

Dipartimento di Scienze di
Base ed Applicate per
L'ingegneria



SAPIENZA
UNIVERSITÀ DI ROMA

Department of Basic and Applied Sciences for Engineering (SBAI) - La Sapienza University of Rome

Call n. **42/2020** - Rep. 2020 - Prot. **1444** of **21.12.2020**

**GENERAL CALL FOR THE AWARDING OF N.1 RESEARCH FELLOWSHIP TO CONDUCT RESEARCH ACTIVITY CAT. B -
TYPE II**

Deadline: 20.1.2021

THE DIRECTOR

HAVING REGARD the Law of 9.5.1989, n. 168;

HAVING REGARD the Law of 30 December 2010, n. 240 and in particular Art. 22;

HAVING REGARD the Statute of the University adopted by Rectoral Decree n. 3689 of 29/10/2012;

HAVING REGARD the Rectoral Decree n. 1549/2019 of 15/05/2019 with which the Statute of this University has been modified;

HAVING REGARD the Regulations for granting of research fellowships issued with Rectoral Decree n. 1776/2019 of 07/06/2019;

HAVING REGARD the M.D. n. 102 of 09.03.2011 with which the minimum gross annual amount of the research grants awarded pursuant to Law 240/2010 is determined in an amount equal to €. 19,367.00, net of charges to be paid by the administration;

HAVING REGARD to the resolutions of the Academic Senate and the Board of Directors of 12.04.2011 and 19.04.2011, respectively;

HAVING REGARD to the resolution of the Council of the Department of Basic and Applied Sciences for Engineering of 16-11-2020 with which it was approved the publication of the call in question;

HAVING REGARD to the economic-financial coverage guaranteed by funds:

- CHALLENGES European Contract n. 861857 "Real time nano CHAracterization relateD TechNlOGiEes" --
Fund Owner: Prof. Marco Rossi

VERIFIED the administrative-management regularity by the Chief Administrative Officer of the Department

DECREES

Art. 1 Research Project

A public selection procedure, for titles and interview, is hereby organized to grant n° 1 research fellowship for research activity, of **category B - Type II** of 12 months for the disciplinary scientific sector FIS/01 related to the following research project "**Models from first principles of "tip-enhanced" spectroscopy for real time analysis of materials and electronic devices**" at the **Department of Basic and Applied Sciences for Engineering** of Sapienza University of Rome.

Art. 2 Duration, renewal and amount of the fellowship

The research fellowship pursuant to art. 1 will have a duration of 12 months and may be renewed, according to art. 22, paragraph 3 of Law 240/2010. The total duration of the relationships established, pursuant to art. 22, paragraph 3 of Law 240/2010, including possible renewals, may not in any case exceed six years, with the exception

of the period in which the fellowship was used in conjunction with the PhD, up to the maximum legal duration of the relevant course.

The total duration of the relationships established with the beneficiaries of research fellowship and fixed-term contracts researcher pursuant to art. 24 of Law 240/2010, stipulated with the same subject, cannot in any case exceed twelve years, even if not continuous. For the purposes of the duration of the aforementioned relationships, periods spent on maternity or for health reasons according to current legislation are not taken into account.

The gross annual amount, excluding charges to be paid by the beneficiary, is set at €19.367,00 (nineteen thousand three hundred and sixty-seven euros) and will be monthly paid.

The provisions of Article 4 of Law No 476 of 13 August 1984, as amended and supplemented, and those of Article 2 paragraph 26 et seq. of Law No 335 of 8 August 1995, with subsequent amendments, with regard to compulsory abstention for maternity leave, the provisions of the Decree of the Minister of Labour and Social Security of 12 July 2007 and, with regard to sick leave, Article 1, paragraph 788, of Law no. 296 of 27 December 2006 and subsequent amendments can be implemented to the fellowship.

The Department guarantees equality and equal opportunities between men and women for the awarding of the fellowship in question and the protection of personal data, in accordance with the current regulations.

Art. 3 General admission requirements

Those in possession of a PhD degree in Physics, Chemistry, Engineering and equivalent or equivalent qualification, also obtained abroad or researchers with more advanced curriculum also for having obtained structured positions in Universities, Research Institutions, applied research institutions, public or private, foreign or, limited to non-permanent positions, Italian, excluding permanent staff of the subjects referred to in Article 22, paragraph 1, of Law 240/2010, may participate in the selection.

