



## **Call for the selection of 1 research contract**

The University of Pisa announces public selection procedures for the award of 1 research contract in accordance with Article 22 of Law 240/2010 as set out in Annex A) to this call, in which the information sheets indicating the reference structure, the description of the research project, the specific responsibility within the project and the functions to be performed, as well as the scientific disciplinary area and information on the interview, are provided.

**Deadline for submitting the application:** 7<sup>th</sup> april 2026 at 1.00 p.m.

**Contract duration:** 24 months

**All-inclusive annual administrative gross amount:** € 54.910,00

### **Admission requirements:**

- A PhD or medical specialisation degree.

Students enrolled in the third year of a PhD programme or in the final year of a postgraduate medical specialisation programme are also eligible to apply, provided they obtain their degree within six months from the publication date of the selection notice. Failure to meet this requirement candidates will lose the right to be awarded the research contract.

### **Documents to be attached:**

The application must include:

- a) A research development project related to the research project specified for the selection in Annex A);
- b) A comprehensive scientific-professional curriculum containing all the necessary elements for assessing prior research activities and any relevant work experiences, in connection with the content of the research project under consideration (specifically indicating: date/duration, place of completion, etc.);
- c) For individuals with a foreign doctoral degree, an equivalence decree or determination; if the candidate already holds one, a copy of the foreign doctoral degree or a suitable certification issued by the foreign institution, confirming the components, duration, and activities of the doctoral programme undertaken to achieve the doctoral degree;
- d) Additional documents that the candidate deems useful for the selection purposes;
- e) Publications that the candidate considers relevant for the selection, considering the maximum number set for the selection, as indicated in Annex A), with a list signed by the candidate;
- f) Photocopies of the tax code and a current valid identification document.

**Candidates must submit the publications they intend to present exclusively in PDF format through the dedicated section of the online procedure.**

**Each publication shall not exceed 30 megabytes.**

**Publications not enclosed with the application will not be considered by the Selection Board. Lists with links to texts are not allowed as a replacement for publications.**

### **Applications**

Applications must be submitted online only, using the following link: <https://pica.cineca.it/unipi/>

or shall be invalid. An e-mail inbox is required to login and complete the application.

Candidates can login into PICA platform using the digital identifier SPID (Sistema Pubblico d'Identità Digitale - Public Digital Identity System), selecting the University of Pisa among the available Institutions.

If candidates have no SPID, they can request it according to the procedures set forth on the website [www.spid.gov.it](http://www.spid.gov.it).

Candidates can also login with the credentials issued directly by PICA platform (please note: in order to apply online, the system requires an e-mail inbox for self-registration), with their LOGINMIUR, REPRISE or REFEREES account.

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

The system allows saving an application draft within the application deadline, recording the online application's date and sending a receipt with an automatic reply. After the deadline, the system will not allow login nor application submission.

Each application will be assigned a unique identification number to be referred to in all subsequent communications, along with the selection code provided by the application form.

Under penalty of exclusion, the application shall be valid only if including all the required data, the copy of a valid ID and:

- if submitted without accessing with digital identifier SPID, the applicant's signature is compulsorily required;
- If submitted by accessing with digital identifier SPID, the application will be automatically processed by the system and the applicant's signature is not required.

Applicants undertake to promptly 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 Rector of the University of Pisa by the Italian certified e-mail system address ( P.E.C. Posta Elettronica Certificata): [protocollo@pec.unipi.it](mailto:protocollo@pec.unipi.it) or emailed to [concorsi\\_contratti@unipi.it](mailto:concorsi_contratti@unipi.it) , within the application's submission deadline.

An applicant's valid identification document shall be annexed.

For further information on application submission, please refer to [concorsi\\_contratti@unipi.it](mailto:concorsi_contratti@unipi.it).

For technical problems support only, please click on the bottom link available at <https://pica.cineca.it/unipi>.

#### **Selection procedure:**

For the selection under Annex A) the Director of the Department appoints a Selection Board consisting of the head of the research project and two other members.

Candidates are assessed comparatively on the basis of the following elements:

- a) Quality, originality and innovativeness of the research development project, with reference to the research project under consideration;
- b) Relevance and significance of the research activities previously carried out, as well as any work experience, in relation to the contents of the research project subject to the selection, in addition to documented qualifications (such as, for example, grade point average, postgraduate diplomas, any contracts, scholarships, conference presentations, and other documented qualifications);
- c) Quality, originality and innovativeness of the attached publications, as well as their relevance to the research project under consideration;
- d) An interview aimed at assessing the knowledge of the basic subjects of the scientific disciplinary sector to which the subject of the research project belongs, the suitability for carrying out the research activity under the contract and for the implementation of the research project, as well as the evaluation of knowledge of the English language and/or other languages relevant to the research (as reported in the Annex A). During the interview, the Selection Board also assesses the knowledge of the Italian language for foreign candidates.

The Selection Board has 100 points available for the comparative evaluation of the candidates: 60 points can be allocated for the criteria mentioned above under a), b) and c), and 40 points for the interview.

The Selection Board may stipulate a minimum score below which eligibility cannot be awarded.

Candidates are summoned for the interview on the day and time specified in the Annex A) for the procedure.

Failure to attend an interview by a candidate is considered an explicit indication of their intention to withdraw from the selection process.

