
Vocal 1	Titular	Cristina Corchero
Vocal 2	Titular	Manel Sanmartí

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 134/2022

Area: Econòmica Area leader: Jaume Marfà Group: Corporate Development and Technology Transfer Head of Group: Marta Fonrodona

Position: S-4.2 Knowledge and Technology Transfer Manager

Description of the job position

The professional will lead and coordinate the technology transfer, valorization and business intelligence activities within the Corporate Development and Technology Transfer area, and they will supervise the promotion activities within de department. In particular, tasks will include:

- Knowledge and technology transfer, valorization and exploitation: coordination of the technology transfer activities, technology scouting and definition of valorization strategies, negotiation and management of agreements and technology transfer contracts.
- Management of IREC's IP portfolio.
- Business Intelligence: institutional KPIs, reporting, DDBBs, open data, etc.
- Promotion activities coordination, follow up of competitive funding programs and schemes and relationship with industry. Preparation and support to valorization and technology transfer proposals and projects. Leading of transversal technology transfer projects and initiatives.
- Representation of IREC in clusters, platforms and associations.

This professional must be highly skilled in KTT activities, project management and preparation, business intelligence activities and must have a deep knowledge of energy related technologies and sector, including related competitive funding programs and valorization strategies. Capacity to work in a team, flexible, service oriented with initiative and problem-solving skills would be valuable. High level of communication and negotiation skills are mandatory.

Requirements:

Essential:

- University Degree in Science, Engineering or Technology
- PhD in Energy related fields (renewable energy, energy efficiency)
- Proven experience in technology transfer activities (minimum 3 years)
- Proven experience in business intelligence and institutional KPIs
- Proven experience in industrial and intelectual property, and of IP evaluation and management tools.
- Experience in competitive funding schemes and promotion, at European, Spanish and Catalan levels. Proven experience in promotion of valorization and technology transfer projects.
- Proven experience in research-industry collaborations and agreements, especially in technology transfer programs and activities.



Shaping Energy for a Sustainable Future

- Professional experience in industru (mínimum 5 years) and in research institutions (mínimum 5 years).
- Participation in clusters, platforms or sectorial associations.
- High proficiency in English, Catalan and Spanish. Knowledge of additional languages will be valued.
- Training courses directly related to the functions of the workplace.
- Experience in people and budget management.

Preferred:

- Knowledge and/or experience on renewable energies, smart grids, energy efficiency and energy sector.
- Knowledge and/or experience in strategy, marketing, negotiation, agreements and relationship with stakeholders.
- Experience as board member in clusters, platforms or sectorial associations.
- Knowledge of open science, open access and FAIR principles.
- Proven experience in research Project management, especially in European projects.
- Experience as principal investigator.
- Project Management certification (PMI o equivalent)
- High proficiency in MS Office tools and ERP tools (SAP)

Personal skills:

- Autonomy, planning and organization
- Communication and negotiations skills
- Decision-making
- Results-oriented and analytical
- Team worker
- Self-motivated and open-minded

Topics included in the exam:

Law 14/2011 of Science, Technology and Innovation.

Knowledge and Technology Transfer. Intangible asset vaulation. Spin-off creation. Contracts and licenses.

Industrial and intellectual property. IP protection. IP commercialization. Contracts and licenses. Software and IP.



Technology transfer funding competitive calls (national and European framework). Proposal preparation and project management. Non-disclosure agreements and collaboration/consortium agreements.

Research Data Management. Open Science and Open Access. FAIR principles. UNEIX system and Portal de la Recerca de Catalunya.

Proposed Jury:

Presidency	Titular	Jaume Marfà
Vocal 1	Titular	Cristina Corchero
Vocal 2	Titular	Manel Sanmartí

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 135/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Energy Systems AnalyticsHead Group:Cristina Corchero García

Position: R1 - Energy Systems Analytics Project Engineer

Description of the job position

Energy Systems Analytics Research Group announces a position as Junior Researcher (R1). The candidate will work on research projects in the framework of energy systems analytics. The candidate will work in the fields of vehicle-to-grid integration, optimal energy management, demand-response management, flexible buildings, energy efficiency and smart grids. This professional must be highly skilled in energy analytics and management tools. Capacity to work in a team, flexible, innovative, with initiative and problem solving skills would be valuable. High level of analytical and synthesis skills would be beneficial.

Requirements

Essential:

- Master in energy engineering, industrial engineering, electrical engineering, or equivalent with knowledge and experience in energy analytics.

Or

- Master in Statistics and Operations Research, Applied Mathematics, Mathematical Engineering or similar with knowledge on energy sector.
- o 2nd life batteries
- o Data science
- o Optimization and modelling

Preferred:

- Knowledge or proven skills for the following:

- o Energy sector and systems
- o Battery applications
- o 2nd life batteries
- o Renewable energy sources
- o Electric vehicle
- o Analytics

Topics included in the exam:

- Energy Markets
- Data science
- Optimization and modelling

Assessable merits:

- Years of experience in a public research institute similar to IREC
- Required MSc



- Participation in competitive projects
- Experience in energy analytics

Proposed Jury:

Presidency	Titular	Cristina Corchero
Vocal 1	Titular	Jose Luis Dominguez
Vocal 2	Titular	Lluc Canals (UPC)

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 136/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Energy Systems AnalyticsHead Group:Cristina Corchero García

Position: R2 - Energy Management Systems Senior Engineer

Description of the job position

Energy Systems Analytics Group announces a position as senior energy management systems (EMS) engineer. The tasks to be carried out will be mainly focused to project management, technology development and implementation of energy management systems at laboratory and demonstration field level, coordination of project engineers team and reporting to team leader. These activities require knowledge of design and implementation of energy management systems, automation, controls and communication systems. Knowledge of renewables, energy storage, electric mobility and grid integration is advantageous.

This professional must be highly skilled in industrial applications and research projects with specific focus on energy management systems and, in particular, to experimental deployment of EMS systems. Capacity to work in a team, flexible, innovative, with initiative and problem solving skills. High level of

analytical and synthesis skills. The professional must also has experience on project management and technical team coordination.

Requirements

Essential:

MSc in controls and automation, electrical engineering or similar. Knowledge and experience in design and implementation of energy management systems, automation systems, communications and SCADA systems. Experience in design and operation of microgrids and smart grids components and systems for their applications with renewable energy, energy storage systems, electric mobility and grid integration. Experience on industrial and competitive project management and technical team coordination.

Preferred:

Experience in industrial SCADA platforms and systems. Experience in the energy sector: wind energy, renewable energy sources and, in particular, in control and design of electrical systems within these fields of activity. Experience in international research collaborative projects and the execution of third party projects is desired.

Proven experience in industry will be an advantage.



Topics included in the exam:

- Microgrids
- Energy Management Systems
- Optimization and modelling

Assessable merits:

- Years of experience in a public research institute similar to IREC
- Required MSc
- Participation in competitive projects
- Experience in EMS programming

Proposed Jury:

Presidency	Titular	Cristina Corchero
Vocal 1	Titular	Jose Luis Dominguez
Vocal 2	Titular	Lluc Canals (UPC)

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 137/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Energy Systems AnalyticsHead Group:Cristina Corchero García

Position: R2 - Energy Management Systems Senior Engineer

Description of the job position

Energy Systems Analytics Group announces a position as senior energy management systems (EMS) engineer. The tasks to be carried out will be mainly focused to project management, technology development and implementation of energy management systems at laboratory and demonstration field level, coordination of project engineers team and reporting to team leader. These activities require knowledge of design and implementation of energy management systems, automation, controls and communication systems. Knowledge of renewables, energy storage, electric mobility and grid integration is advantageous.

