



Excerpt from the Rector's decree n. 65/2024

Call for the selection of n. 1 Junior Research Fellows

(Under the Italian Law 240/2010 article 24, subparagraph 3, point a)

The University of Pisa announces a call for 1 Junior Fixed-Term Research Fellows for the Departments and the Academic Fields or Academic Disciplines as listed in Annex A.

The fixed-term contract is to carry out research activities, teaching, integrative teaching activities and services for students, for a 350 hours commitment, on a full-time basis.

The Junior Research Fellow is required to perform lectures for a minimum of 36 up to a maximum of 60 hours per academic year, allocated as an institutional assignment for Bachelor's and Master's degree programs, Specialization Schools and PhD programs. It is possible to provide a further derogation up to a maximum of 72 hours, in order to avoid an excessive partitioning of teaching modules.

Contract duration: 3 years

Deadline for application 26/02/2024, 1 p.m.

Admission requirements:

PhD or equivalent academic qualification awarded in Italy or abroad and recognized as eligible for admission.

As for a qualification awarded abroad, equivalency or comparability documentation has to be provided as stated under:

D.Lgs.165/2001, article 38:

http://www.funzionepubblica.gov.it/sites/funzionepubblica.gov.it/files/modulo_equivalenza_Titoli_Accademici.pdf

Or under:

D.P.R. 382/1980, article 74:

<https://www.unipi.it/index.php/titoli-accademici-esteri>

As for an equivalent or comparable academic qualification, the candidate shall be admitted within the application's deadline and shall provide the qualification equivalency or comparability before the signing of the contract.

Candidates are required to declare the following:

1. That they enjoy full rights of citizenship in their home State.
2. That they have not been convicted or found guilty of any criminal offence; in the event of any conviction, it is mandatory to provide the details of the relevant judgments and any pending criminal proceedings.

3. That they have not been dismissed or dispensed from employment by a Public Administration office for persistent unsatisfactory performance; that they have not been declare disqualified from State employment, in compliance with article 127, first paragraph, letter d) of the Consolidation Act of Provisions concerning State civil servants approved by Presidential Decree no. 3 of 10 January 1957.

4. That they are registered on the electoral roll.

5. That they have knowledge of the Italian language.

No admission to this selection for:

- Professors or Research Fellows with permanent position at the university, currently employed or currently retired.
- Fixed-term Research Fellowship or Post PhD research grants at the University of Pisa or other Italian universities, either public, private or online, and other public institutions (Under the Italian Law Italian Law n. 240/2010, articles 22 and 24) for a period that, totaled over this contract, would exceed 12 years altogether, even when not consecutive. As for the duration of the working period mentioned above, parental leave or medical leave, are excluded (under the existing legislation).

Applications:

Applications are to be submitted online only, using the following link: <https://pica.cineca.it/unipi> or shall be invalid. It is necessary to have an email address to login and complete the application.

Applicants should fill in all the required data and upload all documents in PDF format.

The system allows saving a draft of the application within the application deadline. The system will register the online application date and send a receipt with an automatic e-mail reply. After deadline, the system will not allow login nor application submission.

In order to be valid, application shall include all the required data, applicant's signature and a valid identification document.

Each application will be assigned a tracking number to be cited in all subsequent communications, together with the selection code provided by the application form.

Applicants undertake to communicate in writing any variations of what declared in the application form.

The communication shall be edited in PDF format, signed and forwarded to the University of Pisa Rector via the Italian certified e-mail system address (P.E.C. Posta Elettronica Certificata): protocollo@pec.unipi.it or via e-mail at: concorsi@adm.unipi.it. Applicant's valid identification document shall be annexed.

For further information on application submission, please refer to concorsi@adm.unipi.it

For any IT malfunctioning please refer to unipi@cineca.it.

Applications shall be completed with the following annexes:

1. A self-attested Curriculum of the personal didactics, teaching and scientific activities, dated and signed;
2. The Publications applicant considers eligible for this selection with the corresponding list dated and signed;

3. A complete list of all Publications, dated and signed;
4. A copy of the fiscal code (if applicable) and identification card/passport, dated and signed;

All publications should not exceed 30 megabyte and are to be submitted in PDF format only, using the specific section of the application form.

