



Scuola Superiore Meridionale

**SCUOLA SUPERIORE MERIDIONALE**  
**Call for Applications**

APPLICATIONS DEADLINE  
**05 January 2026, 2:00 p.m. CET**

**This document has no legal value and it is  
only meant to provide information in  
English about the call**

**ARTICLE 1**  
**(Award)**

A public selection procedure, based on qualifications and interview, is hereby launched for a fixed-term position with a duration of six years, pursuant to the amended Article 24, paragraph 3, of Law No. 240/2010, under a full-time employment regime, for the performance of research, teaching, supplementary teaching, and student support activities at the Scuola Superiore Meridionale, for the recruitment of:

**Within the Humanities and Legal Area:**

- 1 tenure-track researcher (RTT) in GSD 10/LATI-01 Latin Language and Literature and SSD LATI-01/A Latin Language and Literature, for teaching and research needs in *Archeologia e Culture del Mediterraneo Antico. Ricerca Storica, Conservazione, Fruizione del Patrimonio (ACMA)*;
- 1 tenure-track researcher (RTT) in GSD 11/HIST-03 Contemporary History and SSD HIST-03/A Contemporary History, for teaching and research needs in *Global History and Governance (GHG)*;

**Within the Scientific and Technological Area:**

- 1 tenure-track researcher (RTT) in GSD 02/PHYS-01 Experimental Physics of Fundamental Interactions and Applications and SSD PHYS-01/A Experimental Physics of Fundamental Interactions and Applications, for teaching and research needs in *Cosmology, Space Science & Space Technology (SPACE)*;
- 1 tenure-track researcher (RTT) in GSD 03/CHEM-02 Physical Chemistry and SSD CHEM-02/A Physical Chemistry, for teaching and research needs in *Molecular Sciences for Earth and Space (MOSES)*.

All detailed information, including requirements and specific aspects related to the profile advertised, is provided in the technical sheets attached to this call, which form an integral part thereof.

<b>Scuola Superiore Meridionale</b>	<b>GSD</b>	<b>SSD</b>	<b>n. position</b>	<b>n. Annex</b>	<b>Identification code sub-procedure</b>
Archeologia e Culture del Mediterraneo Antico. Ricerca Storica, Conservazione, Fruizione del Patrimonio	10/LATI-01 Latin language and literature	LATI-01/A Latin language and literature	1	Annex_1	RTT_ACMA_2025
Global History and Governance	11/HIST-03 Contemporary History	HIST-03/A Contemporary History	1	Annex_2	RTT_GHG_2025
Cosmology, space science & space technology	02/PHYS-01 Experimental Physics of Fundamental Interactions and Applications	PHYS-01/A Experimental Physics of Fundamental Interactions and Applications	1	Annex_3	RTT_SPACE_2025
Molecular sciences for earth and space	03/CHEM-02 Physical Chemistry	CHEM-02/A Physical Chemistry	1	Annex_4	RTT_MOSES_2025

## **ARTICLE 2**

### **(Nature of employment and type of contract)**

The employment relationship will be established between the Scuola Superiore Meridionale through the stipulation of a fixed-term employment contract, governed by the relevant provisions in force also with regard to tax, welfare, social security and insurance treatment. The contract will be signed no more than 90 days after the conclusion of the relevant selection

procedure and shall be for a non-renewable term of six years. The contracts no rights to access any permanent position in any Italian University, but constitutes a preferential title in open competitions for positions in the Italian Civil Service. The fixed-term researcher will carry out research, teaching and student service activities, according to programs set by the competent academic bodies and to the requirement of the relevant academic Structure.

Regarding the research activity, the researcher's work performance is overseen by a scientific supervisor or by the Coordinator of the relevant Academic Structure or by his/her delegate; the teaching commitment is set by the relevant academic bodies.

The fixed-term researcher is required to self-certify, through a dedicated register, the teaching student service activities carried out, and required to deliver this registry, completed and duly signed, to the Coordinator of the relevant academic Structure at the end of each academic year.

The Coordinator in turn is charged with supervising and reporting to the Rector any case of non-compliance registered; failure to comply with the requirements related to the registry may constitute just cause for termination of the contract (as per Article 2119 of the Italian Civil Code).

