



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

**Purpose: Public comparative procedure for the recruitment of 2 researchers with a full-time fixed-terms employment contract for three years, pursuant to art. 24 paragraph 3 letter a) (junior) of Law no. 240/2010, as part of the National Recovery and Resilience Plan (PNRR), Mission 4 "Education and Research" - Component 2 "From Research to Business".**

## THE DIRECTOR

- WITH REFERENCE TO** the Regolamento UE of February 12th, 2021, no. 2021/241, which established the Dispositivo per la Ripresa e la Resilienza;
- WITH REFERENCE TO** the National Recovery and Resilience Plan (PNRR), presented to the European Commission on April 30<sup>th</sup> 2021 pursuant to art. 18 of Regulation (EU) no. 2021/241 and approved by decision of the ECOFIN Council of July 13<sup>th</sup> 2021 notified to Italy by the General Secretariat of the Council with note LT161 / 21 of July 14<sup>th</sup> 2021, which plan consists of 6 missions and 16 components, and in particular considering the Mission 4 Component 2 (M4C2) "From Research to Business" which aims to support investments in research and development, to promote innovation and the diffusion of technologies, to strengthen skills by promoting the transition to a knowledge-based economy , covering the entire supply chain of the research and innovation process, from basic research to technology transfer;
- WITH REFERENCE TO** the Projects approved under the PNRR and related to the following notices:  
«Public notice for the presentation of intervention proposals for the Strengthening of research structures and creation of "national samples" of R&D on some Key Enabling Technologies to be financed under the National Recovery and Resilience Plan», announced with Directorial Decree n.3138 of 16/12/2021 (so-called National Championships Announcement);  
«Public notice for the presentation of intervention proposals for the creation of "Partnerships extended to universities, research centers, companies for the financing of basic research projects"», announced with Directorial Decree no. 341 of 15th March 2022, (so-called Extended Partnership Call);
- WITH REFERENCE TO** the notice published in the Official Gazette - 4th special series of 3<sup>rd</sup> march 2023 with which the University of Bologna has published a selection notice for the assignment of fixed-term

research contracts of type a), pursuant to law no. 240, art. 24, paragraph 3, letter a) (RTDA) to be applied to PNRR resources;

**WITH REFERENCE TO** the rules referred to in Article 13 of the present call for application;

**WITH REFERENCE TO** the resolutions of the Departments for which the positions are activated, adopted pursuant to art. 17 of Reg. no. 344 of 29<sup>th</sup> March 2011;

**WITH REFERENCE TO** the resolution of Board of Governors of 24<sup>th</sup> October 2022

## ORDERS

### Art. 1 – Purpose

Procedures of comparative evaluation by qualifications and public discussion are called for the recruitment of 2 researchers with a full-time fixed-term employment contract for three-year pursuant to art. 24 paragraph 3 letter a) (junior) of Law no. 240/2010.

An annual gross salary equal to € 36.840,00 will be corresponded. The annual increase in this amount will be calculated according to the existing procedure for non-contracted personnel.

The contracts are activated with resources from the National Recovery and Resilience Plan (PNRR).

The specific elements of each position are defined in the relative attachment. In the case of procedures for the selection of multiple positions, the specific elements of each of them will be specified in the relative attachment.

In the following articles, where there are specific elements of each selection, reference is made to the attachments.

### Art. 2 – Activities to be performed

The researchers will have to carry out 350 hours of supplementary teaching and assistance to students, for each academic year covered by the contract.

The hours of frontal teaching on annual basis are indicated in each attachment.

Concerning the provisions of art. 10 of the Reg. regarding fixed term researchers, issued by Rectoral Decree no. 344 of March 29<sup>th</sup> 2011 and amendments, the project that each winner will have to develop and the scientific productivity objectives are explained in the relative attachment.

### Art. 3 – Admission requirements

The selection is open to those who come from non-EU countries. Each attachment specifies the necessary requirement to be able to participate in the relative selection.

In particular, either the possession of the PhD or, for the sectors concerned, of a medical specialization diploma may be required.

In any case, applicants must be in possession of qualification at the date of the deadline for the submission of applications to the present selection.

In case of PhD obtained abroad, please include a statement of equipollence with the Italian PhD title pursuant to art. 74 of D.P.R. 382/1980 or the statement of equivalence with the Italian PhD title pursuant to art. 38 of Legislative Decree. N. 165/2001.

In case of High School of Specialization obtained abroad, please include a statement of equivalence with the Italian title pursuant to art. 38 of Legislative Decree. N. 165/2001, or art. 74 of D.P.R. 382/1980.

