

Ref. 124/19 – Support Technician (Control System)

RESOLUTION OF 13 JUNE 2019 OF THE DIRECTOR OF THE CONSORTIUM OF ULTRA-SHORT ULTRA-INTENSE PULSED LASERS CENTRE OF SALAMANCA (CLPU) ISSUING THE CALL FOR A SELECTION PROCESS TO AWARD A TEMPORARY EMPLOYMENT CONTRACT AS SUPPORT TECHNICIAN (CONTROL SYSTEM)

The Pulsed Lasers Centre (henceforth CLPU) is a public consortium attached to the General Administration of the State, in which the Ministry of Science, Innovation and Universities, the Regional Government of Castile and León and the University of Salamanca participate. Its purpose is to design, build, equip and exploit a first-rate laser systems installation open to the national and international scientific community. The CLPU is regarded as an agent of the Spanish System for Science, Technology and Innovation.

The CLPU is regarded as an agent of the Spanish System for Science, Technology and Innovation and is part of the Unique Scientific and Technological Infrastructures System (ICTS) in the materials field of expertise and is organized as a unique location user centre.

According to article 15, section e) of the Consortium statutes, the Director is responsible for the selection and recruitment of the Centre's staff, taking into account the guidelines provided by the Governing Council and the Executive Commission, so that, under such responsibility, the following competition rules are published.

COMPETITION RULES

I. GENERAL RULES

The aim of this call is to carry out a selection process among all its participants with the purpose of concluding a TEMPORARY full-time employment contract for a specific job or service with the employment status and workplace specified in the Annex to this call.

This call is implemented under authorization number 000150/2019*190044 issued on 26 February 2019 by the General Directorate of Personnel and State Pension Costs and the General Directorate of Public Function, in accordance with Additional Provision 31 of Law 6/2018, of 3 July, on General State Budget for the year 2019 concerning the temporary recruitment of public-sector consortia staff.

The call will take account of the principle of equal treatment for men and women with regard to employability, in accordance with article 14 of the Spanish Constitution, Basic Law 3/2007, of 22 March, and Resolution of 26 November 2015 of the Secretariat of State for Public Administrations approving the Agreement of the Council of Ministers of 20 November 2015, by virtue of which the II Plan for Equality between women and men in the General State Administration and its public bodies is approved. Because of the implementation of such regulations for effective equality between women and men and for the promotion of gender equality, all the gender-neutral references included in this call include both women and men.

Likewise, the principles of free concurrence, merit, capacity and publicity will also be guaranteed.

Both the call and the results of the stages of the selection process will be published, at least, on the CLPU's website, <http://www.clpu.es>.

II. ACCESS TO THE CALL

To participate in this call, anyone interested who meets the minimum requirements established in its Annex must complete the form available on the website (<https://www.clpu.es/es/about-us/job-opportunities>) and send it electronically through the page itself, attaching their Curriculum Vitae and the supporting documentation proving compliance with the participation requirements specified in the Annex to this call.

Only when attachments exceed the established size limit, they may be sent by e-mail to rrhh@clpu.es, stating the number of the call.

Both the application and the Curriculum Vitae and supporting documentation proving compliance with the minimum requirements must be delivered before the submission deadline indicated in the Annex to this call.

The present call is also open to the workers of the CLPU who meet the requirements established in the call and whose recruitment is in accordance with labour regulations.

The participation in this selection process implies the full acceptance of the call and its rules by the candidates, including the possibility of the Selection Board declaring the call for this position job vacancy.

III. SELECTION BOARD

The Selection Board for this selection process is appointed by the Director of the CLPU, and its composition is detailed in the Annex to this call, delegation of its functions being possible if expressly authorized.

The Board will ensure strict compliance with the terms of the call and, in particular, with the principles referred to in Section I thereof.

According to article 5 of Basic Law 3/2018, of 5 December, on Personal Data Protection and Digital Rights Guarantee, the members of the Selection Board are subject to an obligation of confidentiality and professional secrecy regarding any personal data that they may handle when performing their functions in the context of this selection process.

IV. SELECTION PROCESS

The selection process will consist of two stages and will be carried out using the merit based competition, according to the criteria reported in detail in the present document.