This professional must be highly skilled in industrial applications and research projects with specific focus on energy management systems and, in particular, to experimental deployment of EMS systems. Capacity to work in a team, flexible, innovative, with initiative and problem solving skills. High level of analytical and synthesis skills. The professional must also has experience on project management and technical team coordination.

Requirements

Essential:

MSc in controls and automation, electrical engineering or similar. Knowledge and experience in design and implementation of energy management systems, automation systems, communications and SCADA systems. Experience in design and operation of microgrids and smart grids components and systems for their applications with renewable energy, energy storage systems, electric mobility and grid integration. Experience on industrial and competitive project management and technical team coordination.

Preferred:

Experience in industrial SCADA platforms and systems. Experience in the energy sector: wind energy, renewable energy sources and, in particular, in control and design of electrical systems within these fields of activity. Experience in international research collaborative projects and the execution of third party projects is desired.

Proven experience in industry will be an advantage.

Topics included in the exam:

- Microgrids
- Energy Management Systems
- Optimization and modelling



Assessable merits:

- Years of experience in a public research institute similar to IREC
- Required MSc
- Participation in competitive projects
- Experience in EMS programming

Proposed Jury:

Presidency	Titular	Cristina Corchero
Vocal 1	Titular	Jose Luis Dominguez
Vocal 2	Titular	Lluc Canals (UPC)

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 138/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Energy Systems AnalyticsHead Group:Cristina Corchero García

Position: R2 - Senior Engineer on Energy Systems Integration

Description of the job position

Energy Systems Analytics Group announces a position as Post-Doc on Energy Systems Integration having a strong perspective and compromise on circular economy. The candidate will work on technical research projects in the fields of optimal energy management, energy efficiency, smart grids and sustainable vehicles.

This professional must be highly skilled in research projects including experimental simulation and validation. Capacity to work in a team, flexible, innovative, with initiative and problem solving skills. High level of analytical and synthesis skills.

The professional is expected to lead research projects (competitive and industrial) in the field of energy systems integration with special focus on storage systems and renewable generation. Publication of high-level articles required.

Requirements

Essential:

- PhD in energy systems, electrical power engineering, industrial engineering or similar.

Skills are required for the following:

- Experience in energy systems integration, specifically storage systems, renewable energy and demand response.
- Experience in international research collaborative projects and the execution of third party projects.
- JCR Journal publications.

Preferred:

- Knowledge or proven skills for the following:

- o Energy sector and systems
- o Energy markets
- o Renewable energy sources
- o Electric vehicle
- o Analytics

Topics included in the exam:

- Energy Systems integration
- Data science



- Optimization and modelling

Assessable merits:

- Years of experience in a public research institute similar to IREC
- Required PhD
- Participation in competitive projects
- Experience in energy analytics

Proposed Jury:

Presidency	Titular	Cristina Corchero
Vocal 1	Titular	Jose Luis Dominguez
Vocal 2	Titular	Lluc Canals (UPC)

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 139/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Energy Systems AnalyticsHead Group:Cristina Corchero García

Position: R2 – Senior Engineer in Energy Systems Integration

Description of the job position

Energy Systems Analytics Group announces a position as Senior Engineer on Energy Systems Integration. The candidate will work on technical research projects in the fields of optimal energy management, energy efficiency, smart grids and sustainable vehicles.

This professional must be highly skilled in research projects including experimental simulation and validation. Capacity to work in a team, flexible, innovative, with initiative and problem solving skills. High level of analytical and synthesis skills.

The professional is expected to lead research projects (competitive and industrial) in the field of energy systems integration with special focus on storage systems and renewable generation. Publication of high-level articles required.

Requirements

Essential:

- MSc in energy systems, electrical power engineering, industrial engineering or similar.

Skills are required for the following:

- Experience in energy systems integration, specifically storage systems, renewable energy and demand response.
- Experience in international research collaborative projects and the execution of third party projects.
- JCR Journal publications.

Preferred:

- Knowledge or proven skills for the following:

- o Energy sector and systems
- o Energy markets
- o Renewable energy sources
- o Electric vehicle
- o Analytics
- Topics included in the exam:
 - Energy Systems integration
 - Data science
 - Optimization and modelling
 - -



Assessable merits:

- Years of experience in a public research institute similar to IREC
- Required PhD
- Participation in competitive projects
- Experience in energy analytics

Proposed Jury:

Presidency	Titular	Cristina Corchero
Vocal 1	Titular	Jose Luis Dominguez
Vocal 2	Titular	Lluc Canals (UPC)

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 140/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Energy Systems AnalyticsHead Group:Cristina Corchero García

Position: R2 - Post-doc researcher for LCA and LCC for energy technologies

Description of the job position

The Energy Systems Analytics Research Group is seeking for a post-doc in the field of Life Cycle Assessment and economic assessment for energy technologies.

Its main tasks will be leading European project tasks focused on the LCA analysis of different energy technologies such as battery systems, renewable energies and advanced materials for energy.

This candidate must have high education qualifications and more than five years of experience in life cycle assessment (LCA), economic assessment (LCC), advanced and proven knowledge in LCA software (GaBi and Ecoinvent database), applied to the energy sector, energy storage systems for electric vehicles, renewable energies and advanced materials for energy . Capability to work in a team, flexible, innovative, with initiative and problem solving skills. High level of analytical and synthesis skills.

It will be also recommended experience on European project participation and task coordination as well as in project proposal preparation.

The candidate is expected to provide engineering support for the energy economics aspects of IREC projects integrated as part of the Energy Efficiency in Systems and Communities Research Area.

Requirements

Essential:

- Hold a PhD in the areas of Industrial Engineering, Electrical Engineering, Energy Engineering, Civil Engineering or Environmental Sciences related with LCA or LCC techniques.
- LCA experience in the field of renewable energy systems, preferable energy storage systems and fuel cells.
- Knowledge in LCA software (GaBi) and databases.

Preferred:

- Knowledge and experience in projects in the energy sector, especially in renewable energies, advance materials for energy, energy storage systems.
- Knowledge of financial aspects related to energy projects.
- Good communication skills; ability to communicate complex scientific information to individuals from other disciplines.
- Experience in European collaborative projects.
- LCA or LCC related scientific publications.

Topics included in the exam:

- LCA
- GaBi databases



Assessable merits:

- Years of experience in a public research institute similar to IREC
- Required PhD
- Participation in competitive projects
- Experience in LCA with GaBi

Proposed Jury:

Presidency	Titular	Victor Ferreira
Vocal 1	Titular	Jose Luis Dominguez
Vocal 2	Titular	Beatriz Amante (UPC)

Moreinformationabouttheselectionprocessin:CALLANDREGULATORYBASESOFTHESELECTIONPROCESSBYCOMPETITIONFORTHERECRUITMENT OF LABOR PERSONNEL2022/CONVOCATÒRIA IBASESREGULADORESDELPROCÉSDE SELECCIÓPER A LA CONTRACTACIÓ DE PERSONALLABORAL2022



Publish Date: December 28th 2022 N. Ref.: 141/2022

Area :	Energy Efficiency in Systems, Buildings and Communities
Group:	Energy Systems Analytics
Head Group:	Cristina Corchero García

Position: Experienced researcher in Energy Systems Analytics (R3)

Description of the job position:

Energy Systems Analytics Group announces a position for an experienced researcher in the energy systems area with good knowledge in the topics of energy systems integration, electricity markets, electrical grids and mathematical optimization towards sustainable energy systems. The ideal candidate shall demonstrate a significant track record of publications in top scientific journals and of competitive funding projects acquired.