Applicants for this selection are required to consult the University website at <https://bandi.unipi.it/public/Bandi?type=COR> (on the selection procedure page) during the two days preceding the date set for the interview.

On the University website (<https://bandi.unipi.it/public/Bandi?type=COR>), in the section dedicated to the procedure, the following will be published:

- Assessment scores for criteria a), b) and c);
- The list of candidates admitted to the interview;
- Practical instructions for carrying out the interview and/or any details should the interview be rescheduled;
- The procedure approval decree and the merit ranking that takes into account the scores achieved by the candidates.

The prospective doctoral or postgraduate student may only enter into a contract after obtaining a doctoral or postgraduate medical degree. In the event that the PhD candidate or postgraduate student fails to obtain the degree within six months from the publication date of the selection notice, they will lose the right to be awarded the research contract.

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 should prevail as the only valid. For full Italian text see: <https://bandi.unipi.it/public/Bandi?type=COR> (on the selection procedure page).

Selection code - CDR\_eco2026\_1

Department of Economics and Management

GSD 13/ECON-07 "Management"  
SSD ECON-07/A "Management"

Project SUSTECH  
CUP: I53C25002430006

Head of the Research Project  
Prof.ssa Elisa Giuliani

Research project:

**Accelerating SUSTainable TECHnological trajectories with computational chemistry and machine learning [SUSTECH]**

SUSTECH addresses a central paradox of modern societies: while synthetic chemicals underpin major technological and economic advances, many pose significant risks to human health and environmental sustainability. The project aims to understand how technological, organizational, and economic pathways lead to the development and commercialization of hazardous compounds, and how innovation can be redirected toward safer alternatives. Combining computational chemistry and machine learning with the economics of innovation, SUSTECH analyzes molecular structures disclosed in patents to predict hazard-related characteristics and link them to innovation strategies and incentive structures. By identifying potentially misguided incentives and developing predictive tools for early-stage hazard assessment, the project provides an evidence base for policy interventions that steer chemical innovation toward sustainability. SUSTECH brings together complementary expertise in predictive molecular algorithms, innovation and patent analysis in chemistry and pharmaceuticals, and sustainability-oriented science and technology policy.

**Specific responsibilities within the project and functions to be performed:**

The postdoctoral researcher will be a key contributor to Task 3 - The Impact Lab, with a primary focus on RQ 3.2 (Better policies) and close interaction with Task 3.1 (Better data). The postdoc will work at the interface of policy analysis, innovation studies, and data-driven tools developed within the project, helping to translate predictive chemical knowledge into participatory and anticipatory governance frameworks.

Specifically, the postdoctoral researcher will:

- Contribute to the design and analytical framing of the Impact Lab, ensuring that insights from data and policy practice in the relevant concept are meaningfully translated into indicators, and narratives relevant for social scientists, policymakers, and non-specialist stakeholders.
- Analyze and compare policy frameworks and regulatory regimes governing chemical innovation, authorization, and market entry, identifying how existing incentive structures may distort the direction of technological change toward hazardous compounds.
- Collaborate with the Chemistry and Data teams in Task 3.1 to shape the SUSTECH-Platform from a policy and social science perspective, including the selection, interpretation, and communication of hazard-related and socially relevant impact metrics embedded in the open data infrastructure.
- Use outputs from the open platform and predictive models to explore how early, ex-ante access to information on chemical properties can enable new forms of policy intervention, such as anticipatory regulation, pre-market appraisal, and the avoidance of regrettable substitutions.
- Develop and assess policy instruments and governance mechanisms aimed at improving the selection of chemicals with safer and more sustainable profiles, including innovation incentives, funding conditionalities, regulatory sandboxes, and pre-emptive authorization standards.
- Co-design and participate in open science and multi-stakeholder events (Task 3.2.1), contributing to training sessions, demonstrations of the SUSTECH-Platform, and structured dialogues with regulators, companies, civil society organizations, and international institutions.

These activities will also serve to test the feasibility and legitimacy of proposed policy approaches.

- Support the establishment and operation of regulatory sandboxes (Task 3.2.2), using these controlled environments as experimental spaces to evaluate alternative technological pathways, governance arrangements, and participatory appraisal methods enabled by the platform.
  - Contribute to policy impact activities (Task 3.2.3), including the preparation of policy briefs, scenario analyses, and recommendations for policymakers on how to integrate predictive data and pluralistic appraisal into chemical regulation and innovation policy.
  - Advance theoretical and empirical work on directed technical change, examining how reducing the opaqueness of technological trajectories—through open, interoperable, and user-friendly data—reshapes the assumptions underpinning market-led innovation and regulatory governance.
  - Disseminate research findings through peer-reviewed publications and policy-oriented outputs, and actively engage in interdisciplinary collaboration across the project.
- Through these activities, the postdoctoral researcher will contribute to democratising directionality in chemical innovation, enabling plural agency in the appraisal of technological alternatives, and supporting the development of anticipatory, inclusive, and evidence-based policies aimed at achieving a toxic-free future.

**Maximum number of publications that candidates may submit, including the doctoral thesis, if submitted: 3**

**Language skills:**

**English language**

**Date, time and mode of the interview:**

**20<sup>th</sup> april 2026 at 12 pm in telematic mode**