

THE DIRECTOR

- **SUBJECT:** Procedure of comparative evaluation by qualifications and public discussion for the recruitment of 1 position for Assistant professor with a employment contract for three-year pursuant to art. 24, paragraph 3, letter a), of Law no. 240/2010;
- **Given That** Alma Mater Studiorum University of Bologna and the European Climate, Infrastructure and Environment Executive Agency (CINEA) have signed the "Grant Agreement" nr. 101075592 for the funding of 1 full-time fixed-term Assistant professor position - pursuant to art. 24, paragraph 3, letter a), of Law no. 240/2010;

With Reference To the rules referred to in Article 13 of the present call for application;

- With Reference To the resolution of the Department Board of Electrical, Electronic and Information Engineering "Guglielmo Marconi" - DEI of 18/05/2023, of request for activation of a fixed-term Assistant Professor position pursuant to art. 24, paragraph 3, letter a), of Law no. 240/2010;
- With Reference To the resolution of the Board of Directors of 27/06/2023, with which the request was approved;
- **Givent That** Considering that the aforementioned educational and research needs presented by the Electrical, Electronic and Information Engineering "Guglielmo Marconi" DEI can be fulfilled through the issuance of a public selection procedure;

ORDERS

Art. 1 – Purpose

A procedure of comparative evaluation by qualifications and public discussion is called for the recruitment of 1 position for Assistant professor with a full-time fixed-term employment contract for three-year - pursuant to art. 24, paragraph 3, letter a), of Law no. 240/2010, Sector competition reference 09/E2 - Electrical Energy Engineering, Scientific sector ING-IND/33 - Electrical Power Systems.

The job is activated for the needs of research and study of the Department of Electrical, Electronic and Information Engineering "Guglielmo Marconi" - DEI of the Alma Mater Studiorum - University di Bologna.

Serving primarily at the Department of Electrical, Electronic and Information Engineering "Guglielmo Marconi" - DEI, in Bologna.



The contract shall last three years. An annual gross total amount equal to \notin 36.840,00 will be corresponded to the researcher. The annual increase in this amount will be calculated according to the existing procedure for non-contracted personnel.

Art. 2 – Activities to be performed

The contract includes 350 hours of supplementary teaching and assistance to students, for each academic year covered by the contract. The contract shall not schedule hours of teaching on annual basis.

Concerning the provisions of art. 10 regarding fixed term researchers, issued by Rectoral Decree no. 344 of 29th march 2011 and amendments, the researcher's activities must be linked to the development of the project: "Development and validation of an algorithm for life and reliability estimation of HVDC cable systems". The position is financed under the "HORIZON EUROPE NEWGEN" project, GA 101075592 (resp. prof. Giovanni Mazzanti).

The activities shall consist in the development and validation - via the results of dedicated Accelerated Life Tests taken from the literature and/or carried out within the NEWGEN project - of a new comprehensive algorithm for life and reliability estimation of complete HVDC cable systems, including cable lengths, joints and terminations. The algorithm shall be able to: 1) treat the main working stresses that HVDC cable systems may encounter during qualification and service in hybrid AC/DC transmission grids, in particular the electro–thermal stress associated with: • constant electrical and thermal stress, corresponding to rated voltage and temperature; • load cycles of at constant voltage; • voltage transients, with focus on long Temporary Overvoltages and Voltage Polarity Reversals; 2) treat localized space charge distributions due to charge carrier injection/extraction from electrodes and bulk inhomogeneities of the dielectric.

Objective of the research project, during the period of the contract, will be: 1) Perform the required development work of the algorithm for life and reliability estimation of HVDC cable systems, manufactured both with existing and with new insulations developed in the NEWGEN project. 2) Perform the required experimental work for dielectric characterization and accelerated life tests of the insulation specimens provided by the other partners of the NEWGEN project. 3) Write a numerical code for the implementation of the developed algorithm. 4) Perform the required simulative work for validating the algorithm via comparison with the literature data and the experimental results obtained during the NEWGEN project. 5) Analyze and interpret results, drawing inferences and conclusions. 6) Use research results to write reports, papers and reviews in international journals and conferences. In particular, it is requested a minimum of: - 2 articles published in the IEEE Transacions and/or IEEE Access - 3 articles published in the proceedings of IEEE Conferences.