The selected applicant will be asked to conduct research, development and innovation by defining, acquiring and managing one or several competitive and industrial research projects in these topics. The candidate shall be the principal investigator for some research projects.

This professional must be highly skilled in research projects including experimental simulation and validation. Capacity to lead and work in a team, flexible, innovative, with initiative and problem solving skills. High level of analytical and synthesis skills.

The professional is expected to

- Define, obtain and manage competitive (HE or similar) and industrial (private) research projects in the field of energy systems integration.
- Lead a team of researchers.
- Promote the transfer of research results to public and private partners.
- Publish in JCR indexed journals.
- Write/review technical reports when required.
- Make presentations at international workshops and conferences.
- Participate in international research forums.
- Actively contribute to the development of scientific and technological cooperation networks at national and international level.

Requirements

Essential:

- PhD in energy systems, electrical power engineering, industrial engineering, applied mathematics or operations research.
- More than 5 years of post-doc research experience.
- Skills are required for the following:
 - Experience in energy systems integration.
 - Machine learning algorithms including application to renewable energy sources and consumption patterns forecasting
 - Electricity markets with focus on distribution system.
 - Experience in international research collaborative projects and the execution of third party projects.
 - o Experience in international research projects proposals writing.



- Track of top JCR Journal publications.
- Experience in research team management.

Language required:

- Fluent in English.
- Spanish or Catalan is an asset.

Topics included in the exam:

- Energy Markets
- Data science
- Optimization and modelling

Assessable merits:

- Years of experience in a public research institute similar to IREC
- Required PhD
- Leadership on competitive projects
- Experience in energy analytics and energy markets

Proposed Jury:

Presidency	Titular	Cristina Corchero
Vocal 1	Titular	Jose Luis Dominguez
Vocal 2	Titular	Lluc Canals (UPC)

More information about the selection process in:



Publish Date: December 28th 2022 Ref.: 142/2022

Àrea:Eficiència Energètica en Sistemes, Edicifis i ComunitatsGrup:Power SystemsCap de Grup:Jose Luis Domínguez García

Position: R1 Researcher in the field of Power Electronics

Description of the job position

The Power Systems Group announces the opening of a permanent position as Researcher to work on different technical research projects in the fields of power electronics. The tasks to be carried out will be focused to design, model, experimental development of innovative Power Converters

The professional is expected to actively participate in the IREC Energy SmartLab Team.

Requirements

Essential:

- Bachelor in Industrial Electronics and Automatic Control, Electronics, Telecommunication, electrical engineering or similar.
- Experience in electronics modeling and simulation software
- Hands-on experience with power electronics is a must
- Knowledge on Matlab and Altium.

Preferred:

- Master in Industrial Electronics and Automatic Control, Electronics, Telecommunication, electrical engineering or similar (or ongoing)
- Experience in research projects
- Knowledge of Real-Time simulators
 - Research publications
- Experience with control boards design and programming
- Knowledge regarding industrial electronic systems
- Knowledge on Matlab and Altium.
- Knowledge on PCB design
 - -

Language required:

Fluent in Spanish, Catalan and English.

Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility
- Results-oriented
- Analytical and synthesis capabilities

Topics included in the exam:

Power converter topology, RT-simulator, Power converter control, H&S rules on lab, PCB board design.



Proposed Jury:

Presidency	Titular	Jose Luis Domínguez García
Vocal 1	Titular	Cristina Corchero
Vocal 2	Titular	Francisco Diaz

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 143/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Power SystemsHead of Group:Jose Luis Domínguez García

Position: R1 Researcher in the field of SmartGrid Automation, monitoring and control

Description of the job position

Power Systems group announces a permanent position as SmartGrid Automation reseracher. The candidate will work on technical research projects in the fields of microgrids, smart grids and renewable energy integration at the Power Systems Group of IREC. The tasks to be carried out will include both simulation and experimental activity within the IREC's Energy SmartLab.

These activities require knowledge and high interests on smart grids, renewables, energy storage, electric mobility and grid integration. Knowledge on design and implementation of automation and controls systems, communications, micro grids components, electrical equipment and power systems may be beneficial. The position requires a candidate with high interest and capacity to work on laboratory experimental facilities. The professional is expected to actively participate in current and new research projects (competitive and industrial) within the group **Requirements**

Essential:

- Master and Bachelor in Industrial Electronics and Automatic Control, Electronics, Telecommunication, electrical engineering or similar.
 - Skills on several of the following fields are required:
 - o Energy sector and electrical networks
 - Renewable energy sources
 - Modelling and analytics
 - Experience with communications and automation systems (e.g. Modbus, MQTT, or others).
 - Experience with control boards (e.g. Raspberry pi, or others)
 - Experience with industrial/laboratory SCADA systems.

Preferred:

- The knowledge and experience with software as Matlab, DigSilent PowerFactory or PSSE is a surplus.
- Software architecture design.
- Hands-on experience with laboratory equipment
- Experience with Data Bases, GIT, Docker and others.
- Knowledge on Software as a Service
- Experience with Real-Time Simulators (i.e. OPAL-RT or TYPHOON-HIL)

Language required:

Fluent in Spanish, Catalan and English.

Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility



- Results-oriented
- Analytical and synthesis capabilities

Topics included in the exam:

SDN systems, communication systems, grid modelling, electrical power flow, lab-testing development.

Proposed Jury:

Presidency	Titular	Jose Luis Domínguez García
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	Francisco Diaz

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 144/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Power SystemsHead of Group:Jose Luis Domínguez García

Position: IREC Energy SmartLab Assistant Lab technician

Description of the job position

The Electrical Engineering Department (Power systems and Energy System Analytics groups) announces a position Laboratory technician for the IREC Smart Grid laboratory (IREC Energy SmartLab). The candidate will be involved in the Laboratory team and will be responsible of the installation of equipment, reparations, test preparations, among other activities directly related to the lab needs.

These activities require knowledge in electrical installations, automation equipment, communications and control systems. In addition, motivation and high interests on smart grids, renewables, energy storage, electric mobility and grid integration. The professional is expected to actively participate in current and new research projects (competitive and industrial) within the group.

Requirements

Essential:

- Electrical or Electronics technician certificate.
- Experience on Electrical Laboratories; and hands-on work
- Experience on Research Institutions and/or Academia.
- knowledge and experience with software as SKETCH-UP; and MS Office tools

Preferred:

- Bachelor or Master in electrical or electronics engineering
 - Skills on several of the following fields are desired:
 - Electrical equipment
 - Communications and Automation
 - Control Board programming
 - Converter assembly/reparation experience

Language required:

Fluent in Spanish, Catalan and English.

Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility
- Results-oriented
- Analytical and synthesis capabilities

Topics included in the exam:

Electrical schemes revision, H&S rules in electrical lab, consumables management, demonstrator design.



Proposed Jury:

Presidency	Titular	Jose Luis Domínguez García
Vocal 1	Titular	Cristina Corchero
Vocal 2	Titular	Francisco Diaz

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 145/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Power SystemsHead of Group:Jose Luis Domínguez García

Position: Senior Engineer (R2) in the Computer Science for SmartGrids

Description of the job position

The Power Systems Group announces the opening of a permanent position as Senior Engineer (R2) to work on different technical research projects in the fields of Data Management, Communications and Cybersecurity of Smart Grids. The tasks to be carried out will be focused to development and programming of tools to increase smart grid intelligence. Additionally, experimental activities and set ups within IREC's lab facilities are expected.