In both cases, pending the release of the only result of equivalence by the designated offices, it is possible to produce the delivery receipt of the request instance of the same (for the release procedure, see page:

<http://www.cimea.it/it/servizi/procedure-di-riconoscimento-dei-titoli/riconoscimento-non-accademico.aspx>).

In any case, the proof of the equivalence 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 that proposed the activation of the single contract, or to the Rector, Director General 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 non-tenure 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.

#### **Art. 4 – Application procedure**

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

<https://personale.unibo.it>

**Regarding all procedures, the deadline is the following: 21<sup>st</sup> March 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 (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 editor acceptance letter. While uploading each document will be asked to indicate the title, the authors' names, the editor, 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 of publications indicated in each attachment.

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 with the public administration as it derives from the interdiction from public office, or 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 that proposed the activation of the single 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](mailto: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 and procedures for submitting the application form indicated in article 4 of this call for applications;
- Lack of the qualification required to participate in the selection indicated in each attachment.

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 selections; the Administration may, at any time and even after the exams, order the exclusion from the selection hereto.

#### **Art. 6 – Selection Board**

With regard to each procedure, 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 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 each Commission will be published on Alma Mater Studiorum - University of Bologna website.

### **Art. 7 – Selection procedure**

With regard to each 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 MIUR 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 the language indicated in each attachment.

With regard to each procedure, the discussion with the Commission will take place starting from 3<sup>rd</sup> April 2023, and it will be carried out in public form and electronically using the audio and video teleconferencing tool via the Teams platform (the workstation from which candidates will take do the interview must be equipped with a webcam - essential for the recognition of the candidate - microphone and headphones and/or audio speakers).

With reference to each procedure, the notice of the day and time in which the public discussion will take place will be announced together with the publication of the list of admitted candidates on the University website at: <https://bandi.unibo.it/docenti/rtd>.

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.

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 winner and recruitment**

With regard to each procedure, 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.

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

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 the forementioned notice, in case the resolution has not been otherwise disclosed.

The Department that activated the single position 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 start date of the employment relationship.

### **Art. 9 – Employment procedures**

Following the conclusion of the recruitment procedure referred to in art. 9, the candidates will be asked to sign a fixed-term contract of full-time or defined-time employment.

The employment relationship is governed by a personal contract, statutory laws and EC regulations.

In the event that the research project is in the medical field and provides for the performance of medical activity, the latter is governed by the national collective agreement for medical staff and by the specific appointment conferred by the hospital facility where the researcher will carry out the activity.

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 purposes of participation in the public selection, documents and qualifications in English, French, German and Spanish can be produced in the language of origin. Documents and qualifications written in other languages must be presented in the original language with an Italian or English translation attached. The translation must be true and

correct, written by an Italian consular, a qualified diplomatic representative, or an official translator.

Regarding the documentation necessary for hiring purposes, all the documents written in any foreign language shall be accompanied by a true and correct translation into Italian, written by an Italian consular, a qualified diplomatic representative, or 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 for each position in the relative attachment as well as to carry out the research periods in the company and abroad (the latter only where applicable).

In the event that medical assistance services are provided, the researcher will also assume rights and duties related to this activity.

These activities will be carried out in respect of the existing hierarchy and in coordination with existing programmes and research projects.

The researchers 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: [www.unibo.it/privacy](http://www.unibo.it/privacy) (Notice for participants in contests and selections published by the University).

The person in charge of the contest is Mr. Gianfranco Raffaelli, Responsabile dell'Ufficio Ricercatori a tempo determinato - Piazza Verdi n. 3 - 40126 Bologna.

For further information, please contact: Ufficio Ricercatori a tempo determinato dell'Alma Mater Studiorum - Università di Bologna – Piazza Verdi n. 3 - Tel. +39 051 2099980 – 2098958 - 2098972, Fax 051 2086163; e-mail: [apos.ricercatoritempodeterminato@unibo.it](mailto:apos.ricercatoritempodeterminato@unibo.it).

### **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\\_determinato.htm](http://www.normateneo.unibo.it/NormAteneo/Regolamento_ricercatori_a_tempo_determinato.htm)).