As per art. 24, paragraph 5, of L. 240/2010, the School might – on the researcher's request and if adequate resources are available – consider the researcher, as long as s/he possess Italy's National Scientific Qualification (Abilitazione Scientifica Nazionale) for a permanent position as associate professor, as per the procedures referred to in art. 11 of the School's Regulations for the Recruitment of Researchers on fixed-term contracts.

Article 14, paragraph 6-duodevices, of Decree-Law No. 36/2022, converted into Law No. 79/2022, shall apply.

For all matters not expressly provided for in this call concerning the rights and duties of RTT researchers, Article 24 of Law No. 240/2010 and the relevant provisions of the School's current Regulations shall apply.

### **ARTICLE 3**

#### **(Duties)**

The overall annual commitment for teaching and student service activities is equal to 350 hours for a full-time position; of these, no less than 60 hours are allocated to lecture courses.

### **ARTICLE 4**

#### **(Remuneration)**

The researcher who will be appointed shall receive an all-inclusive annual gross remuneration equal to the initial salary of a full-time confirmed researcher, increased by 20%.

The annual gross remuneration is subject to adjustment pursuant to the Prime Minister's Decree (D.P.C.M.) of 4 July 2025.

### **ARTICLE 5**

#### **(Participation Requirements)**

To participate in the competitive selection, the following prerequisites are required under penalty of exclusion:

#### **GENERAL REQUIREMENTS:**

- enjoyment of civil and political rights: those deprived of the right to vote are not eligible for employment;
- not having been convicted for criminal offences incompatible with the status of state employee; any such conviction would lead either to disqualification from employment by the Scuola Superiore Meridionale, as per Article 127, first paragraph, letter d) of the Consolidated Text of the provisions concerning the status of civilian state employee, issued by Presidential Decree no. 3 of 10/01/1957, or to dismissal;
- not to have been dismissed or discharged from employment by Public Administration for recurrent inadequate performance, nor to have been declared disqualified from a State job, as per Article 127, first paragraph, letter d) of the Consolidated Text of the provisions concerning the status of civil employees of the State, issued by Presidential Decree no. 3 of 10/01/1957; finally, not to have been dismissed for just cause or justified subjective reason, nor for having obtained employment by producing false documents or by fraudulent means;
- not to be employed permanently as a full professor, associate professor, or researcher, nor to have ceased to hold one of the aforementioned qualifications;
- not to have already benefited, for a period of at least three years, from contracts of the type covered by this call (RTT).

Foreign candidates need to possess the following general requirements:

- (a) enjoy civil and political rights also in the States of which they are citizens;
- (b) possess all the other requirements, as set out above for Italian nationals;
- (c) have adequate knowledge of the Italian language.

Candidates having kinship or affinity ties, within the fourth degree included, with the members of the SSM Steering Committee and with the General Director of the Scuola Superiore Meridionale are not allowed to participate

#### **SPECIFIC REQUIREMENTS:**

To possess, by the call deadline, one of the following specific requirements:

PhD degree or equivalent qualification obtained in Italy or abroad;

If the qualification required for admission was obtained abroad, it is necessary to attach the academic recognition decision equating it to a PhD degree under the Italian university system, issued by a University, or the formal decision recognizing the foreign qualification as equivalent to the Italian one, issued by the Department of Public Administration.

Pending the issuance of the recognition decision for a PhD degree obtained abroad, in order to ensure the broadest participation, it is possible to submit an application for admission to this selection procedure by indicating the foreign degree in the original language and attaching a copy of the application for recognition submitted to the competent Administration, together with a copy of the delivery receipt.

The decision proving academic recognition or the recognition of the foreign qualification as equivalent to the Italian one must, in any case, be submitted to this Administration within and no later than 180 days from the signing of the contract, failing which the employment relationship will be terminated.

Furthermore, by the application deadline of this call, in implementation of Article 24, paragraph 1-bis, of Law 240/2010 as amended and supplemented, candidates may participate who, for at least thirty-six months, even cumulatively, have attended PhD programmes or carried out research activities on the basis of a formal assignment, excluding unpaid activities, at universities or research institutes, in Italy or abroad, other than the SSM that issued this call.