Art. 3 – Admission requirements

The selection is open to applicants, including those who come from non-EU countries, in possession of PhD or equivalent qualification obtained in Italy or abroad.

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AREA DEL PERSONALE

Applicants must be in possession of the aforementioned qualification at the date of the deadline for the submission of applications to the present selection.

In case of a Ph.D. obtained abroad, it is necessary to attach the decree of academic recognition of the degree (so-called decree of equivalence, as provided for by Article 74 of Presidential Decree No. 382/1980). This requirement applies to those who already possess it. Alternatively, the recognition decision of the degree for the purpose of participating in competitions for researcher positions in universities and public research institutions must be provided, in accordance with Legislative Decree No. 206/2007 - amended by Legislative Decree No. 15/2016 (for EU degrees) - and Presidential Decree No. 394/99, Article 49 (for non-EU degrees). In the meantime, before the competent authorities issue the recognition decision, it is possible to submit the receipt confirming the submission of the recognition request.

For more information on the procedures for the recognition of foreign degrees, it is recommended to consult the university's web page regarding "Non-academic recognition to participate in researcher competitions" at the following address: https://www.unibo.it/en/teaching/enrolment-transfers-and-degrees/recognition-of-a-foreign-degree-1.

In any case, the proof of the recognition of the foreign qualification must be produced to the administration prior to beginning service and, anyhow, within 180 days from the publication of the approval decree of the procedure on the official university bulletin, otherwise the exclusion from the position of winning candidate occurs.

Applications from professors, associate professors, or researchers with tenure will not be accepted, even if the applicant is not in service.

The selection is not open to any persons who are related by blood up to the fourth degree, to a professor working in the Department or in the Structure that proposed the activation of the contract, or to the Rector, to the General Director or a member of the Board of Governors of the University.

Furthermore, the selection is not open to anyone who has had research fellowship or fixed-term researcher contracts at the University of Bologna or any other state-funded, private-funded or distance-learning Italian university pursuant to articles 22 and 24 of Italian Law 240/2010, or with any other body listed in paragraph 1 of Art. 22 of Italian Law 240/2010 for a period which, summed to the foreseen duration of this contract, exceeds a total of 12 years, even if not consecutive. For the purposes of the duration of the above-described periods, in compliance with the laws in force any periods of maternity or sick leave shall not be calculated.

State employees may on unpaid leave for the entire duration of the contract, thus occupying a nontenure position without pay or social security contributions, in cases where such a position is allowed by the structure of origin, likewise without pay or social security contributions.

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ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA Area del personale

Art. 4 – Application procedure

The submission of the application for participation in the selection must be made exclusively via electronic procedure by accessing the following link:

https://personale.unibo.it

Call deadline: 20/10/2023 at 12:00 (noon, Italian Time)

The application must be submitted at the same time with the insertion of all the attached documentation required.

The following documents shall be enclosed to the electronic application form (preferably files:

PDF, other supported files: JPG, BMP, PNG):

1. identification document scanned (10MB max);

2. curriculum vitae with indication of the scientific-professional activity (10MB max);

3. reference letters, if any. Letters can be submitted directly by the candidate uploading it during the application, in case of possession (10MB max), or can be submitted by the referee. In this case candidates should provide the referee e-mail address. When the application is closed, the system will send an automatic request to the referee, referring to the candidate and the procedure. The referee must submit his letter through the link into the e-mail. At this address he/she will upload his/her letter by the application deadline in order to be considered as part of the candidate's application.

4. scientific publications (max 12: other supported files are TIFF and PS, 20MB max each document) which are already printed at the date of the call of application deadline, or scientific publications accepted for printed, together with the publisher acceptance letter. While uploading each document will be asked to indicate the title, the authors' names, the publisher, the year of publication. Optional information are the month, the ISBN code, the DOI code, the booklet number. Pursuant to Ministerial Decree 243/11, the PhD thesis is considered a publication, and thus if presented by the candidate it shall be included in the maximum number indicated (12).

