



UNIVERSITÀ DI PISA

Excerpt from the Rector's decree n. 841/2020

Call for the selection of n. 2 Junior Research Fellows

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

The University of Pisa announces a call for 2 Junior Fixed-Term Research Fellow for the Department and the scientific area or sector as listed in Annex A1 and A2.

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 60 hours per academic year, with a 10% variability, allocated as an institutional assignment for Bachelor's and Master's degree programmes, Specialization Schools and PhD programmes. It is possible to provide a further 10% extra derogation, up to a maximum of 72 hours, in order to avoid an excessive partitioning of teaching modules.

Contract duration: 3 years

Gross annual salary: € 35.733,00

Deadline for application: 07/08/2020, 1 p.m.

Admission requirements:

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

medical specialization, for the sectors concerned

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:

http://www.miur.gov.it/documents/20182/0/Equipollenza_Dottorato_ricerca_dpr382.pdf/f5ff98ae-ddff-4166-a822-83ef1b57c7f0

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.

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, totalled 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@cinca.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. All admitted candidates will be summoned by registered post at least twenty days before the interview; the failed attendance to the interview will be considered as a voluntary renunciation.

During the interview, all candidates will be furthermore tested on the foreign language skills requested by the selection.

In compliance with the provisions adopted following the COVID-19 epidemiological emergency, interviews will take place on virtual mode to ensure the simultaneous connection between the members of the Commission and the candidates, under the regulations on the protection of personal data for confidentiality conservation.

During the interview it will be forbidden the audio / video recording through the IT platforms used as well as the broadcasting of the audio / video recording made with tools other than the platform.

The interview disclosure will be guaranteed inviting all candidates and any third part who has requested, with a link to the event; the link will be published at <https://www.unipi.it/index.php/concorsi-gare-e-bandi> in the section "Prove e colloqui in modalità telematica - Aule virtuali" and will allow the connection to the telematic session.

The list of candidates admitted to the interview will be published on the university website at <https://www.unipi.it/index.php/concorsi-gare-e-bandi> in the section dedicated to the procedure in this call.

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://www.unipi.it/ateneo/bandi/ricercat/ricercator/index.htm>

(1) If applicable

Annex A/1

Department of Civil and Industrial Engineering

Admission Examination Sector: **09/C2 - Thermal sciences, energy technology, building physics and nuclear engineering**

Disciplinary Scientific Sector: **ING-IND/19 Nuclear power plants**

Nr. of position available: 1

Focus of research:

Theoretical-experimental analyses of safety systems of nuclear fission and fusion reactors. The researcher will have to analyze the safety systems of nuclear fusion reactors from a numerical and experimental point of view, with particular reference to the ITER reactor and the vapor pressure suppression system of the Vacuum Vessel

Scientific productivity:

The researcher will have to collaborate on the experimental program, underway at the DICl laboratories, carried out on a reduced scale steam pressure suppression system operating at sub-atmospheric pressure conditions. He will have to assess the scale laws and the extrapolation of the results to the full scale safety system. The results of the research program should be illustrated in scientific articles on international scientific journals and presented at national and international conferences

Head office:

Department of Civil and Industrial Engineering - Laboratorio Bruno Guerrini - San Piero a Grado (Pi)

Specific didactic activity of the contract:

The teaching activity will concern the Master's Degree in Nuclear Engineering and in particular the co-teaching of Fusion Reactor Engineering and Nuclear Construction courses

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

Candidates may present a maximum number of **12** scientific publications

Annex A/2

Department of Civil and Industrial Engineering

Admission Examination Sector: **09/C2 - Thermal sciences, energy technology, building physics and nuclear engineering**

Disciplinary Scientific Sector: **ING-IND/19 Nuclear power plants**

Nr. of position available: 1

Focus of research:

Issues typical of the Nuclear Plant sector, with particular reference to thermal-hydraulic problems related to the operation and safety of innovative and generation IV fission nuclear reactors and of fusion nuclear reactors. The researches will be performed mainly through modelling, simulation and the possible participation in the design and analysis of relevant experiments

Scientific productivity:

The activity involves the preparation of scientific papers, both for international journals and for their presentation at national and international conferences, and the participation in possible national and international research projects in collaboration with public or private bodies with main reference to innovative fission and fusion nuclear reactors

Head office:

Department of Civil and Industrial Engineering

Specific didactic activity of the contract:

Teaching and tutoring activities concerning the matters of the scientific and disciplinary sector ING-IND/19 (Nuclear Plants) in the frame the Master of Science Programme in Nuclear Engineering and of the Research Doctorate Programme in Industrial Engineering

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

Candidates may present a maximum number of **12** scientific publications