Those who have a degree of kinship or affinity, up to and including the fourth degree, with a professor belonging to the Department of Basic and Applied Sciences for Engineering or with the Rector, the General Manager or a member of the Board of Directors of the University cannot participate in the selection.

Research fellowships cannot be conferred to:

- subjects who find themselves in a situation, even potential, of conflict of interest with Sapienza University;
- subjects who have been convicted, even with a non-final sentence, for one of the crimes provided for in Chapter I of Title II of the second book of the Criminal Code and/or for crimes for which the mandatory arrest in flagrante delicto is provided for pursuant to art. 380 of the Criminal Code;
- in all other cases provided for by Law.

Foreign citizens must have a degree recognised as equivalent under international agreements, i.e. in accordance with the procedures established by the relevant legislation in force. This equivalence must result from appropriate certification issued by the competent authorities. Qualifications obtained abroad that have not already been declared equivalent, in accordance with current legislation, will be evaluated only for selection purposes, by the selection board; for this reason, they must be translated, legalized and provided with the declaration of value by the competent Italian diplomatic representations abroad, and attached to the application, even in photocopy. The requirements must be fulfilled by the deadline for submission of applications for this selection.

Art. 4 Application and submission deadline

The application to the selection procedure, drawn up on plain paper according to the attached scheme (**Enclosure A**), must be sent **within 30 days from the day after publication (see deadline shown on the start page of the call)** under penalty of exclusion from the selection procedure through one of the following methods:

- from the personal certified e-mail address to the following certified e-mail address: dipartimento.sbai@cert.uniroma1.it;
- by registered letter with return receipt, including: identity documents, tax code/health card, forms A, B, C, D in paper format and an IT support (**under penalty of exclusion from the competition**) on which all other documents required by the call (titles, publications, etc.) addressed to the Department of

Basic and Applied Sciences for Engineering - Via Scarpa 16 00161 Roma. It should also be noted that this Department will not be held responsible in the event that the IT support should be illegible or damaged.

In the subject of the e-mail/registered letter for the submission of the application, the applicant must indicate the following caption: **"Research Fellowship Competition - Call - AR No. 42/2020 - Rep. 2020 - Prot. 1444 of the 21.12.2020"**.

If the deadline coincides with a public holiday, the deadline shall be postponed to the first working day.

Candidates must indicate in their application a personal e-mail address to which all communications, including communications for interview, should be sent. Any changes must be promptly communicated to the Department of Basic and Applied Sciences for Engineering. The Department assumes no responsibility in case of unavailability of the addresses and for dispersion of communications due to failure, late or incorrect communication of the e-mail address indicated in the application by the candidate.

Candidates are in any case required to consult Sapienza website at the link <http://web.uniroma1.it/trasparenza/albo-pretorio>, which will be used for all updates, deeds and information regarding the specific selection procedure.

In the application (**Enclosure A**) candidates will have to declare, under their own responsibility, in order to avoid the exclusion from the selective procedure:

- surname and name;
- date and place of birth;
- residence;
- nationality;
- possession of political rights;
- that they have not reported criminal convictions and that they have no criminal or administrative proceedings underway for the application of security or prevention measures, nor that they have criminal records that can be entered in the criminal record pursuant to Article 686 of the Italian Criminal Code;
- Equivalence of qualifications, if obtained abroad/Declaration of value of qualifications obtained abroad that have not already been declared equivalent;
- to have the title of PhD in or the following equivalent title, also obtained abroad, or to be a researcher with more advanced curriculum also for having obtained the following position(s) structured in universities, research institutions, applied research institutions, public or private, foreign or, limited to non-permanent positions, Italian (specify which);
- any ownership of previous research fellowships with the indication of location, period in which the activity was carried out and the subject of the research;
- any previous holders of fixed-term researcher contracts, pursuant to art. 24 of Law no. 240 of 30 December 2010, indicating the location, the period in which the research activity was carried out;
- that they are not a holder of any other scholarship for any reason whatsoever awarded or that they undertake to renounce it if they pass this selective procedure;
- to carry out the following work at ... (specify employer, whether public or private institutions and type of relationship);
- not having a degree of kinship or affinity, up to and including the fourth degree, with a Professor belonging to the Department of Basic and Applied Sciences for Engineering, or with the Rector, the General Manager or a member of the Board of Directors of Sapienza University of Rome;
- not to be dismissed or relieved of employment in a public administration for persistent, insufficient performance and not to have been declared disqualified from a public office, pursuant to Article 127, paragraph 1, letter d) of the Consolidated Act of the provisions concerning the statute of civil servants of the State, approved by Presidential Decree No 3 of 10 January 1957;
- the personal e-mail address to which communications related to this selective procedure are to be sent.
- Candidates with disabilities, in accordance with Law no. 104 of 5 February 1992, will have to make an explicit request, in relation to their disability, regarding the help necessary to be able to attend the interview.