Requirements

Essential:

- Bachelor or Master in computer Science, industrial engineering, Telecos engineering or other related degrees.
- Interest on energy and smart grid related issues
- Knowledge and experience with the following software:
 - o Docker
 - o Python, Java
 - DataBases
 - o GIT
 - \circ other

Preferred:

- Experience in collaborative and international projects
- Experience/knowledge in cybersecurity

Language required:

- Good communications skills in English are mandatory.
- Knowledge of Spanish and/or Catalan will be beneficial.

Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility
- Results-oriented
- Analytical and synthesis capabilities



Topics included in the exam:

Cloud-based platforms, webpage development, SDN systems, Docker; self-healing, online sharing platforms, grid security.

Proposed Jury:

Presidency	Titular	Jose Luis Domínguez García
Vocal 1	Titular	Cristina Corchero
Vocal 2	Titular	Francisco Diaz

More information about the selection process in:



Publish Date: 146/2022 N. Ref.: December 28th 2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Power SystemsHead of Group:Jose Luis Domínguez García

Position: R2 Recognised Researcher in the field of Power Electronics

Description of the job position

The Power Systems Group announces the opening of a permanent position as Recognised Researcher to participate and lead technical research projects in the fields of Power Electronics. The tasks to be carried out will be focused on the conception of novel Power Converter topologies, modulations, and control strategies, including multilevel and multiport converter topologies. The Researcher must perform additionally the design, implementation, and experimental verification of power converter setups at IREC's lab facilities.

The Researcher is expected to actively participate in the IREC Energy SmartLab Team, contribute to or lead European and national project proposals, produce technical documentation and research articles based on the research project activities and results, and lead MSc and PhD thesis works.

Requirements

Essential:

- PhD or more than 5 years of experience in research related to Power Electronics.
- Experience in electronics modeling and simulation software.
- Experience in design, implementation, and operation of power converters.
- Experience with control boards design and programming.
- Knowledge regarding industrial electronic systems.
- Hands-on experience with power electronics is a must.
- Relevant publication track-record on the field.

Preferred:

- Experience in competitive project proposal preparation.
- Experience in project management as PI.
- Proven experience in supervision and team management.
- Experience in programming.
- Experience with communications and automation systems.

Language required: Fluent in Spanish, Catalan and English.

Personal Skills:

- Team Worker
- Initiative in Research and Innovation



- Flexibility
- Results-oriented
- Analytical and synthesis capabilities

Topics included in the exam:

Power converter concepts, power converter modulation, wide band gap technologies, fault-tolerant converters, multilevel converter, multiport converters, DC/DC.

Proposed Jury:

Presidency	Titular	Jose Luis Domínguez García
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	Francisco Diaz

More information about the selection process in:



Publish Date: December 28th 2022 Ref.: 147/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Power SystemsHead of Group:Jose Luis Domínguez García

Position: R2 Recognised Researcher in the field of Floating Wind

Description of the job position:

The Power Systems Group announces the opening of a permanent position as Recognised Researcher to work on different technical research projects in the fields of floating wind. The tasks to be carried out will be focused to the design, development and implementation of floating wind research projects, including the analysis of cost, environmental impact, advanced control, digital twin. Additionally, experimental activities with micro grids including design and implementation of experimental set ups with IREC's micro grid are expected.

Requirements:

Essential:

- Master and Bachelor in relevant engineering for floating wind.
- More than 3 years as researcher in a research institute.
- Experience in research industrial and competitive projects.
- Demonstrable responsibility on European project tasks as well as industrial contract.
- Experience in cost and environmental evaluation of floating wind.
- Experience in floating wind optimization.
- Knowledge of moorings, anchors and dynamic cables.
- Relevant publications in the field of floating wind.
- Knowledge and experience on simulation tools for floating wind.

Preferred:

- Supervision and training of people, researchers
- Experience on GIS-based tools
- Experience on Databases
- Experience on project management
- Proven IP on the field.
- -

Language required:

Fluent in Spanish, Catalan and English.

Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility
- Results-oriented
- Analytical and synthesis capabilities



Floating wind components, Floating wind technologies, Cost evaluation, system constraints, technology limitations, Power Flow, system lossess, wake effect.

Proposed Jury:

Presidency	Titular	Jose Luis Domínguez García
Vocal 1	Titular	Marta Fonrodona
Vocal 2	Titular	Francisco Diaz

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 148/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Power SystemsHead of Group:Jose Luis Domínguez García

Position: R2 Recognised Researcher in the field of ElectricalGrid Security, operation and estimation

Description of the job position:

The Power Systems Group announces the opening of a permanent position as Recognised Researcher to work on different technical research projects in the fields of security, resilience, operation and monitoring of smart grids with large penetration of power electronics, renewable energy, energy storage and EVs. The tasks to be carried out will be focused to the design, development and implementation of advanced control, optimization and monitoring for grid integration of renewable energies including modelling and testing. Additionally, experimental activities with micro grids including design and implementation of experimental set ups with IREC's micro grid are expected.

Requirements:

Essential:

- Bachelor or Master in electrical engineering, industrial engineering, or energy engineering.
- More than 4 years in a research institute.
- Experience in research industrial and competitive projects.
- Demonstrable responsibility on European project tasks as well as industrial contract.
- Responsibility and PI of research collaborative projects
- Skills on several of the following fields are required:
 - Energy sector and electrical networks
 - Renewable energy sources
 - Modelling and analytics
 - Digsilent Power Factory, Matlab or PSSE
- Knowledge and experience on state estimation techniques
- Experience on mitigation techniques for the grid.

Preferred:

- PMU-WAMS optimization
- PhD in related field
- Experience in project management

Language required:

Fluent in Spanish, Catalan and English.

Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility
- Results-oriented



- Analytical and synthesis capabilities
- Good people treatment.
- Capacity to work under stressful situations.

State Estimation, grid congestion management, optimal power flow, PMU optimal location, RES-markets, EV penetration.

Proposed Jury:

Presidency	Titular	Jose Luis Domínguez García
Vocal 1	Titular	Cristina Corchero
Vocal 2	Titular	Francisco Diaz

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 149/2022

Area :Energy Efficiency in Systems, Buildings and CommunitiesGroup:Power SystemsHead of Group:Jose Luis Domínguez García

Position: R3 Established Researcher in the field of Energy Storage integration, management and control

Description of the job position:

The Power Systems Group announces the opening of a permanent position as Established Researcher to work on different technical research projects in the fields of energy storage, including integration and design of electronics, boards, power electronics and control for microgrids and smart grids. The tasks to be carried out will be focused to the design, development and implementation of energy storage technologies, power electronics including its control and communication boards for laboratory and research projects, as well as advanced control for grid integration of renewable energies. Additionally, experimental activities with micro grids including design and implementation of experimental set ups with IREC's micro grid are expected.

The professional is expected to actively participate in the IREC Energy SmartLab Team.

Requirements:

Essential:

- PhD in Electrical Engineer
- Master and Bachelor in Industrial Electronics and Automatic Control, Electronics, Telecommunication, electrical engineering or similar.
- More than 8 years as PostDoc in a research institute.
- Experience in research industrial and competitive projects.
- Demonstrable responsibility on European project tasks as well as industrial contract.
- Responsibility and PI of research collaborative projects
- Proven experience and success of Competitive project proposal preparation and funding attraction
- Experience in power converter reparation.
- Experience in real field work and installations.
- Relevant publications in the field of renewable energy and grid integration.
- Knowledge and experience on energy storage technologies including management (BMS) and integration.