In the event of equal qualifications, preference will be given to candidates with any degree of disability. Applicants with a degree of disability equal to or above 33% who wish to request the adaptation of time and/or means must provide Expert Technical Opinion issued by the Technical Evaluation Body that stated the degree of disability.

The selection process will begin the day after the deadline for submission of applications, and the duration of each stage and of the entire process will be as indicated in the Annex to these regulations.

First stage: Assessment of the fulfilment of requirements by the candidate

The assessment of whether candidates meet the requirements established in the call and necessary to be eligible for the job will be conducted based on the information included in the Curriculum Vitae and the supporting documents provided. The Selection Board may request any further explanation in order to clarify possible details and assess a correct evaluation of the candidates' profiles.

After the assessment of the requirements has been completed for all candidates, and within the period prescribed for this stage, upon proposal of the Selection Board, the corresponding resolution will be issued with the list of eligible candidates, indicating who has been admitted to the next stage of the selection process and the requirements that have not been met by those who have not.

The resolution, as stated in Section I of these rules, will be published on the CLPU's website. Candidates can file any relevant appeals within five working days after the date of publication.

Second stage: Merit Assessment

Candidates who have passed the first stage will be personally contacted by the CLPU so that they may start their participation in the second stage of the selection process and are

required to submit beforehand the supporting documentation for the assessment of the relevant merits by sending it to rrhh@cipu.es.

Candidates will be assessed on the scale of merits by means of a personal interview, preferably face-to-face, although other means such as videoconferencing, video chat or the like will also be accepted, if and when the assessment process for it.

Likewise, and if the Board deems it appropriate, further supplementary documentation to that already provided may be requested in relation to the assessment of merits, and it might also be possible that a specific test is prepared to ensure the correct assessment of merits. If so, such test will be specified in the Annex. The Selection Board may also accept other forms of certification provided they unequivocally justify the merits provided.

After such assessment has been completed for all the candidates who passed the selection process stage, the Selection Board will submit a report signed by all its members to the body responsible for confirming the selection process result, detailing the overall score and the partial score obtained by them in each of the different sections, proposing a ranking of candidates according to the grades achieved and the minimum requirements to pass this second stage.

Based on the proposal of the Selection Board, and within the period prescribed for the duration of the second stage, the corresponding resolution will be issued with the name of the candidate who, having obtained the highest score in the merit assessment.

The selected candidate must explicitly notify the acceptance or denial of such appointment. Upon a refusal by the selected candidate, the position would be offered to the next candidate according to the established order of precedence.

V. DATA PROTECTION

To ensure confidentiality in the publication of the results of the selection process outlined in section I of these rules, candidate identification will consist of name, surnames and four random numbers of the national identification document, foreign identification document, passport or equivalent document.

The CLPU's Department of Human Resources will be the body in charge of the custody and management of all information related to the selection process.

By virtue of Basic Law 3/2018, of 5 December, and of Regulation (EU) 2016/679, of 27 April 2016, we inform you that the processing of any personal data you may provide through this application form and in the attached documents is authenticated in pursuance of the legal obligations to which the Consortium is subject and will be included in a file named "Curriculum Vitae" owned by the

Consortium for the Design, Construction, Equipment and Exploitation of the Ultra-short Ultra-intense Pulsed Lasers Centre - CLPU (protecciondatos@ccpu.es) and intended for the management of staff selection and recruitment processes through public calls. Documentation provided by the selected candidate will be added to a file labelled “Human Resources” for the purpose of managing the subsequent execution of the corresponding contract.

Data will not be released to third parties unless required under legal obligation or authorized by law.

Candidates may exercise the rights contained in the mentioned Regulations as detailed in the additional information that can be accessed through the following links: [https://www.ccpu.es/es/PD_Curriculum_Vitae_y https://www.ccpu.es/es/PD_Recursos_Humanos](https://www.ccpu.es/es/PD_Curriculum_Vitae_y_https://www.ccpu.es/es/PD_Recursos_Humanos)

Should you supply data concerning your health and/or disability in order to be eligible for the mentioned positions, their handling will be protected according to letter b) of section 2 of article 9 of Regulation (EU) 2016/679, of 27 April 2016.