While applying, applicants shall declare under their own responsibility:

- 1. surname and name;
- 2. place and date of birth;
- 3. citizenship;
- 4. residence address;
- 5. (if Italian citizens) registration to electoral rolls. If any, the reasons why he/she is not registered or cancelled from them;
- 6. that there have not been any criminal proceeding against them or current criminal proceedings; otherwise, applicants shall specify the proceedings against them (the date of the measure and the judicial authority that issued it) and pending penal proceedings. The existence of a previous criminal conviction is not in itself an impediment to hiring, unless it is a conviction for a crime that prevents the establishment of the employment relationship

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with the public administration as it derives from the interdiction from public office, o the inability to contract with the public administration, or the termination of the employment relationship (articles 28, 29, 32-ter, 32-quater, 32-quinquies of the Criminal Code, articles 3,4, 5, L . 97 of March 27, 2001). In other cases, the Administration will ascertain the gravity of the criminally relevant facts committed by the person concerned, for the purposes of access to public employment. This check is carried out with the aim of ascertaining the existence of the fiduciary element which constitutes the fundamental prerequisite of the relationship between employer and worker, as well as for the purpose of assessing the existence of the requisites of moral suitability and aptitude to carry out activities as a public employee;

- 7. to have or not to have benefited of non-voluntary leave periods due to maternity/paternity compulsory abstention or for serious health reasons, indicating the periods in case
- 8. possession of the qualification required pursuant to Art. 3 of this call for application and the mark obtained, if any;
- 9. to be fit to the employment the selection refers to;
- 10. that they are not, nor have been, professors, associate professors or researchers with tenure, even if not in service;
- 11. that they are not related by blood up to the fourth degree, to any professor working in the Department or in the Structure that proposed the activation of the contract, or to the Rector, Director General or a member of the Board of Governors of the University of Bologna;
- 12. elected e-mail address for the purpose of the participation in this contest;
- 13. Foreign citizens shall also declare to have a proper knowledge of Italian and to enjoy civil and political rights also in their origin countries or the reasons for loss of enjoyment.

Any modification shall be timely communicated to the Ufficio Ricercatori a tempo determinato. In case of technical problems, contact the support: assistenza.cesia@unibo.it .

Art. 5 – Applicants' obligations

The penalty of exclusion from the selection shall apply in the following cases:

• Non-compliance with the terms established for posting the application form;

• Lack of the requirement pursuant to art. 3 of the present call for application (qualification). All applicants shall be admitted to the contest and the Administration reserves the right to check that they actually are in possession of the requirements necessary to apply for the selection; the Administration may, at any time and even after the exams, order the exclusion from the selection hereto.

Art. 6 – Selection Board

The Selection Board will be appointed upon administration resolution and is composed of three full or associate professors belonging to the competition Scientific sector or, alternatively, to the same competition macro-sector for which the procedure is announced or of equivalent role in the case of

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components not coming from national universities, identified by the Department that proposed the activation of the contract.

Two of the members, external to the University, are drawn with the methods provided by the art. 8-bis of the Regolamento per la disciplina delle chiamate dei Professori di Prima e Seconda fascia in application of articles 18 and 24 of the Law 240/2010, issued with DR 977/2013 and s.m. A third component is identified by the Department Council among the professors inside or outside the University. As envisaged by art. 57 of Legislative Decree 165/2001, in order to guarantee equal opportunities between men and women for the access to work and work treatment, generally, at least one member is female.

The Commission appoints a president and a recording secretary between their members.

Notice of the appointment of the will be published on Alma Mater Studiorum - University of Bologna website.

Art. 7 – Selection procedure

The selection procedure is carried out by the Board after a preliminary evaluation of each candidate's qualifications, curriculum and scientific production, including the doctoral thesis, according to the criterion identified by the MUIR in D.M. 243/2011.

The candidates chosen in the preliminary evaluation based on their comparative merits - between 10 and 20% of the number of applicants and not less than 6 - will then be called for interview. The interview will consist of a discussion of the candidate's qualifications and scientific production and may take the form of a seminar open to the public. If the total number of candidates is 6 or less all candidates will be interviewed.

Any reference letters produced by the candidates will also be considered.

The discussion will take place in English. The discussion with the Commission will be carried out in public form and will be held in presence or electronically using the audio and video teleconferencing tool via the Teams platform (the workstation from which candidates will take the interview must be equipped with a webcam - essential for the recognition of the candidate - microphone and headphones and/or audio speakers).

Notice of the day, time and methods of conducting the public discussion (whether in presence or electronically via Teams) as well as the list of admitted candidates will be published at least 20 days before the discussion on the University website at: <u>https://bandi.unibo.it/docenti/rtd</u>.

The publication on the University website will constitute official notification to all applicants, without any obligation for any further communication.