Preferred:

Supervision and training of people, researchers..

Language required: Fluent in Spanish, Catalan and English.

Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility



- Results-oriented
- Analytical and synthesis capabilities

Energy Storage, Grid Codes, Grid integration control, RES, management systems, proposal preparation, competitive calls.

Proposed Jury:

Presidency	Titular	Jose Luis Domínguez García
Vocal 1	Titular	Cristina Corchero
Vocal 2	Titular	Francisco Diaz

More information about the selection process in:



Publish Date: December 28th 2022 Ref.: 150/2022

Area:Advanced Materials and Systems for EnergyArea leader:Joan Ramon MoranteGroup:Functional NanomaterialsHead of Group:Andreu Cabot

Position: Laboratory Technician

Description of the job position

Job functions:

- Laboratory maintenance and control of consumables and equipment.
- Support the right performance of security systems, and Health and Safety.
- Support managing gas systems, cryogenics, and deionized water system.
- To support and participate in the technical coordination committee of the area made by laboratory technicians.
- Maintenance and calibration of main equipment
- Implementation of new setups, prototypes, and equipment. Give technical support to the experimental setups, especially for new researchers.
- Assistance and managing internal and external users of laboratory infrastructure. Functional testing and results reporting.

Requirements

The candidate must have:

- 1. Background in Chemistry, Physics, Material Science, or equivalent.
- 2. Experience in managing research laboratories and their services (gas, deionized water, cryogenics, resource management and storage of chemicals, waste management,...)
- 3. Experience in risk prevention and safety management in a research laboratory ambient
- 4. Experience in the organization of research laboratory resources.
- 5. Experience in the use of fundamental material synthesis and characterization tools such as gloveboxes, fume hoods, electron microscopy, and x-ray diffraction.

The following points will be taken into account in the evaluation:

- 1. Theoretical and practical knowledge of chemical and structural characterization techniques
- 2. English level
- 3. Experience in the field of energy storage
- 4. Experience in the synthesis of nanomaterials
- 5. Computer programming skills
- 6. Knowledge in the fields of chemical, electronics, mechanical, and fluid engineering
- 7. Ability to design and implement new experimental setups.

Topics included in the exam:

- 1. Basic Chemistry
- 2. Basic chemical, electronics, fluid, and mechanical engineering
- 3. Materials characterization techniques
- 4. Chemical and electronics safety
- 5. Waste management



6. Gas system management

- 7. Equipment maintenance: glovebox, electric test systems, gas chromatography, chemical lab general equipment
- 8. Programming (system control) and computational (e.g. excel database) skills

Proposed Jury:

Presidency	Titular	Andreu Cabot (IREC)
Vocal 1	Titular	Jordi Jacas (IREC)
Vocal 2	Titular	Maria Ibañez (IST Viena)

More information about the selection process in:



Publish Date: Ref.: 151/2022

Area:Advanced Materials and Systems for EnergyArea leader:Joan Ramon MoranteGroup:Functional NanomaterialsHead of Group:Andreu Cabot

Position: Senior researcher

Description of the job position

The Functional Nanomaterials Group in the Advanced Materials for Energy Area of IREC announces a position for a recognized researcher available for a highly motivated candidate. The candidate will perform and manage research in the field of nanomaterials for energy conversion and storage. She/he will supervise PhD students and young postdoctoral researchers

Requirements

The candidate must have:

- 1. A PhD in Chemistry, Physics, Material Science, Nanoscience, or equivalent.
- 2. Extensive experience in writing research manuscripts.
- 3. Experience in the organization and writing of project proposals
- 4. Research experience in nanomaterials synthesis, energy conversion and energy storage

The following points will be taken into account in the evaluation:

- 8. Established research and industrial network within Europe
- 9. English level
- 10. Patent coauthoring or background/training for patent preparation
- 11. Previous participation in European projects
- 12. Project creation and preparation skills (eg. H2020, Horizon Europe, M.ERA.NET)
- 13. Experience in industry or working with Industrial partners
- 14. Experience in the field of energy storage
- 15. Experience in the synthesis of nanomaterials
- 16. Student supervision skills

Topics included in the exam:

- 9. General Chemistry
- 10. Nanomaterials synthesis, manipulation, characterization, and application
- 11. Chemical and structural characterization tools
- 12. Electrochemistry
- 13. Electrochemical energy storage
- 14. Catalysis
- 15. General chemical, electronics, fluid, and mechanical engineering
- 16. Programming (system control) skills
- 17. Scientific writing (manuscripts and proposals)



Proposed Jury:

Presidency	Titular	Andreu Cabot (IREC)
Vocal 1	Titular	Jordi Jacas (IREC)
Vocal 2	Titular	Maria Ibañez (IST Viena)

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 152/2022

Area :Advanced Materials for EnergyArea leader:Prof. J.R. MoranteGroup:Solar Energy Materials and Systems (SEMS)Head of Group:Prof. Alejandro Pérez-Rodríguez

Position: Coordinator of wide band gap thin film photovoltaic technologies research line at the SEMS group

Description of the job position:

The group of Solar Energy Materials and Systems (SEMS) from the area of Advanced Materials for Energy announces an Experienced (R2) Research position available for a highly motivated candidate to work in the coordination of the Advanced Materials for Thin Film Photovoltaic Technologies research line at the SEMS group. Activities: The candidate will carry out a multidisciplinary activity with the final aim of coordinating the tasks for the development of new advanced materials and concepts, including absorber synthesis, and solar cell devices fabrication and characterization for thin film chalcogenide photovoltaic technologies. The candidate will be in charge of the launching and consolidation of the research activities in the group in wide band-gap materials (oxides, chalcogenides), for advanced photovoltaic applications (tandem concepts, semi-transparent and transparent devices). Tasks involved in the position include: use of DC and DC-pulsed sputtering as well as thermal evaporation, e-beam and ALD systems, use of conventional and rapid thermal annealing furnaces, fabrication and characterization of solar cell devices, fundamental characterization of materials (XRD, SEM, Raman, AFM, XRF, etc), transference of knowledge to scientific and industrial levels, coordination with project IPs and preparation of project applications at national (Spanish) and International cooperative programs.

Requirements:

<u>Essential</u>: Candidate must have a PhD degree in Chemistry, Physics, Material/Electronics Engineering or equivalent. The candidate must have previous demonstrated experience in fabrication and characterization of Thin Film Chalcogenide Photovoltaic devices technologies, and previous involvement in international collaborative projects as those funded by the European Commission

Preferred:

Experience in advanced characterization of photovoltaic materials and devices, including advanced fundamental characterization of materials (XRD, SEM, Raman, AFM, XRF) and optoelectronic characterisation of devices (IV under illumination, EQE, IQE). Publications at international scientific journals and participation in international conferences

Topics included in the exam:

- * Thin film technologies: PVD and CVD based processes
- * PV fundamentals: Photovoltaic effect Solar cells and modules
- * PV technologies: 1st, 2nd and 3rd generation PV technologies
- * Thin film PV industrial technologies
- * Thin film chalcogenide PV technologies



Proposed Jury:

Presidency	Titular	Alejandro Pérez-Rodríguez
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Joaquim Puigdollers

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 153/2022

Area: Advanced Materials for Energy Area leader: Prof. J.R. Morante Group: Solar Energy Materials and Systems (SEMS) Head of Group: Prof. Alejandro Pérez-Rodríguez