VI. APPEALS AGAINST THIS CALL

Contentious-administrative appeals against the rules of this call may be lodged with the contentious-administrative courts of Salamanca within two months from the day following its publication. An internal administrative appeal may also be lodged with the Director of the CLPU within one month from the day following “the official publication of the results” publication, in which case the candidate may not lodge the aforementioned contentious-administrative appeal until the express resolution or implied rejection of the internal administrative appeal lodged has taken place, as envisaged in articles 123 and 124 of Law 39/2015, of 1 October, of the Common Administrative Procedure for Public Administrations.

Sgd: Mr Luis Roso Franco

Director of the CLPU

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ANNEX

A. SELECTION PROCESS TIME LIMITS

A.1 Deadline for submission of applications

The application period will run from the date when the announcement of the call is published on the CLPU website until 14 July 2019.

A.2 Duration of stages of the process

The first stage of the selection process, assessment of requirements, will extend over a maximum of two months.

The second stage of the selection process, assessment of merits, will extend over a maximum of two months.

B. SELECTION BOARD

The members of the Selection Board are:

POSITION	INCUMBENT	SUBSTITUTE
Chairperson:	Head of Scientific area	CLPU Manager
Secretary:	HR Technician	Financial Manager
Board members:	Engineering area member Scientific area member	Technical area member

In the event of a tie, the Chairperson of the Selection Board will have a casting vote.

C. JOB POSITION: TASKS AND RESPONSIBILITIES

The specific service or labour with autonomy and substantivity inside the company activity will be the development of the design, implementation and management of a software control system in order to manage the acquisition, processing and saving of data of the scientific equipment, especially the one used in the experimental campaigns.

The duration of the contract is undetermined with an estimated implementation period of three years. There will be a trial period of six months.

C.1 Job characteristics

This selection process gives access to the job of SUPPORT TECHNICIAN (Control System), which falls into GROUP III of the CLPU's Employment and Salary framework.

Remuneration will be commensurate with the value of the candidate, the job offered and the CLPU salary table. As a guideline a range for fixed annual, full time equivalent gross salary, between 21.693 / 26.623 € has been established.

On the basis of the Resolution issued by the CLPU's Management with regard to the implementation of the working hours of its employees, dated 7 September 2017, a 40-hour work week is set for directly recruited staff on a special dedication regime, based on the uniqueness of their functions and their not coming from any of the associated administrative bodies, as stated in article 121 of Law 40/2015, of 1 October, of the Legal Regime of the Public Sector.

The working languages of the CLPU are Spanish and English, used interchangeably.

C.2 Functions of the job position

The main functions associated with the job position are:

- Design and implementation of a high-level¹ control software with a user interface able to manage the experimental equipment in a unified and automatic way according to the specifications driven by the Head of the Scientific Area.
- Design and implementation of a low-level¹ software infrastructure able to control every single experimental device and easily interface to a high-level software control system, object of the previous point.
Such software structure aimed to manage the experimental activity will be hereafter named experimental control system, or more briefly CS.
The main activities to be carried-out by the candidate for a successful implementation of the projects are outlined:
- Collect different control systems' (employed in similar scientific facilities) and users' requirements in order to create a clear and exhaustive documentation reporting and analysing the requested specifications and implications on the implementation point of view.
- Design the architecture of the CS.
- Design the future operation modes of the experimental activity implied by the activity carried-out.
- Control/manage the systems closely connected to the CS, like the data management network, the related hardware devices etc.
- Follow-up of the assigned project through a reporting activity. Supervise possible external companies implied in the implementation of the CS, whereas some parts of the job are subcontracted by the CLPU.
- Programme the full experimental control system or part of it.

¹ Low and high level here is referred to the proximity to the machine or to the user level.

- Commissioning of the CS or part of it.
- Maintenance of the CS or part of it.
- Defining, in agreement with the Head of the scientific Area, a user policy related to the CS especially the one related to the external users.
- Any other task commissioned to the employee, which he/she is capable of doing related to the specific service or labour described in the previous points.