Art. 5 Titles and professional curriculum

The following titles must be attached to the application in PDF format:

1. declaration regarding the fruition of the PhD (specifying whether with or without a fellowship) and/or activity carried out as a research grant holder (**Enclosure B**);
2. equivalent declaration of certification of the degree with date of graduation, final grade and indication of the single exams grades (**Enclosure C**);
3. equivalent declaration of certification of a PhD or equivalent qualification also obtained abroad (**Enclosure C**);
4. declaration in lieu of certification or affidavit of notoriety of the performance of any work in public/private institutions;
5. declaration in lieu of certification or affidavit of the qualifications considered useful for the purposes of the competition (diplomas of specialization, certificates of attendance of postgraduate courses, obtained in Italy or abroad, scholarships or research assignments obtained both in Italy and abroad, etc.) (**Enclosure C**);
6. curriculum vitae of scientific and professional activity dated and signed;
7. any scientific publications (**Enclosure D**).
8. copy of a valid identity document and tax code or health card (front/back) dated and signed.

Pursuant to the amendments introduced by Article 15, paragraph 1, of Law no. 183 of 12 November 2011, to the regulation of certificates and replacement declarations contained in Presidential Decree no. 445/2000, Public Administrations may no longer request or accept acts or certificates containing information already in the possession of the Public Administration. Therefore, only declarations in lieu of and/or affidavit submitted pursuant to articles 46 and 47 of Presidential Decree 445/2000 will be admitted and considered valid.

With reference to publications, which are deemed useful for the purposes of this selection procedure, candidates must also attach a specific declaration in lieu of affidavit attesting their compliance with the original (pursuant to art. 47 of Presidential Decree 445/2000) (**Enclosure D**).

The certificates drawn up in a foreign language must be completed with an Italian translation, which must be certified as compliant with the text by the competent authorities.

Translation of publications and titles written in English is not required.

Foreign citizens residing in Italy may use substitute statements only in cases where it is a matter of proof of status, facts and personal qualities that can be certified or attested by Italian public or private entities.

Foreign citizens who do not reside in Italy may not make use of self-certification in any way.

Art. 6 Selection

The evaluation criteria shall be determined by the Commission and expressed in cents and shall include, depending on their importance, the following items:

- Graduation Grade;
- Scientific publications and other research products;
- Specialization diplomas and certificates of attendance of postgraduate courses;
- Other qualifications related to the activity carried out as holders of contracts, scholarships and positions in national or international research institutions. The effective date and duration of the activity itself must be duly attested;
- Link of the PhD to the topics covered by the Call for proposal

Art. 7 Interview

Candidates admitted to the interview will be notified at least twenty days before the date on which they will have to take the test by notice sent to the candidates at the e-mail address they have indicated in the application form, unless all interested parties give up in writing.

The Administration is not responsible for the change of e-mail address or its incorrect indication in the application form. Candidates are in any case required to consult the University website at the link <http://web.uniroma1.it/trasparenza/albo-pretorio> which will be used for all updates, deeds and information regarding the specific selective procedure.

The interview can be conducted remotely.

To be interviewed, candidates must have a valid identity document. During the interview the Examining Committee will verify the candidate's ability to deal with the topics covered by the research project referred to in art. 1 of this notice, in particular on:

- Interview on the candidate's experience in the field of scientific research
- Knowledge and experience in the field of theoretical physics of condensed matter and computational physics.
- Experience and knowledge of theoretical and technical aspects, and the use of relevant computational codes (HPC), related to the density functional theory and its applications in the field of vibrational and optical spectroscopies.

The interview will take place in a classroom open to the public. At the end of each session the Selection Committee will make public the results obtained by each candidate.

Art. 8 Examination Board

The Committee is appointed by the Department Director, based on a proposal deliberated by the Council or, in cases of urgency, by the Department Council, once the terms have expired. The Committee is composed of three members: a full professor with the function of President and two members chosen from the professors and researchers (including fixed-term ones) of Sapienza and researchers from Research Institutions in agreement; one of them also has the function of Verbalizing Secretary.

All Commissioners must belong to the field of competition or to the scientific disciplinary field covered by the selection. The Committee's judgment is incontestable on the substance.