Position: Coordinator of the advanced process monitoring of thin film photovoltaic technologies research line at the SEMS group

Description of the job position:

The Solar Energy Materials and Systems (SEMS) group from the area of Advanced Materials for Energy in IREC announces an Experienced (R2) Research position for a highly motivated candidate to work in the coordination of the advanced process monitoring of thin film photovoltaic technologies research line at the SEMS group. The candidate will carry out a multidisciplinary activity with the final aim of coordinating the adaptation of the technologies developed al lab level in the SEMS group regarding photovoltaic device fabrication, advanced characterization and process control for the development of advanced monitoring and quality control applications and their transference to the industry. The candidate will be in charge of starting, coordinating and consolidating research activities that cover the standardization and adaptation of the fabrication processes and process control of chalcogenide-based thin film photovoltaic devices to make them compatible with industrial specifications and requirements regarding industrial manufacturing as well as process monitoring and control. The main tasks in which the candidate will be involved include:

- 1) Design and coordination of experiments for the industrial transferability of the fabrication processes of PV devices, including the development of industrial quality control and process monitoring methodologies and tools;
- 2) Participation in the communication, dissemination and exploitation of the results of the SEMS group;
- 3) Participation in the preparation of industrial and competitive project proposals in the frame of European and national calls;
- 4) Contribution in the coordination and management of projects both at the PI and research team member levels.

Requirements:

<u>Essential</u>: The candidate must be in possession of a PhD degree in Chemistry, Physics, Materials Engineering, Electronic Engineering or equivalent. The candidate must have previous demonstrated experience in the fabrication, advanced characterization and process monitoring of thin film chalcogenide photovoltaic technologies. The candidate must demonstrate publications at international scientific journals and participation in international

conferences. The candidate must have had previous involvement in international collaborative projects as those funded by the European Commission. The candidate must have demonstrable experience in industrial transference activities.



<u>Preferred</u>: Experience in advanced characterization techniques including advanced fundamental characterization of materials (XRD, SEM, Raman, AFM, XRF) and optoelectronic characterization of devices (IV under illumination, EQE, IQE). Working experience in the photovoltaic industry.

Topics included in the exam:

* Thin film technologies: PVD and CVD based processes deposition and materials/devices characterization

* PV fundamentals: Photovoltaic effect, solar cells and modules

- * PV technologies: chalcogenide-based PV technologies fabrication and characterization
- * Thin film PV industrial technologies: manufacturing and process monitoring

Proposed Jury:

Presidency	Titular	Alejandro Pérez-Rodríguez
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Joaquim Puigdollers

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 154/2022

Area : Advanced Materials for Energy Area leader: Prof. J.R. Morante Group: Solar Energy Materials and Systems (SEMS) Head of Group: Prof. Alejandro Pérez-Rodríguez

Position: Coordinator of kesterite thin film photovoltaic technologies research line at the SEMS group

Description of the job position:

The group of Solar Energy Materials and Systems (SEMS) from the area of Advanced Materials for Energy announces an Experienced (R2) Research position available for a highly motivated candidate to work in the coordination of the Kesterite Thin Film Photovoltaic Technologies research line at the SEMS group. The candidate will carry out a multidisciplinary activity with the final aim of coordinating the tasks for the development and optimization of kesterite based technologies, including a special emphasis on the upscaling of the processes for the consolidation of a kesterite baseline mini-module technology with very high uniformity and reproducibility and efficiencies > 10%, paving the way for the demonstration of the scalability of the processes and the transfer towards PV customized integration applications. The candidate will be at the forefront of the photovoltaic device fabrication/characterization for the creation of fabrication protocols and standardization that will allow to achieve reproducible >10% high efficiency devices in a 10x10 cm² area deposition. The candidate will be also in charge of the consolidation of the R+D activities in the group in the field of kesterite thin film technologies. Tasks involved in the position include: use of DC and DC-pulsed sputtering as well as thermal evaporation, e-beam and ALD systems, use of conventional and rapid thermal annealing furnaces, fabrication and characterization of solar cell devices, fundamental characterization of materials (XRD, SEM, Raman, AFM, XRF, etc), transference of knowledge to scientific and industrial levels, coordination with project IPs and preparation of project applications at national (Spanish) and International cooperative programs.

Requirements:

<u>Essential</u>: Candidate must have a PhD degree in Chemistry, Physics, Material/Electronics Engineering or equivalent. The candidate must have previous demonstrated experience in fabrication and characterization of Thin Film kesterite Photovoltaic devices technologies, and previous involvement in international collaborative projects as those funded by the European Commission

Preferred:

Experience in advanced characterization of photovoltaic materials and devices, including advanced fundamental characterization of materials (XRD, SEM, Raman, AFM, XRF) and optoelectronic characterization of devices (IV under illumination, EQE, IQE). Publications at international scientific journals and participation in international conferences

Topics included in the exam:

- * Thin film technologies: PVD and CVD based processes
- * PV fundamentals: Photovoltaic effect Solar cells and modules
- * PV technologies: 1st, 2nd and 3rd generation PV technologies



- * Thin film PV industrial technologies
- * Thin film chalcogenide PV technologies,

Proposed Jury:

Presidency	Titular	Alejandro Pérez-Rodríguez
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Joaquim Puigdollers

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 155/2022

Area:Advanced Materials for EnergyArea leader:Prof. J.R. MoranteGroup:Solar Energy Materials and Systems (SEMS)Head of Group:Prof. Alejandro Pérez-Rodríguez

Position: Coordinator of the advanced combinational characterization of materials and devices at the SEMS group

Description of the job position:

The Solar Energy Materials and Systems (SEMS) group from the area of Advanced Materials for Energy in IREC announces an Experienced (R2) Research position for a highly motivated candidate to work in the coordination of the Advanced Combinatorial Characterization of Materials and Devices research line. The candidate will carry out a multidisciplinary activity with the final aim of coordinating the advanced combinatorial characterization of materials and photovoltaic devices developed in the SEMS group for studying their fundamental properties and identifying performance loss mechanisms. The candidate will be in charge of starting, coordinating and consolidating research activities that cover the development of optoelectronic and spectroscopic characterization methodologies and provide support in the characterization of materials and devices applying combinatorial strategies. Additionally, the candidate will participate in the adaptation of these methodologies for their use in industrial process monitoring. The main tasks in which the candidate will be involved include:

- 1) Design and coordination of experiments for the fundamental characterization of PV-related materials and devices,
- 2) Participation in the communication, dissemination and exploitation of the results of the SEMS group,
- 3) Participation in the preparation of industrial and competitive project proposals in the frame of European and national calls
- 4) Contribution in the coordination and management of projects both at the PI and research team member levels.

Requirements:

<u>Essential</u>: The candidate must be in possession of a PhD degree in Chemistry, Physics, Materials Engineering, Electronic Engineering or equivalent. The candidate must have previous demonstrated experience in advanced characterization (including spectroscopic and optoelectronic) of semiconductors and photovoltaic materials and devices of different technologies. Additionally, the candidate must have demonstrable experience in advanced data processing using analytical methodologies and Artificial Intelligence algorithms. The candidate must demonstrate publications at international scientific journals and participation in international conferences. The candidate must have had previous involvement in international collaborative projects as those funded by the European Commission. The candidate must have demonstrable experience in industrial transference activities.

<u>Preferred</u>: Demonstrable experience in advanced characterization techniques for PV related semiconductors materials and devices including (Raman, PL, Transmittance, reflectance, SEM, XRF) and optoelectronic characterization of devices (IV under illumination, EQE, IQE, Hall effect).