Selection procedure:

A Rector's Decree will appoint the Selection Committee, consisting of three members.

The selection will be made according to a preliminary assessment of the candidates with an accurate and evidenced analytic evaluation of the Curriculum, of qualifications and scientific results, including PhD thesis.

After the preliminary assessment, the candidates that have comparatively proven to be the most meritorious, will be admitted to an open interview; they will represent between 10 and 20 % of the total and will be not less than six. The interview will concern applicant's qualifications and scientific results. In the event the number of applicants is six or less, all candidates are admitted.

Information about date, time, list of candidates admitted, and the conditions of the assessment interview will be published on the University website at the following link: <https://bandi.unipi.it/public/Bandi?type=RIC>, in the specific section reserved to the selection, 45 days after the deadline for the submission of the applications (with a fifteen days' notice guarantee).

The publication on the University website is to be regarded as convocation notice for the participants to the selection, who must show the day and time indicated; no further communications will be published. The failed attendance to the interview will be considered as a voluntary waiver to the selection.

The discussion of qualifications and publications, even if it takes place in the form of a seminar open to the public, and the possible test to verify the linguistic skills referred to in article 7 of the relevant University Regulations, will take place in person or, where adequately motivated, remotely or in mixed mode, in compliance with the provisions of Presidential Decree no. 862/2022 of 23 May 2022.

During the discussion of qualifications and publications, an oral test will also be held to ensure adequate knowledge of the foreign language indicated in the announcement.

The Commission will declare the candidate's suitability or otherwise in terms of knowledge of the language.

Please note that the English version is given as a matter of courtesy, for the only purpose of information. It cannot be legally used in the event of a dispute or a claim arising from the interpretation of this translation and concerning the contents, a possible uncertainty, contradiction or discrepancy. Should this occur, the Italian version of the call shall prevail as the only valid. For full Italian text see: <https://bandi.unipi.it/public/Bandi?type=RIC>

Department of Civil and Industrial Engineering

Competition sector **09/C2 - THERMAL SCIENCES, ENERGY TECHNOLOGY, BUILDING PHYSICS AND NUCLEAR ENGINEERING**

SSD ING-IND/19 - NUCLEAR POWER PLANTS

Nr. of position available: 1

Focus of research:

The objective of the research is the theoretical and experimental study of innovative safety systems and materials for fission and fusion plants and packaging system for the transport and storage of radioactive waste, from a thermo-mechanical and dynamic-structural point of view. In particular, the research will concern the main aspects of safety design and its optimization, by innovative approaches and predictive methodologies, such as HPC, AI, machine learning etc., to support the extension of plants operation and improve their durability.

The research will be carried out using 1) experimental and computational equipment available at the laboratories of DICI (particularly the LIN laboratory) and of CISUP, 2) structural, dynamic (i.e., FEM) and system codes.

Furthermore, the activity will be carried out in collaboration with national and international universities and research centres.

Scientific productivity objectives:

The scientific productivity objectives will be:

- the proposal, implementation, and coordination of research activities in the field of nuclear fission and fusion reactors, developed in national and international framework in collaboration with Italian and foreign institutions.
- participation in European, national, and international research projects and technology transfer aimed at improving the operation, reliability, and safety of nuclear materials and (fission and fusion) plants.
- dissemination of results through publication in indexed international scientific journals and participation in national and international conferences in the sector.

Location of Research Activities:

Department of Civil and Industrial Engineering

Teaching activities:

Teaching, student tutoring, supervision of B.S. (Laurea), M.S. (Laurea Magistrale) and PhD theses in Nuclear Engineering, and other institutional activities for a total of 350 hours per year under full-time regime, of which 60 hours per year of teaching (lessons) and/or teaching assistance for the specific courses of the Academic Discipline ING/IND 19 Nuclear Power Plants foreseen by the didactic programming of the M.S. (Laurea Magistrale) Degree in Nuclear Engineering

Candidates will be required to demonstrate an adequate knowledge of English language.

Candidates may present a maximum number of 12 scientific publications.