The Committee may avail itself of highly qualified Italian or foreign expert auditors external to University, without additional charges to public finance.

Art. 9 Calculation of the ranking

The Committee, at its first meeting, will establish the criteria and modalities for the evaluation of the qualifications and the interview, formalising them in the relevant minutes, in order to assign the corresponding scores. The Committee, on the basis of the scores assigned, establishes the ranking in descending order, adding up the scores of the titles, publications and interview.

The Department Director, after having verified the aspects relating to the administrative-management regularity of the selection procedure by the Chief Administrative Officer, approves with his own disposition the results of the selection which will be made public at the Department and on University's website, giving notice to the candidates and leading to the taking up of service which must take place within 30 days from the communication by e-mail, starting from the first in the ranking and then proceeding in the order of the ranking where there is a written waiver. The right to the research fellowship shall expire if, within the deadline set by the call for proposals, they do not declare that they accept the fellowship or do not present themselves within the deadline.

Only deferrals from the date on which entitlement to the fellowship begins due to duly certified health reasons, compulsory abstention on maternity leave and duly substantiated cases of force majeure may be justified.

Art. 10 Conferment of the research fellowships

The fellowship is conferred by private law contract. This contract does not in any way constitute an employment relationship and does not give rise to any rights regarding the access to the roles of the University staff.

In accordance with art. 46 of Presidential Decree no. 445 of 28.12.2000, within 30 days from the conferment of the fellowship, under penalty of loss of right to it, the winner must produce a declaration on plain paper containing:

- a. Date and place of birth;
- b. citizenship;
- c. capacity to exercise political rights;
- d. no criminal convictions and no pending criminal proceedings.

The declaration relating to points (c) and (d) must also state that the requirement is met on the date of expiry of the deadline for the submission of applications.

The winner will be required to produce a declaration in lieu of affidavit regarding the authenticity of the titles submitted. If such declaration is not provided, the winner will be required to submit the titles evaluated in original, or alternatively, to regularise them in stamps.

It is without prejudice to the Administration the possibility to verify the truthfulness and authenticity of the certificates produced. In case of false declaration, the provisions of articles 75 and 76 of Presidential Decree no. 445 of 28.12.2000 are applicable.

Pursuant to art. 15 of Legislative Decree no. 33 of 14 March 2013, the winner shall submit to the Department of Basic and Applied Sciences for Engineering:

- a) a version of curriculum vitae, drafted in such a way as to ensure that it complies with the requirements of European Regulation no. 679/2016 and art. 26 of Legislative Decree no. 14 March 2013, no. 33, for the purpose of publication, and marking this curriculum vitae "for publication purposes";
- b) information relating to the fulfilment of duties or the ownership of positions in private law bodies regulated or financed by the public administration or the performance of professional activities.

The submission of the documentation referred to in letters a) and b) is a condition for the effectiveness of the contract and for the payment of the related fees.

Upon taking up his duties, the Department Director indicates to the research fellow the name of the Research Coordinator to whom he/she is entrusted. The winner must also comply with the requirements of the University Regulations for the conferment of research fellowships. The winner will be provided with a copy of this Regulation.

Art. 11 Rights and duties

The research fellows must carry out their research activities within the research programs approved by the Department to which they belong; the tasks assigned to the research fellows must be related to the research activities and not merely technical support. Research fellows can collaborate in the research activities conducted by students for the preparation of their thesis; they can participate in seminars and practical work for students and can be part of the profit exam boards as subject experts.

The research fellows have the right to use, for the purpose of carrying out their research activities, the equipment of the Department where they carry out their studies and to use the services available to researchers according to the rules in force and the provisions approved by the Department. If, where expressly authorized by the Research Coordinator, the research fellow has to go on a mission as part of the research to which he or she is assigned, he or she will be reimbursed the expenses in accordance with the criteria and procedures in force.

The research fellows are required to submit annually to the management of the Department in which they carry out their activities a written report on the research activity conducted, accompanied by the evaluation of the Research Coordinator.

The research activity can be partly carried out in a University or Research Institution abroad, obtaining specific certification, as long as this is in accordance with the programs and objectives of the research entrusted to the research fellows; the period of stay abroad must be previously and expressly authorized by the relevant Department on the basis of a reasoned proposal by the Research Coordinator.