Topics included in the exam:

* Thin film materials and device characterization: spectroscopic and optoelectronic characterization



- * PV fundamentals: Photovoltaic effect, solar cells and modules
- * PV synthesis: fabrication process, and methods
- * PV technologies: chalcogenide-based PV technologies fabrication and characterization
- * Thin film PV industrial technologies: process monitoring

Proposed Jury:

Presidency	Titular	Alejandro Pérez-Rodríguez
Vocal 1	Titular	Jordi Jacas
Vocal 2	Titular	Joaquim Puigdollers

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 156/2022

Area :Advanced Materials and Systems for EnergyArea leader:Prof. Joan Ramon MoranteGroup:Energy Storage, Harvesting and CatalysisHead of Group:Prof. Joan Ramon Morante

Position: researcher of energy storage (waste to power) R2: Energy production based on biogenic carbons and/or waste

Description of the job position

The Energy Storage group has announced a permanent position in the field of research and technologic development on processes and technologies for the obtention of energy from different types of waste with special emphasis on those with biogenic origin considering the obtention of synthetic fuels and added value chemicals.

Activities will cover electrochemical, thermochemical, gasification and pyro-gasification options including catalyst implementation as well as reactors and pilot plants.

The group has consolidated experience and know-how in material synthesis and characterization, catalysts, and reactors implementation. We are looking for a researcher to join the group activities, including:

I. Development of catalyst materials and their implementation as catalysts

II. In-situ and ex-situ characterization tools and methodologies for catalysts.

III. Rational design and simulations of reactors, demonstrators and scale up processes

IV. Synthsis processes of added value chemicals: Methane or methanol or di-methyl-ether DME, biohydrogen,....

V. Fischer Tropsch routes for synthetic fuels.

Research and development of materials, components and structure configurations of reactors and systems for the energy production and energy storage from waste.

Requirements

- Experience in the preparation and uses of catalysts
- Experience in reactors.
- Experience and knowledge in the field of power-to-X and waste to power technologies
- Experience in processes using biogenic CO2.
- Experience and knowledge in synthetic fuels or in the obtention of added value chemicals.

• Strong and complementary scientific and technological record of actions (to be evaluated according to the career stage of the candidate):

- oOriginal research articles
 - oPatents
- oConferences, proceedings, and books
- oOutreach actions
- oParticipation in national and international research projects and proposals preparation.
- oPI/coordination of national and international research projects/WPs
- oExpertise, skills and experience promoting & participating industrial projects

Also preferred backgrounds:

- Experience in material catalyst synthesis. Implementation of practical catalysts.
- Experience in reactor design and simulations, demonstrators, and pilot plants.
- Previous experience with complementary in-situ ex-situ spectroscopic techniques will also be positively evaluated.



- Previous experience in theoretical calculations, simulation of processes, computational tools will be positively evaluated.
- Experience in the field of Carbon Capture and Utilization (CCU).
- Experience in electro-conversion, thermos-conversion, bioconversion or artificial photosynthesis envisioning further integration or combination of routes will be positively evaluated.
- Experience in moving laboratories results to the market.
- Experience in industrial projects
- Experience in dissemination and research impact related activities
- Experience in the preparation of project proposals

Waste to power technologies. Methanation processes. Biomethane, Methanol production., Biomethanol, Thermochemical routes, Plasma technologies, Synthetic fuels production, Catalyst design and implementation, Gasification routes, Incineration routes with Carbon Capture processes, Pyro-gasification routes, Fischer-Tropsch routes

Proposed Jury:

Presidency	Titular	Prof. Joan Ramon Morante
Vocal	Titular	Dra. Teresa Andreu (university of Barcelona)
Secretary	Titular	Prof. Alejandro Pérez-Rodriguez
Presidency substitute Jordi Guilera		Jordi Guilera
Vocal substitute Jordi Arbiol (ICN2)		Jordi Arbiol (ICN2)
Secretary	substitute	A.Cabot

More information about the selection process in:



Publish Date: December 28th 2022 Ref.: 157/2022

Area :Advanced Materials and Systems for EnergyArea leader:Prof. Joan Ramon MoranteGroup:Energy Storage, Harvesting and CatalysisHead of Group:Prof. Joan Ramon Morante

Position: Energy storage: batteries. Nivell R2

Description of the job position

The Energy Storage group has announced a permanent position in the field of electrochemical energy storage and advanced secondary batteries. The group has consolidated experience and know-how in material synthesis and characterization, electrode fabrication, electrochemical cell assembly and testing, and post-mortem analyses. We are looking for a researcher to join the group activities, including:

- I. Developing materials, components, and systems for Li-ion and Na-ion batteries.
- II. Developing materials, components, and systems for post Li-ion battery systems, including Li-S, metal-air batteries and all solid-state batteries
- III. Developing materials, components, and systems for supercapacitors.
- IV. Developing materials, components, and systems for sustainable redox flow batteries

Requirements

- PhD in Science and Technology field
- Fluent English is mandatory
- Strong and complementary scientific and technological record of actions (to be evaluated according to the career stage of the candidate):
 - Original research articles
 - o Patents
 - Conferences, proceedings, and books
 - Outreach actions
 - o Participation in national and international research projects
 - o PI/coordination of national and international research projects/WPs
 - Expertise and skills in industrial projects
 - Proven experience in the following aspects is mandatory:
 - o Material synthesis and characterization
 - o Electrochemical characterization of electrodes and devices
 - o Battery systems.

Preferred (experience in the following aspects will be positively evaluated):

- o Anodes for secondary batteries
- Battery cell parametrization for modelling
- o Spectroscopic techniques, including impedance spectroscopy, for electrode characterization
- o In-situ and ex-situ characterization
- Mentoring and team leading (PhD thesis, Master/Bachelor thesis, etc)
- Research in international teams (research visiting, pre-doctoral and post-doctoral research stays, international partnerships, etc)
- Funding searching
- Led technology transfer and innovation actions



Secondary batteries, post Li-ion batteries, electrode fabrication, synthesis-structure-properties correlations in energy materials, Li-S batteries, metal-air batteries, all solid-state batteries.

Proposed Jury:

Presidency	Titular	J.R. Morante
Secretari	Titular	Lluis Trillas
Vocal	Titular	T.Andreu (University of Barcelona)
Presidency	suplent	Jordi Jacas
Secretari	suplent	A.Perez-Rodriguez
Vocal	suplent	J.Arbiol (ICN2)

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 158/2022

Area :Advanced Materials and Systems for EnergyArea leader:Prof. Joan Ramon MoranteGroup:Energy Storage, Harvesting and CatalysisHead of Group:Prof. Joan Ramon Morante

Position: Energy storage: batteries. Nivell R2

Description of the job position

The Energy Storage group has announced a permanent position in the field of electrochemical energy storage and advanced secondary batteries. The group has consolidated experience and know-how in material synthesis and characterization, electrode fabrication, electrochemical cell assembly and testing, and post-mortem analyses. We are looking for a researcher to join the group activities, including:

- V. Developing materials, components, and systems for Li-ion and Na-ion batteries.
- VI. Developing materials, components, and systems for post Li-ion battery systems, including Li-S, metal-air batteries and all solid-state batteries.
- VII. Developing materials, components, and systems for supercapacitors.
- VIII. Developing materials, components, and systems for sustainable redox flow batteries

Requirements:

- PhD in Science and Technology field
- Fluent English is mandatory
- Strong and complementary scientific and technological record of actions (to be evaluated according to the career stage of the candidate):
 - Original research articles
 - o Patents
 - o Conferences, proceedings, and books
 - o Outreach actions
 - o Participation in national and international research projects
 - o PI/coordination of national and international research projects/WPs
 - o Expertise and skills in industrial projects
 - Proven experience in the following aspects is mandatory:
 - Material synthesis and characterization
 - o Electrochemical characterization of electrodes and devices

Preferred (experience in the following aspects will be positively evaluated):

- Cathodes for secondary batteries
- Fabrication of green electrodes
- Synthesis-structure-properties correlations in electrode materials
- Spectroscopic techniques, including XPS, for electrode characterization
- Mentoring and team leading (PhD thesis, Master/Bachelor thesis, etc)
- Research in international teams (research visiting, pre-doctoral and post-doctoral research stays, international partnerships, etc)



- Funding searching
- Led technology transfer and innovation actions

Secondary batteries, post Li-ion batteries, electrode fabrication, synthesis-structure-properties correlations in energy materials, Li-S batteries, metal-air batteries, all solid-state batteries.