The publication will be communicated by e-mail to the address indicated by the candidates in the application.

The Alma Mater Studiorum - University of Bologna does not assume any responsibility for the non-receipt or the not-read of the e-mail.

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It is up to candidates to keep themselves informed by consulting the University website page to find necessary information about selection.

Candidates attending the interview must bring a valid identification document with them.

EU citizens shall bring their passport or an identity document issued by their country of origin. Non-EU citizens shall bring their passport.

Art. 8 – Individuation of the winning candidate and recruitment

After the exams, the Board proceeds to identify the winner. On equal merits, priority will be defined according to the date of birth and the youngest one shall precede.

The procedure's acts are approved pursuant to an administration resolution and will be published in Alma Mater Studiorum – University of Bologna Official Bulletin.

The terms to raise any appeal shall start from the date of publication of said notice, in case the resolution has not been otherwise disclosed.

In case of the winner's withdrawal, the candidate who obtained the highest overall score after the winner will be called.

The Department of Electrical, Electronic and Information Engineering "Guglielmo Marconi" - DEI, will propose recruitment by a majority vote of the professors and associate professors of the Department and approved by the Board of Governors. The Department will also propose the date of commencement of employment contract.

Art. 9 – Employment procedures

Following the conclusion of the recruitment procedure referred to in art. 8, the candidates will be asked to sign a fixed-term contract of full-time employment.

The employment relationship is governed by a personal contract, statutory laws and EC regulations. The personal contract shall specify any reasons for which it might be terminated, as well as the relevant periods of notice. In any case the contract will be terminated immediately and without notice in the event of the cancellation of the recruitment procedure to which it is inalienably linked. The trial period shall last three months. At the end of the period, unless the employment relationship has been terminated by either of the parties, the employee is confirmed for service and the whole period worked from the beginning of the contract shall be calculated for seniority purposes.

Art. 10 – Documentation required for the participation in the public selection and for hiring purposes

For the purpose of participating in the public selection, documents and qualifications in English, French, German, and Spanish may be submitted in their original language.

However, scientific publications related to the subject area of the competition, in the case of selection procedures in language-related fields, may also be submitted in their original language. Documents and qualifications in other languages must be presented in their original language, accompanied by a certified translation in Italian or English.

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The translation must be certified as faithful to the foreign text and can be carried out by the competent diplomatic or consular representation or by an official translator. As for the documentation required for employment purposes, any acts or documents drafted in a foreign language must be accompanied by a certified translation into Italian, faithful to the foreign text, which can be carried out by the competent diplomatic or consular representation or by an official translator.

Art. 11 – Rights and duties of a researcher with a fixed-term contract of employment

In accordance with the rights and duties of public employees prescribed by the Italian civil code, on signing the contract the researcher will be expected to perform all those activities mentioned in Art. 2. These activities will be carried out in respect of the existing hierarchy and in coordination with existing programmes and research projects.

The researcher will perform the requested activities in person, substitution is not permitted.

Existing Italian laws concerning maternity, injury and illness will be applied.

The researcher undertakes to fulfill the obligations of conduct prescribed by the code of conduct, issued by DPR 62/2013.

Art. 12 – Processing of personal data and person in charge for the contest

Information about the processing of personal data (provided during the application process) are available at the link: <u>www.unibo.it/privacy</u> (Notice for participants in contests and selections published by the University).

The responsible person for the administrative procedure (RPA) is Dr. Michele Menna.

For any further information related to the competition procedure, you can contact the Office of Fixed-Term Researchers - University of Bologna - Piazza Verdi, No. 3 - Tel. +39 051 2098972 - 2098958 - 2099980; email: apos.ricercatoritempodeterminato@unibo.it; Office Manager Dr. Gianfranco Raffaeli.

Art. 13 – Reference Regulations

The present notice is issued based on the following regulations:

- Art. 24 of Law no. 240 dated December 30th, 2010;
- D.P.R. (Decree of the President of the Republic) no. 445 dated December 28th, 2000;
- Leg. Decree no. 165 dated March 30th, 2001;
- Law 241/1990;
- Regulation for fixed-term researchers of Alma Mater Studiorum University of Bologna, (link:

http://www.normateneo.unibo.it/NormAteneo/Regolamento_ricercatori_a_tempo_deter minato.htm).

For the Director Digitally signed by Giovanni Longo

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