The research fellow accepts and undertakes to observe and follow all the provisions of the Code of Ethics, the Code of Conduct for public employees adopted by Presidential Decree no. 62 of 16 April 2013, the Code of Conduct for Sapienza employees issued by Presidential Decree no. 1528 of 27/05/2015 and the University Code of Ethics issued by Presidential Decree no. 1636 prot. 0032773 of 23/05/2012. Violation by the research fellow of the obligations deriving from the Code of Conduct for Civil Servants will be considered a serious breach and will result in termination of the contract pursuant to art. 1456 of the Italian Civil Code and art. 2, paragraph 3, of Presidential Decree no. 62/2013.

The research fellow is required to comply with the protection and safety regulations, also in the health field, in force at this University.

Art. 12 Prohibition of cumulation, incompatibility, suspension

Research fellowships cannot be cumulated with gross annual personal taxable income, as per art. 49, paragraph 2 of the TUIR - Title I, Chapter IV, exceeding € 16.000,00. The fellowship may not be cumulated with scholarships for any reason whatsoever, with the exception of those granted by national or foreign institutions useful to integrate, during stays abroad, the research activity of the scholarship holders.

Holders of research fellowships are not allowed to participate in Bachelor's Degree Courses, Master's Degree or, PhD with scholarship, in Italy or abroad.

The employee assigned to Public Administration, holder of the research fellowships must be placed on unpaid leave. Employees of private employers, even part-time, are not eligible for research fellowships.

The research fellowship cannot be cumulated with other research fellowships, even if conferred by different Universities, national, foreign or online, as well as by the Bodies referred to in art. 22, paragraph 1, of Law no. 240/2010.

The fellowship is individual; fellowship holders may carry out self-employment activities, subject to written notification to the Department to which they belong and on the condition that: such activity is declared by the Department itself compatible with the pursuit of the research activity; does not involve conflicts of interest with the specific research activity carried out by the fellowship holder; does not cause prejudice to the University, in relation to the activities carried out; the Research Coordinator and the fellowship holder must declare that they are not bound by existing or pre-existing professional relationships.

Fellowship holders who intend to carry out or continue to carry out a work activity involving services rendered without charge at voluntary or cooperative associations or non-profit cultural or social welfare institutions may carry it out, without prejudice to the total fulfilment of their research duties. The research activity of the research fellow is suspended in cases of compulsory abstention due to maternity, parental leave and sick leave and extended according to the rules in force. A total period of justified absence not exceeding thirty days in a year shall not constitute suspension.

Art. 13 Loss and termination of the contract

The procedure for declaring the termination of the contract can be initiated against the fellowship holder who, after starting the planned research activity, does not continue it regularly and uninterruptedly for the entire period, without justified reason, or who is responsible for serious and repeated mistakes or breach of contract, on the basis of a reasoned proposal by the Research Coordinator, approved by the Council of the Department of reference.

The causes of termination of the contract are as follows:

- unjustified failure to start the activity or delay in the effective start of the activity;
- unjustified suspension of the activity for a period that is prejudicial to the research;
- violation of the system of incompatibilities laid down in Article 6 of the Regulation, repeated after a period of first warning;
- negative opinion expressed by the Council of the relevant Department or by the restricted body administration and management of the department itself.

In case of withdrawal by the research fellow, he/she must give notice by PEC at dipartimento.sbai@cert.uniroma1.it.

Art. 14 Communication of the selective procedure and final provisions

The notice relating to this selective procedure will be published on the website of the Department of Basic and Applied Sciences for Engineering, on the University Transparency portal, on the M.I.U.R. and European Union websites. The personal data provided by the candidates with the application will be processed for the purposes of managing the selective procedure and the possible recruitment procedure.

At any time the interested parties may exercise their rights under European Regulation no. 679/2016.

The person responsible for the processing of personal data is the Responsible for the procedure. For anything not provided for in this notice, please refer to the relevant laws and regulations in force.

Art. 15 - Person in charge of the procedure for this call

Mrs Oriana Cappelli (oriana.cappelli@uniroma1.it 0649766639) is in charge of the procedure subject of this call for the awarding of n.1 research fellowship.

Rome, **21.12.2020**

Signed by THE DEPARTMENT DIRECTOR

Prof. Adalberto Sciubba

ADDITIONAL AND INTEGRATIVE NOTES for the international participants:

- 1) All the laws listed are related to the legislation of the Italian Republic;
- 2) In case of legal disputes, the present english language translation does not have legal value in itself, and therefore does not supersede the original Italian version of the call announcement (Bando).

Signed by THE DEPARTMENT DIRECTOR

Prof. Adalberto Sciubba