Proposed Jury:

Presidency	Titular	J.R. Morante
Secretari	Titular	Lluis Trillas
Vocal	Titular	T.Andreu (University of Barcelona)
Presidency	suplent	Jordi Jacas
Secretari	suplent	A.Perez-Rodriguez
Vocal	suplent	J.Arbiol (ICN2)

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 159/2022

Area :Advanced Materials and Systems for EnergyArea leader:Prof. Joan Ramon MoranteGroup:Energy Storage, Harvesting and CatalysisHead of Group:Prof. Joan Ramon Morante

Position: Researcher of energy storage R2: energy carriers and decarbonization. Power to X

Description of the job position

Research and development of materials, components and structure configurations of cells, reactors and systems for the production of energy carriers and decarbonization processes.

The Energy Storage group is seeking for an experienced researcher in the field of Power-to-X, primarily focused on electrocatalytic routes for the generation of value-added products, hydrogen and synthetic fuels. These activities will require experience in materials science and engineering, electrochemical cell design, development of electrochemical cell components, cell stacking and reactors. The candidate must have more than 2 years of experience after PhD in materials science for energy applications, with specific proven knowledge on Power-to-X.

The researcher is expected to actively participate in the Energy Storage team, so he/she must have problem solving skills and capability to work in a team with flexibility and initiative.

Requirements

Essential:

- Experience in the preparation of electrocatalysts, electrodes and cell components
- Experience in the development of low-temperature electrolysis devices to obtain hydrogen, ammonia, or CO₂ derived products.
- Experience in the field of Power-to-X.
- Experience in the development of electrochemical devices/systems for CO2 reduction.
- Experience in the development of electrochemical devices/systems for H2 production.
- Strong and complementary scientific and technological record of actions (to be evaluated according to

the career stage of the candidate):

- oOriginal research articles
- oPatents

oConferences, proceedings, and books

- oOutreach actions
- oParticipation in national and international research projects and proposals preparation.
- oPI/coordination of national and international research projects/WPs
- oExpertise, skills and experience promoting & participating industrial projects

Preferred:

- Experience in reactor design ad simulations, demonstrators, and pilot plants.
- Previous experience with in-situ spectroscopic techniques will be positively evaluated.
- Previous experience in theoretical calculations, simulation of processes, computational tools will be positively evaluated.
- Experience in the field of Carbon Capture and Utilization (CCU).
- Experience in catalyst development and synthesis of porous materials.



- Materials synthesis ad rational catalyst design
- Experience in reactor design and simulations,
- Previous experience in electro-conversion, thermos-conversion, bioconversion or artificial
- photosynthesis envisioning further integration or combination of routes will be positively evaluated.
- Experience in moving laboratories results to the market.
- Experience in dissemination and research impact related activities.

Language:

Fluent in English. Spanish and/or Catalan are positively valued.

Topics included in the exam:

Electrolysis theory; rational design and materials for electrocatalysis; green hydrogen production power-to-X technologies; electrochemistry; materials for electrocatalysis and CCU routes CO2 capture, hydrogen, energies carriers, industry decarbonization, mobility decarbonization, hydrogen role in decarbonization processes, electrochemical route for replacements of routs based on carbon from fossil origin.

Presidency	Titular	Prof. Joan Ramon Morante
Vocal	Titular	Dra. Teresa Andreu (university of Barcelona)
Secretary	Titular	Prof. Alejandro Pérez-Rodriguez
Presidency	substitute	Sebastian Murcia-López
Vocal	substitute	Jordi Arbiol (ICN2)
Secretary	substitute	A.Cabot

More information about the selection process in:



Publish Date: December 28th 2022 N. Ref.: 160/2022

Area :Advanced Materials and Systems for EnergyArea leader:Prof. Joan Ramon MoranteGroup:Energy Storage, Harvesting and CatalysisHead of Group:Prof. Joan Ramon Morante

Position: Researcher of energy storage R2: energy carriers and decarbonization. Power to X

Description of the job position

Research and development of materials, components and structure configurations of cells, reactors and systems for the production of energy carriers and decarbonization processes. The Energy Storage group is seeking for an experienced researcher in the field of Power-to-X, primarily focused on electrocatalytic routes for the generation of value-added products, hydrogen and synthetic fuels. These activities will require experience in materials science and engineering, electrochemical cell design, development of electrochemical cell components, cell stacking and reactors. The candidate must have more than 2 years of experience after PhD in materials science for energy applications, with specific proven knowledge on Power-to-X.

The researcher is expected to actively participate in the Energy Storage team, so he/she must have problem solving skills and capability to work in a team with flexibility and initiative.

Requirements

Essential:

- Hold a PhD in the areas of Chemistry, Material Science, Chemical Engineering.
- Experience in the field of Power-to-X.
- Experience in the development of electrochemical devices/systems for CO2 reduction.
- Experience in the development of electrochemical devices/systems for H2 production.
- Strong and complementary scientific and technological record of actions (to be evaluated according to the career stage of the candidate):
 - o Original research articles
 - o Patents
 - Conferences, proceedings, and books
 - o Outreach actions
 - Participation in national and international research projects and proposals preparation.
 - PI/coordination of national and international research projects/WPs
 - o Expertise, skills and experience promoting & participating industrial projects

Preferred:

- Experience in the field of Carbon Capture and Utilization (CCU).
- Experience in catalyst development and synthesis of porous materials.
- Materials synthesis ad rational catalyst design
- Experience in reactor design and simulations, demonstrators, and pilot plants.
- Previous experience in electroconversion, thermoconversion, bioconversion or artificial photosynthesis envisioning further integration or combination of routes will be positively evaluated.
- Experience in moving laboratories results to the market.
- Experience in dissemination and research impact related activities.



Language:

Fluent in English. Spanish and/or Catalan are positively valued.

Topics included in the exam:

Power-to-X technologies; electrochemistry; materials for electrocatalysis and CCU routes CO2 capture, hydrogen, energies carriers, industry decarbonization, mobility decarbonization, hydrogen role in decarbonization processes, electrochemical route for replacements of routs based on carbon from fossil origin.

Proposed Jury:

Presidency	Titular	Prof. Joan Ramon Morante
Vocal	Titular	Dra. Teresa Andreu (university of Barcelona)
Secretary	Titular	Prof. Alejandro Pérez-Rodriguez
Presidency	substitute	Sebastian Murcia-López
Vocal	substitute	Jordi Arbiol (ICN2)
Secretary	substitute	A.Cabot

More information about the selection process in: