



The University of Pisa announces public selection procedures for the award of n. 2 research assignments in accordance with Article 22 ter of Law 240/2010 as set out in Annex A) to this call, in which the information sheets indicating the reference structure, the specific responsibility within the assignment (tutor) and the functions to be performed, as well as the scientific disciplinary area, are provided.

Deadline for submitting the application: 22nd September 2026 at 1 p.m.

Duration of each research assignment: 12 months

All-inclusive annual administrative gross amount of each research assignment: € 35.000,00

Admission requirements:

- Master's Degree obtained no more than six years prior to the application deadline (pursuant to Ministerial Decree no. 270/2004, or specialist degrees awarded pursuant to Ministerial Decree no. 509/1999, and degree diplomas awarded under the regulations in force prior to Ministerial Decree no. 509/1999, deemed equivalent to the above-mentioned Master's Degrees pursuant to the Interministerial Decree of 9 July 2009). Only candidates holding a master's degree obtained no more than six years prior to the application deadline are eligible to apply. Candidates who fail to meet this requirement will lose the right to be awarded the research assignment.

Documents to be attached:

The application must include:

- a) A comprehensive scientific-professional curriculum containing all the necessary elements for assessing prior activities and any relevant work experiences, in connection with the content of the assignment under consideration (specifically indicating: date/duration, place of completion, etc.);
- b) A Master's Degree. Candidates holding a foreign master degree must submit the documents and elements useful for the assessment of equivalence to be carried out by the selection board; Documents issued in a foreign language other than French, English, German and Spanish, must be accompanied by a certified Italian translation that conforms with the original text, drawn up by the competent diplomatic or consular representation, or by an official translator.
- c) Additional documents that the candidate deems useful for the selection purposes;
- d) 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;
- e) 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) or Carta d'Identità Elettronica (CIE), selecting the University of Pisa among the available Institutions.

If candidates do not have SPID/CIE, they can request it in accordance with the procedures set forth on the website www.spid.gov.it or www.cartaidentita.interno.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 must 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 by accessing the system without the SPID/CIE digital identifier, the applicant's signature is mandatory;
- If submitted by accessing with the SPID/CIE digital identifier, 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 must 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 or emailed to concorsi_incarichi@unipi.it , within the application's submission deadline.

An applicant's valid identification document must be attached.

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

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

Selection procedure:

For each selections under Annex A) the Director of the Department appoints a Selection Board consisting of the head of the assignment and two other members.

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

- a) Relevance and significance of the activities previously carried out, as well as any work experience, in relation to the contents of the assignment to the selection, in addition to documented qualifications (such as, for example, degree grade, postgraduate diplomas, any contracts, scholarships, conference presentations, and other documented qualifications);
- b) Quality, originality and innovativeness of the attached publications, as well as their relevance to the assignment under consideration;

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

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

On the University website (<https://bandi.unipi.it/public/Bandi?type=IRIC>), in the section dedicated to the procedures, will be published the procedures approval decrees and the merit rankings that take into account the scores achieved by the candidates.

Please note that the English version is provided for courtesy and information purposes only. 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 sole legally binding text. For the full Italian version see: <https://bandi.unipi.it/public/Bandi?type=IRIC> (on the selection procedure page).

Selection code inc-ric_chim2026_2_1

n. 1 position

Department of Chemistry and Industrial Chemistry

GSD 03/CHEM-02 Physical Chemistry

SSD CHEM-02/A Physical Chemistry

Project FIS2 DeepEn

CUP I53C24003150001

Supervisor of the appointee's activities (tutor):

Prof.ssa Benedetta Mennucci

Title of the activities covered by the appointment:

ML/MM Methods for the Study of Light-Induced Electron Transfer in Enzymes

Activities to be carried out (covered by the appointment):

The planned activity concerns the development of methodological approaches that combine Machine Learning techniques with classical embedding schemes for the study of photoinduced electron transfer processes in photoenzymes. The work will include the design of efficient numerical strategies for the implementation of the developed models, their realization in computational codes, and their subsequent validation through applications to systems of interest.

Specific responsibility relating to the activities of the appointment and functions to be performed:

The appointee will be responsible for the development of hybrid Machine Learning/Molecular Mechanics (ML/MM) methodologies for the simulation of photoinduced electron transfer processes in enzymatic systems. The activities will include the formulation and implementation of theoretical models in computational codes, their validation through applications to systems of interest, the execution and analysis of computational simulations, as well as collaboration in the research activities of the group and the dissemination of scientific results.

Maximum number of publications that candidates may submit, including the doctoral thesis, if submitted: 2

Language skills:

English language

Selection code inc-ric_chim2026_2_2

n. 1 position

Department of Chemistry and Industrial Chemistry

GSD 03/CHEM-02 Physical Chemistry

SSD CHEM-02/A Physical Chemistry

Project FIS2 DeepEn

CUP I53C24003150001

Supervisor of the appointee's activities (tutor):

Prof.ssa Benedetta Mennucci

Title of the activities covered by the appointment:

Integration of AI Methods and Molecular Dynamics for the Design of Novel Photoenzymes

Activities to be carried out (covered by the appointment):

The research activity focuses on the development of a computational workflow for the design of novel photoenzymes through the integration of generative Artificial Intelligence techniques and molecular dynamics simulations. In particular, generative models such as RosettaFold Diffusion will be employed for the design of new protein structures, while AlphaFold will be used to assess their structural reliability. The resulting structures will then be validated through molecular dynamics simulations aimed at evaluating their conformational stability and the dynamic properties relevant to photoenzymatic activity.

Specific responsibility relating to the activities of the appointment and functions to be performed:

The appointee will be responsible for the development and application of computational workflows for the design of novel photoenzymes through the integration of Artificial Intelligence methodologies and molecular dynamics simulations. The activities will include the use and optimization of AI-based protein design tools, the structural and dynamical validation of the designed systems, and the analysis of the resulting data.

Maximum number of publications that candidates may submit, including the doctoral thesis, if submitted: 2

Language skills:

English language