Finally, by the application deadline of this call, in implementation of Article 14, paragraph 6-septiesdecies, of Decree-Law 36/2022, converted into Law 79/2022, candidates may participate who are, or have been, for a period of not less than one year, holders of fixed-term researcher contracts type A (RTD-A), or candidates who have been, for a total period of not less than three years, holders of one or more research grants.

All candidates are admitted to the selection procedure under this call subject to verification of requirements.

## ARTICLE 6

### (Submitting an application)

Applications are to be submitted, together with any attachment (if required) only electronically by using the dedicated application available at the following web address:

<https://pica.cineca.it/ssm/rtt-ssm-2025/domande/>

**no later than 05 January 2026, 2:00 p.m. CET**

**Failure to submit by this deadline will imply exclusion from the procedure.**

To access the PICA computer application, the candidate is required to register and authenticate exclusively via a PICA account and to adhere to the following instructions.

After authentication, the candidate is required to complete the application, entering all the required data and attaching any necessary documents in electronic PDF format as indicated.

Attachments of up to 30 MB are allowed. (In the case of image copies of analogue original documents, attachments are required to be in PDF/A format and preferably scanned in black and white, with a resolution not exceeding 200 DPI).

Applicants self-certify the truthfulness of their statements and, as per Articles 46 and 47 of Presidential Decree 445 of 28 December 2000 and subsequent amendments and additions, declare to be aware of the penalties provided for by Articles 75 and 76 of the same Presidential Decree in the event of untrue declarations or should they create or use false documents.

Applicants are also required to attach the following documents to their application and enter them into the above-mentioned PICA website:

A) CURRICULUM VITAE, complete with a LIST OF QUALIFICATIONS AND PUBLICATIONS OF THE CANDIDATE;

B) the scientific publications submitted for analytical evaluation, within the upper limit set out in the procedure reference form, numbered in the progressive order reported in the "CURRICULUM VITAE, LIST OF TEACHING AND RESEARCH ACTIVITIES AND PUBLICATIONS". If texts accepted for publication are submitted, the publisher's acceptance document is also required to be attached;

C) a photocopy of a valid identification document; this applies, under penalty of exclusion, only if the applicant completes the application with a handwritten signature.

Publications are required to be submitted in their original language if they are published in Italian, French, English, German or Spanish language. Otherwise, the publications are required to be translated into

Italian or English; translated texts can be submitted in typewritten copies together with the text in the original language.

Scientific publications will not be taken into consideration by the Commission for the purposes of the analytical evaluation of scientific production even if they are within the upper limit set by the reference forms attached to this call for proposals, if they are mentioned in the "CURRICULUM VITAE, LIST OF QUALIFICATIONS AND PUBLICATIONS OF THE CANDIDATE ", but not uploaded in the PICA website. Likewise, publications uploaded in the PICA website but not mentioned in the " CURRICULUM VITAE, LIST OF QUALIFICATIONS AND PUBLICATIONS OF THE CANDIDATE " will not be taken into consideration by the Commission for the purposes of the analytical evaluation of scientific production. Furthermore, any text accepted for publication but lacking the publisher's acceptance document will not be evaluated.

## **ARTICLE 7**

### **(Establishment of Selection Committees)**

At the beginning of the recruitment procedures, for each position open a Selection Committee is established with a composition of three members and in compliance, as far as possible, with the principle of gender parity. The committee is composed of three members one tenured university professor designated for the role, and two full professors, including foreign professors. They will be drawn from shortlists including no less than four persons among those selected by ANVUR in accordance with art.16, paragraph 3, letters f) and h), of Law 240/2010 or among those meeting the requirements needed to be included in these shortlists.

## **ARTICLE 8**

### **(Evaluation of qualifications and Curriculum Vitae)**

During the preliminary evaluation of the candidates, the Selection Committee conducts a reasoned assessment followed by a comparative evaluation, referring to the specific scientific-disciplinary group and any profile defined exclusively through the indication of one or more scientific-disciplinary sectors listed in the form attached to this call. The Committee evaluates the candidates' curriculum vitae and the following duly documented qualifications:

- a) Doctoral diploma or equivalent (achieved in Italy or abroad);
  - b) university-level teaching activity in Italy or abroad;
  - c) documented training or research activity at qualified Italian or foreign academic or scientific institutes;
  - d) documented clinical activities (if relevant for the field in which the position is open);
  - e) project activities (if relevant for the field in which the position is open);
  - f) organization, leadership, and coordination of national and international research groups, or participation to them;
  - g) patents (if relevant for the field in which the position is open);
  - h) participation at national and international symposia, workshops and conferences;
  - i) national and international awards and recognitions for research activities;
  - j) internationally recognized European specialization diploma (if applicable).
- The evaluation of the above qualifications is carried out by considering the significance it assumes in relation to the quality and quantity of the research activity carried out by the individual candidate.

## **ARTICLE 9**

### **(Evaluation of publications)**

The Selection committee assesses the publications submitted by the candidates according to the following criteria:

- a) originality, innovation, methodological rigor, and relevance of each scientific publication;
- b) publication's relevance and coherence for the field in which the position is open;
- c) scientific relevance of each publication's outlet, as well as publication's dissemination within the scientific community;

d) analytical determination of the candidate's individual contribution in case of collaborative work.

The Selection Committee is also required to assess the overall consistency of the candidate's scientific production, as well as its intensity and temporal continuity.

The Selection Committee may also, if appropriate, use the following indicators (if relevant for the field in which the position is open):

a) total number of citations;

b) average number of citations per publication;

c) total "impact factor";

d) average "impact factor" per publication;

e) combinations of the previous parameters aimed at enhancing the impact of the candidate's scientific production (Hirsch index or similar).

## **ARTICLE 10**

### **(Interviews)**

After the preliminary evaluation, only the top candidates, between 10% and 20% of all applicants, and in any case no fewer than six, are admitted to the next stage. If six or fewer applications are received, all candidates are admitted.

The selection process includes:

- a public discussion of the candidates' qualifications and scientific output, in the language specified in the procedure form;
- an oral exam to assess adequate knowledge of the required foreign language (or of one chosen by the candidate from among those listed).

Both the public discussion and the oral exam take place in a public session, either in person or online, ensuring participant identification, communication security, and traceability. In the same session, foreign candidates must also demonstrate adequate knowledge of Italian.

The schedule for the public discussion and oral exam will be announced at least 20 days in advance on the official noticeboard and website of the Scuola Superiore Meridionale. The list of admitted candidates, shown only by application ID number, will be posted at least 3 days before the exam.

Publication on the official online noticeboard constitutes legal notification, and absence from the session is considered a withdrawal from the selection.

After the session, the Committee assigns a score (max 100 points) to the qualifications, the individual publications, and the overall scientific output, based on criteria set in the first meeting.

The selection is not passed if:

- the candidate scores below 75/100 in the public discussion of qualifications and scientific output, or;
- the oral exam shows insufficient knowledge of the required foreign language.

## **ARTICLE 11**

### **(Merit ranking and preferential qualifications)**

At the conclusion of its work, the Committee draws up the merit ranking based on the score assigned to each candidate.

In the event of equal overall scores, the following qualifications constitute preferential titles, in order of priority:

a) a specialization diploma in addition to the one required under Art. 5 of this call as an admission requirement;

b) having taught a university course through a contract concluded in accordance with applicable regulations;

c) previous employment under a fixed-term private-law contract of the same type.

If preferential qualifications are also equal, the younger candidate is given precedence.

Failure to include in the application the declarations regarding possession of the above-mentioned preferential qualifications results in the inability to apply the corresponding benefits.

## **ARTICLE 12**

### **(Incompatibilities and conflicts)**

Without prejudice to current legal provisions and to the Regulations of the Scuola Superiore Meridionale, the contract covered by this call is incompatible:

- a) with holding research fellowships or postdoctoral scholarships, or in general any scholarship or fellowship, whether granted by Italian or foreign institutions, except for those aimed at supporting research activities with travel periods, internships, stays at other national or international institutions, or collaborative research activities that are functional to the needs and/or research programs specified in the contract;
- b) with holding any other subordinate employment relationship, including part-time or fixed-term positions, with Italian or foreign public or private entities; exceptions apply where the regulations of public administrations referred to in Art. 1, paragraph 2, of Legislative Decree No. 165/2001 allow the individual to be placed on unpaid leave without social security contributions, or on secondment or an equivalent status, for a period corresponding to the entire duration of the contract;
- c) exclusively for full-time researchers, with performing freelance professional activities;
- d) with engagement in commercial or industrial activities, without prejudice to the possibility of establishing university spin-off or start-up companies;
- e) with any contracts concluded in any capacity with the School.

The following individuals are excluded from participating in this procedure: persons already employed on a permanent basis as full or associate university professors, permanent researchers (including those no longer in service), as well as individuals who have already held RTT contracts for at least three years. The contract under this call may not be concluded with individuals who have a kinship or affinity up to and including the fourth degree with any member of the Organizing Committee or with the Director General of the Scuola Superiore Meridionale.

## **ARTICLE 13**

### **(Referral to the unabridged official version)**

For all matters not expressly provided for in this call, the provisions of Law No. 240 of 30 December 2010, as amended, and the Regulations of the Scuola Superiore Meridionale concerning the recruitment of fixed-term researchers pursuant to Article 24 of Law No. 240 of 30 December 2010, governing the relevant employment relationship, shall apply.

This document is an abstract of the original Italian-language call of SSM “selezione pubblica, per titoli e colloquio, a tempo determinato, per la durata di anni sei, ai sensi del novellato art. 24, comma 3, della Legge n. 240/2010, in regime di tempo pieno, per lo svolgimento di attività di ricerca e di didattica, di didattica integrativa e di servizio agli studenti presso la Scuola Superiore Meridionale per il reclutamento: nell’ambito dell’Area Umanistico-Giuridica di:

- n. 1 ricercatore tenure track (RTT) nel GSD 10/LATI-01 Lingua e Letteratura latina e SSD LATI-01/A Lingua e Letteratura latina per le esigenze didattiche e di ricerca in Archeologia e Culture del Mediterraneo Antico. Ricerca Storica, Conservazione, Fruizione del Patrimonio (ACMA);
- n. 1 ricercatore tenure track (RTT) nel GSD 11/HIST-03 Storia Contemporanea e SSD HIST-03/A Storia Contemporanea per le esigenze didattiche e di ricerca in Global History and Governance (GHG); nell’ambito dell’Area Scientifico- Tecnologica di:
- n. 1 ricercatore in tenure track (RTT) nel GSD 02/PHYS-01 Fisica Sperimentale delle Interazioni Fondamentali e Applicazioni e SSD PHYS-01/A Fisica Sperimentale delle Interazioni Fondamentali e Applicazioni per le esigenze didattiche e di ricerca in Cosmology, space science & space technology (SPACE);
- n. 1 ricercatore in tenure track (RTT) nel GSD 03/CHEM-02 Chimica fisica e SSD CHEM-02/A Chimica Fisica per le esigenze didattiche e di ricerca in Molecular Sciences for Earth and Space (MOSES).”

For details please refer to the unabridged official version in Italian, available at the following link:  
<https://www.ssmeridionale.it/avcp/selezione-pubblica-per-titoli-e-colloquio-per-n-4-ricercatori-tenure-track-a-tempo-determinato-per-la-durata-di-anni-sei-ai-sensi-del-novellato-art-24-comma-3-della-legge-n-240-2010-in-regim/>

In case of discrepancies between the English version and the Italian document, the Italian version shall prevail.



**Identification Code: RTT\_ACMA\_2025**

**Public selection procedure, through qualifications and interview, for a fixed-term position of the duration of six years, aimed also at recruiting 1 tenure-track researcher (RTT) to carry out research activities and teaching, including supplementary teaching and student services, in Archeologia e Culture del Mediterraneo Antico. Ricerca Storica, Conservazione, Fruizione del Patrimonio (ACMA) within the Humanities–Legal Studies Area of the Scuola Superiore Meridionale.**

**Work commitment regime: full-time**

**Maximum number of publications: 12**

A knowledge of the English language adequate to research needs and purposes is required. The scientific profile sought pertains to the field of Latin Language and Literature (**GSD 10/LATI-01, SSD LATI-01/A**).

**Research-related Requirements**

The researcher will be required to carry out research activities in fields, part of SSD LATI-01/A, adopting a philological method and an interdisciplinary approach to conduct research on works and authors in Latin from its origins to late antiquity, as well as on the historical development of Latin literary civilization in the Mediterranean area.