For the Director of Area del Personale  
f.to digitalmente Giovanni Longo



**Attached documents:**

- Summary table of activated positions;
- Attachments:
  1. Academic Discipline CHIM/03, 1 position, Department Of Chemistry "Giacomo Ciamician" - CHIM;
  2. Academic Discipline ICAR/03, 1 position, Department Of Medical and Surgical Sciences – DIMEC;

**SUMMARY TABLE OF ACTIVATED POSITIONS**

Department	Call	CUP	Project	Project Code	Academic Recruitment Field	Academic Discipline	nr. Positions	Campus
Chemistry "Giacomo Ciamician" - CHIM	CN	J33C22001120001	MOBILITY	CN00000023	03/B1 - Principles of Chemistry and Inorganic Systems	CHIM/03 - General and Inorganic Chemistry	1	Ravenna
Medical and Surgical Sciences - DIMEC	PE	J33C22002840002	PE3 - RETURN	PE00000005	08/A2 - Sanitary and Environmental Engineering, Hydrocarbons and Underground Fluids, Safety and Protection Engineering	ICAR/03 - Sanitary and Environmental Engineering	1	Bologna

## ATTACHMENT 1

The specific elements of this procedure are as follows:

- **Department:** Department of Chemistry "Giacomo Ciamician" - CHIM
- **SC:** 03/B1 – Principles of Chemistry and Inorganic Systems
- **SSD:** CHIM/03 – General and Inorganic Chemistry
- **Number of positions:** 1
- **Main place of employment:** Ravenna
- **Number of hours of frontal teaching per year:** 56
- **Medical assistance services, if required:** Not required
- **Costs indication:** 36.840,00 gross euros per year
- **Financial coverage:** PNRR funds – Call CN – Project MOBILITY, “Sustainable Mobility Center (Centro Nazionale per la Mobilità Sostenibile)” – Code CN00000023
- **CUP:** J33C22001120001
- **Project manager:** Francesca Soavi
- **Project title:** Development of materials and production and recovery processes of current and next-generation electrochemical energy storage/conversion cells of improved performance and sustainability.
- **Duration of contract:** 36 months
- **Brief description of the project:** Development of high-power cells through three main strategies, which will be conducted with attention to the sustainability of materials and processes: a) development of lithium and post-lithium cell materials operating at high C-rates (electrodes, separators, electrolytes, stable at high operating temperatures typical of power applications), b) development of alternative electrode materials characterized by high process kinetics (including capacitive systems such as lithium-ion capacitors, hybrid supercapacitors) and their integration, c) analysis and diagnosis ( ex-situ, in-situ and in-operando) of materials and cells under high power operation using advanced techniques. Technology transfer of the project results through collaborations with industrial partners and/or spin-offs.
- **Objective of the research project:** The researcher will contribute to the development of the sustainable manufacturing, re-use and recycling of high-performance electrochemical cells for energy storage/conversion. This original contribution will lead to patent filing and therefore to the creation of industrial property rights owned by the University of Bologna, and/or to publications in qualified editorial journals. It is expected to publish at least three scientific papers in Scopus indexed, international journals with IF > 4.



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- **Admission requirement:** PhD
- **Maximum number of publications:** 12
- **Language in which the interview will take place:** Italian
- **Foreign language:** English

## ATTACHMENT 2

The specific elements of this procedure are as follows:

- **Department:** Department of Medical and Surgical Sciences - DIMEC
- **SC:** 08/A2 – Sanitary and Environmental Engineering, Hydrocarbons and Underground Fluids, Safety and Protection Engineering
- **SSD:** ICAR/03 – Sanitary and Environmental Engineering
- **Number of positions:** 1
- **Main place of employment:** Bologna
- **Number of hours of frontal teaching per year:** 60
- **Medical assistance services, if required:** Not required
- **Costs indication:** 36.840,00 gross euros per year
- **Financial coverage:** PNRR funds – Call PE – Project PE3 – RETURN, “Multi-risk science for resilient communities under a changing climate” – Code PE00000005
- **CUP:** J33C22002840002
- **Project manager:** Francesco Saverio Violante
- **Project title:** Innovative methodologies and proofs of concept for producing fine scale and target-oriented predictions of climate and environmental variables for risk assessment and mitigation.
- **Duration of contract:** 36 months
- **Brief description of the project:** The researcher will collaborate in the definition of innovative methodologies and feasibility tests for the production of fine-scale and goal-oriented forecasts of climatic and environmental variables for risk assessment and mitigation environmental. To this end, he/she will employ a series of techniques including the measurement and evaluation of variables related to climate change and environmental pollution useful for defining population exposure to these factors. During the development of the project, you he/she has to use electron microscopy and spectroscopy techniques that he/she will perfect through the execution of searches for foreign materials within human tissues. He/She will interact with the mass spectrometry laboratory which will carry out the analyzes of soluble pollutants in biological liquids, collaborating in the research, development and optimization of innovative strategies for environmental and biological sampling of the materials to be subjected to such determinations.
- **Objective of the research project:** During the project the researcher must publish at least 12 articles in peer-reviewed journals and attend at least 6 national or international meetings relevant for the subject of the project.
- **Admission requirement:** PhD



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- **Maximum number of publications:** 12
- **Language in which the interview will take place:** Italian
- **Foreign language:** English