C.3 Skills and requirements required for the job

The core competencies involved in the job position are:

- Global vision of the project carried out.
- Ability to carry out a proficient work, with a good degree of independence, alternatively, being able to manage a group or joining a team in a running activity.
- Ability to plan the activity in the mid and long term (months/years), displaying possible improvement or critical aspects, also on the resources point of view.
- Ability to translate the specifications received to a breakdown list of activities.
- Flexibility and ability to manage changing/evolving situations: modify the adopted strategies on the run in order to provide answers and solutions to occurring problems.
- Attitude for problem solving.
- Bent for continuous learning, and a multi-disciplinary attitude.
- Ability to exchange knowledge in conferences and meetings with other facilities.
- Availability to spend part of the time (estimated approximately in 5%-10% of the total time) to travel to other installations around the world in order to match the standards and the state of art of the other laser facilities.

D. MINIMUM PARTICIPATION REQUIREMENTS AND THEIR VALIDATION

To compete in this call, it is essential to meet each and every requirement listed below, validating them as specified:

R1.- Bachelor degree in informatics engineer, industrial engineer, physics or similar degree with equivalent study programs in terms of the topics of the present call.

Validation: Copy of the academic degree diploma or academic certification proving the completion of the studies required for its achievement.

R2.- Master Degree in topics related to the development of distributed software applications as outlined in the present call (i.e. Section C.2), or equivalent experience of at least 3 years in the same activities, as reported briefly hereafter:

Design, implementation and management of some software control system (or part of it) based on modern software platforms, aimed to control devices and manage their acquisition, processing and saving of data, especially inside scientific infrastructures. Valuable experience

on industrial infrastructures might be taken into account whereas this involves the same degree of complexity and management of similar concepts.

Validation:

In the first case (i.e. master degree), the candidates will have to present a copy of the academic degree. The candidates admitted to the following selection phase might be asked to present their academic experience highlighting a connection respect to the topics of the present call, whenever some detail should appear not clear to the Board from the analysis of the *Curriculum Vitae*.

For the second case (i.e. valuable experience of 3 years) the evaluation board will assess the present requirement according to the references and description reported in the *Curriculum Vitae* submitted by the candidates. The candidates admitted to the following evaluation phase might be asked by the Board to explain in detail and report about the activity carried out, explicitly highlighting the contribution given in each job and the connection respect to the topics requested, whenever such details are deemed not clear.

R3.- English level equivalent to B1 of the Common European Framework of Reference

The English level is strictly required for the working environment object of the call. The candidates accessing to the second phase of selection will be evaluated in their English proficiency level.

Validation:

The assessment of the English level will be verified by carrying-out the full interview or part of it in English and focusing on detailed aspects connected to the job object of the present call.

Candidates who have passed the language proficiency tests of the same or higher levels in selection processes of previous calls published by the CLPU might be exempted from the language level assessment upon explicit request.

E. MERIT ASSESSMENT CRITERIA AND VALIDATION

The candidates accessing the following phase of the selection process will be evaluated according to the additional merit list reported hereafter. As reported in detail in the list, as a general statement, the board will highlight and positively score the active contributions of the candidates in each valuable merit.

M1.- Experience in controlling electronic devices, especially scientific instruments by different software platforms.

Maximum score: 14 points

Assessment criterion: Variety of the devices used and deepness of such activity in terms of knowledge and effort. The experience in a given software environment will be scored up to 8

points according to the effort, the number of device controlled and detailed knowledge of the candidate according to the jobs carried out.

Validation: Evaluation will be made according to the level of the jobs carried-out and the variety of instruments controlled).

M2.- Experience in Software bus or technologies based on the following platforms or similar: TANGO, EPICS, OPC, ZeroMQ, Software bus, Labview systems or similar.

Maximum score: 14 points

Assessment criterion: Each topic in the list or other similar will be evaluated up to 6 points according to the level and experience of the candidate (e.g. basic knowledge, application to some job, advanced application). Possible interaction of different platforms in a complex environment can be scored with additional 2 points.

Validation: The board will validate the activity and possible courses regarding the topics. The activity and the courses will be scored whenever they reflect a matching respect to the topics and a clear effort devoted by the candidate.

M3.- Experience in some of the following: Client-Server Architectures, Build tools, Linux OS, SQL-Database and other similar or related topics.