**Teaching, Supplementary Teaching, and Student Service Requirements**

The fixed-term researcher will be required to carry out teaching, supplementary teaching, and student service activities, within the framework established by the competent academic bodies and in service of the needs of the relevant academic structure (Humanities–Legal Studies Area).

The teaching commitment is defined by the relevant academic bodies

The total annual workload for teaching, supplementary teaching, and student services is 350 hours for full-time positions, of which no less than 60 hours will consist of formal classroom teaching.

**Duties**

Basic and advanced courses for undergraduate students (*allievi ordinari*) and PhD candidates; participation in and organization of seminar and conference series; support for the writing of bachelor's and doctoral theses; support in the organization of internships and training activities for students; participation in the research activities of the Humanities–Legal Studies Area; orientation and guidance activities for the promotion of academic programmes, as well as student placement initiatives.

**Codice identificativo RTT\_GHG\_2025**

**Selezione pubblica, per titoli e colloquio, a tempo determinato, per la durata di anni sei, per il reclutamento, tra l'altro, di n. 1 ricercatore in tenure track (RTT) per lo svolgimento di attività di ricerca e di didattica, di didattica integrativa e di servizio agli studenti nell'ambito di Global History and Governance (GHG) dell'Area Umanistico – Giuridica presso la Scuola Superiore Meridionale.**

Regime di impegno orario: «tempo pieno»

**Numero massimo di pubblicazioni: 12**

Adequate knowledge of English is required, and, if possible, a second foreign language, depending on research needs.

The required scientific profile must refer to GSD 11/HIST-03 Contemporary History and SSD HIST-03/A Contemporary History.

**Research requirements:**

The researcher will be required to carry out comparative research in the field of Contemporary History (SSD HIST-03/A), with particular reference to European political and intellectual history from the Second World War onwards.

**Teaching, supplementary teaching and student service requirements:**

The tenure-track researcher will be required to carry out teaching, supplementary teaching and student services activities, within the framework of the programme established by the relevant academic bodies and according to the needs of the relevant academic structure (Humanities and Law Area). The teaching commitment is defined by the relevant academic bodies. The total annual commitment for teaching, supplementary teaching and student services is 350 hours for full-time employment, of which at least 60 hours must be classroom teaching.

**Tasks:**

The tenure-track researcher will be required to carry out comparative research in the field of Contemporary History (SSD HIST-03/A), with particular reference to European political and intellectual history from the Second World War onwards; to participate in national and international conferences by presenting papers; to publish the results in reputable national and international peer-reviewed journals or in monographs published by national and international publishers. The tenure-track researcher will be required to teach, within the scope of the above-mentioned programme and for the above-defined commitment, in courses for honor students and/or doctoral courses in Global History and Governance, and to carry out supplementary teaching and tutoring activities for students and doctoral students in the scientific-disciplinary field of Contemporary History. The successful candidate will be required to participate in the life and organisational and scientific management of the SSM and the relevant area, for example, by organising and/or collaborating in the organisation of teaching, conferences, workshops, research seminars, as well as contributing to the preparation and presentation of projects for national and international competitive calls for proposals.

**Identification Code: RTT\_SPACE\_2025****Research Requirements:**

The researcher shall carry out research activities in the following scientific-disciplinary sectors: SSD PHYS-01/A – Experimental Physics of Fundamental Interactions and Applications, with particular reference to astrophysical phenomena related to elementary particles, multi-messenger astrophysics both on Earth and in space. The activity includes the analysis and processing of experimental data through advanced statistical methods.

**Teaching, Supplementary Teaching, and Student Service Requirements:**

The fixed-term researcher shall perform teaching, supplementary teaching, and student service activities, within the framework established by the competent academic bodies and according to the needs of the affiliated academic structure (Scientific-Technological Area). The teaching commitment shall be defined by the competent academic authorities. The total annual workload for teaching, supplementary teaching, and student service activities amounts to 350 hours for a full-time position, of which at least 60 hours shall consist of formal classroom teaching.

**Duties:**

The assigned duties shall pertain to the research, teaching, supplementary teaching, and student service requirements as outlined above, and shall also include participation in large international collaborations. The research activities will focus primarily on the detection of particles of astrophysical origin (neutrinos, gamma rays, charged particles) and on the study of their sources within a multi-messenger framework, with particular attention to data analysis and interpretation. The teaching commitment shall include the supervision and tutoring of PhD students, as well as providing the necessary support for the academic and cultural development of the students.

**Codice identificativo RTT\_MOSES\_2025**

**Public selection procedure, based on qualifications and interview, for a fixed-term position of six years, for the recruitment, among others, of one tenure-track researcher (RTT) to carry out research and teaching activities, including supplementary teaching and student services, within Molecular Sciences for Earth and Space (MOSES) of the Science and Technology Area at the Scuola Superiore Meridionale.**

Employment status: full-time.

**Maximum number of publications: 12**

An adequate knowledge of the English language is required, consistent with the research needs.

**The required scientific profile shall refer to GSD 03/CHEM-02 Physical Chemistry and SSD CHEM-02/A Physical Chemistry.**

**Research Needs:**

The researcher shall conduct research in the areas of molecular modeling applied to chemical physical processes relevant to climate change and sustainable chemistry. This activity shall contribute to strengthening the expertise in the simulation and understanding of spectroscopic phenomena and chemical reactivity, with particular emphasis on environmental and atmospheric physical chemistry. Further research needs include the development of multiscale theoretical computational methodologies for analysing chemical reactivity in natural and anthropogenic environments, with a focus on emerging micro-pollutants, their impact on water and soil, and their contribution to the Earth's energy balance.

It is also required to consolidate research through quantum theoretical–computational methods on physical chemistry of innovative and sustainable materials, including functional and photocatalytic materials, aimed at pollution mitigation and supporting the ecological transition.

The overarching objective is to integrate expertise in quantum modelling, dynamical simulations, and computational material design to provide an advanced contribution to global challenges related to climate change, environmental sustainability, and the circular economy.

**Teaching Needs, Supplementary Teaching, and Student Services:**

The fixed-term researcher shall carry out teaching, supplementary teaching, and student service activities, within the framework defined by the competent academic bodies and according to the needs of the relevant academic structure (Science and Technology Area). Teaching duties are determined by the competent academic bodies.

The total annual workload for teaching, supplementary teaching, and student services is 350 hours for full-time positions, of which at least 60 hours must consist of formal classroom teaching.

Specifically, teaching, supplementary teaching, and student-support duties include lectures, numerical exercises, and laboratory activities related to courses in the CHEM-02/A sector, as well as Physical Chemistry courses within the ordinary programmes in Chemical and Biomedical Sciences and in Molecular Sciences for Earth and Space. Duties also include supporting students in preparing their final projects in the 3rd and 5th years, participating in sector-specific seminars (SSD CHEM-02/A), and taking part in examination committees for CHEM-02/A courses.

**Duties:**

The duties include the study of problems in environmental physical chemistry using computational spectroscopy techniques: theoretical computational quantum models shall be developed and applied to analyse the interaction of solar radiation with pollutants, with the aim of improving the understanding of their effects on the Earth's energy balance and on climate change.

Additional duties concern the development of computational models for chemical reactivity and environmental physical chemistry: protocols integrating molecular dynamics and quantum studies will be developed to investigate reactions of pollutants and micro-pollutants in condensed phases. These models shall assess the role of such micro-pollutants in water and soil contamination. The duties also include the study of physical chemistry of sustainable materials, including photocatalytic materials for the reduction of atmospheric pollutants.

Teaching, supplementary teaching, and student support duties at the Scuola will include preparing and delivering lectures, numerical exercises, and laboratory activities for Physical Chemistry courses; assisting students during the preparation of their final projects in the 3rd and 5th years of the programmes in Chemical and Biomedical Sciences and in Molecular Sciences for Earth and Space; and participating in examination committees for courses in the CHEM-02/A sector. Formal teaching activities will concern Physical Chemistry courses offered within Chemical and Biomedical Sciences and Molecular Sciences for Earth and Space.

In addition to carrying out research in the fields defined above, the researcher shall present contributions at national or international conferences; publish results in qualified national and international peer-reviewed journals or monographs published by recognised national or international publishers. The researcher shall also participate in the academic life of the Scuola and its scientific area, for instance by organising and/or contributing to the teaching activities, conferences, workshops, and seminars, as well as contributing to the preparation and submission of proposals for competitive national and international calls.