Maximum score: 10 points

Assessment criterion: The board will recognize the courses and the activities matching the topics requested and showing a clear effort spent by the candidate. Each topic will be scored up to 4 points depending on the degree of experience according to the jobs carried out or the specific training activity.

Validation: Experience related to some job carried out or some course related to these topics.

M4.- Experience in Visual studio (C, C++, C#), or Python or similar programming languages.

Maximum score: 8 points

Assessment criterion: Each language will be scored up to 3 points according to the degree of experience by the candidate (e.g. basic knowledge, application to some job, advanced application).

Validation: The board will validate the experience or possible courses encompassing a clear comprehension and effort by the candidate.

M5.- Experience and knowledge in controlling instruments through different ports and protocols (e.g. GPIB, TCP/IP, RS232, RS485, Probus, Profinet, CAN-bus, Camera Link and others).

The advantages and limitations of each technology will be analysed to highlight the knowledge and the experience of the candidate.

Maximum score: 8 points

Assessment criterion: The Board will assign a minimum of 1 point for each standard whenever the candidate shows a basic knowledge, up to a maximum score of 3. The modern standards implying large bandwidth communications and data delivery will be scored with a minimum of 2 to 6 points. The experience and the jobs carried out will taken into account by the Board for the evaluation.

Validation: Evaluation will take into account the wideness and deepness of the knowledge in each of the topics outlined.

M6.- Experience in multicasting video streaming, GIGE, PTP protocols or similar ones.

Maximum score: 6 points

Assessment criterion: Each topic will be evaluated up to 3 points according to the knowledge of the candidate, from a basic one to the operative one (employment in some specific job) to the high level one (advanced employment in the jobs done).

Validation: Detailed questions will be addressed regarding the way data are handled in such protocols, and highlighting possible problems (e.g. coherence, bandwidth etc.).

M7.- Experience in IT networks, Windows OS administration and remote control (remote desktop, team viewer, VNC).

Maximum score: 6 points

Assessment criterion: According to the level shown by the candidate, the experience in each topic will be scored up to 3 points (e.g. basic knowledge, application to some job, advanced application).

Validation: The board will validate the experience according to the wideness of the candidates' experience and to its quality and deepness.

M8.- Experience and knowledge about the internal structure and operations of electronic devices like precision motors (i.e. stepper, DC, Piezo), imaging sensors (i.e. CCD and CMOS), Analog to Digital Converters, vacuum sensors, amplifiers, digital devices, etc.

Maximum score: 5 points

Assessment criterion: Each device will be scored up to 2 points according to the detail in the knowledge shown by the candidate. The Board could assign up to 3 points for device whenever

the candidate could show a deeper understanding of the devices in connection with their corresponding controlling issues.

Validation: The variety and deepness in the knowledge of scientific devices will be assessed through targeted questions by the board.

M9.- Experience in control of devices in real-time and related hardware platforms (e.g. NI Compact RIO, FPGA and others like oscilloscopes etc.).

Maximum score: 3 points

Assessment criterion: Each topic will be evaluated up to 2 points respectively for basic or advanced knowledge.

Validation: the board will evaluate the experience and knowledge of the candidate gathered through the job carried out or valuable courses.

M10.- A valuable score in publication indexes related to the topics object of the present call.

Maximum score: 3 points

Assessment criterion: 1 point per publication, or documented internal report recognized as valuable by the Board. Less than 1 point can be assigned whether a publication is partially matching the topics of the call or the effort in the job is not considered high.

Validation: The board will check the reported publications by the candidates on the *Curriculum Vitae*. During the interview, the board might ask to clarify and explain possible details regarding the publications reported therein.

M11.- Additional experience in carrying-out the activities object of the present call in scientific environments or in engineering as much as in company frameworks

Maximum score: 3 points

Assessment criterion: 1 point per additional full year (respect to the basic requirement) of experience recognized by the committee according to the activities carried-out and the effort of the candidate.

Validation: The *Curriculum Vitae*, reference letters and other documents presented by the candidates will be taken into account for the score. The Board might address possible questions to the candidates in order to clarify possible details and validate the experience respect to the topics of the call.

The final score of the merit-based competition will be determined by the sum of the scores obtained in the different sections, taking into account that the minimum score required to pass this phase is **20 points**.