THE RECTOR

HAVING REGARD TO Law No 168 of 9 May 1989;

HAVING REGARD TO the Statute of the University of Camerino;

HAVING REGARD TO Law No 241 of 8 July 1990 concerning the rules governing access to administrative documents and subsequent amendments and additions;

HAVING REGARD TO Presidential Decree No 445 of 28 December 2000 concerning regulations on administrative documents;

HAVING REGARD TO Law No 148 of 11 July 2002 on the recognition of Higher Education qualifications in Europe;

HAVING REGARD TO Ministerial Decree No 102/2011 - registered by the Court of Auditors on 13 May 2011 - referring to art. 22, para. 7 of Law No 240/2010 about the minimum allowance of a research grant;

HAVING REGARD TO Legislative Decree No 17 of 9 January 2008 on admission standards of third-country nationals for the purposes of scientific research;
CONSIDERING the research project “European Spectroscopy Laboratory to model the materials of the future – EUSpecLab - Project N. 101073486, Program: HORIZON-MSCA-2021-DN, Marie Sklodowska Curie Actions Doctoral Networks;

HAVING REGARD TO the Personal Data Protection Code EU Regulation 2016/679;

HAVING REGARD TO Law No 240 of 30 December 2010, art. 18 para. 6;

HAVING REGARD TO Law No 240 of 30 December 2010, in particular arts. 18 and 22 on the organization of universities, academic staff and recruitment, as well as enabling the Government to promote quality and efficiency in universities;


HAVING REGARD TO the Regulation for the conferral of awards for collaborative research issued with Rectoral Decree No 6408 of 7 February 2020;

HAVING REGARD TO the Code of Ethical Conduct issued by the University of Camerino with Rectoral Decree No 16 of 3 February 2015, and then amended by Board of Directors resolution no. 93 of 26 June 2019;

HAVING REGARD TO art. 6, para. 2-bis, of Decree-Law No 192 of 1 December 2014, amended and transformed into Law No 11 of 27 February 2015;

FOUND the request of the Research Project Coordinator to issue an HORIZON-MSCA-2021-DN-01call, in the form of a 36 months fixed-amount fellowship agreement, Area CUN: 02 “Physical sciences”, Competition Sector: 02/B1 “Experimental physics of matter”, Scientific Disciplinary Sector: FIS/01 Experimental physics, at the School of Science and Technology - Physics Division - University of Camerino (Macerata) – Italy – Research Project - project “European Spectroscopy Laboratory to model the materials of the future – EUSpecLab- Project N. 101073486, Program: HORIZON-MSCA-2021-DN-01, Marie Sklodowska Curie Actions Doctoral Networks;

WHEREAS this project has been funded under the European Union Horizon Europe Framework Programme – Grant Agreement 101073486 — EUSpecLab — HORIZON-MSCA-2021-DN-01;

WHEREAS funds are already available – Project code: N. 101073486;

CONSIDERING the Resolution of the Science and Technology No 138 of 14 September 2022;

CONSIDERING the Resolution of the Academic Senate and Board of Directors of 28 September 2022;

CONSIDERING the opportunity to open a competition for the conferral of a research grant;
DECRESSES

Article 1
Available position and eligible candidates

A public selection procedure for the recruitment for 1 Doctoral Researcher at the Science and Technology - Physics Division - of the University of Camerino is hereby announced, lasting 36 months, with assessment at the eighteenth month. Details on the position:

<table>
<thead>
<tr>
<th>Candidates</th>
<th>Duration</th>
<th>Total cost for the institution for 36 months</th>
<th>Gross salary payable to the researcher for 36 months</th>
<th>Mobility allowance for 36 months</th>
<th>Family allowance for 36 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher &lt; not be in possession of a doctoral degree at the date of recruitment</td>
<td>36 months full-time</td>
<td>€119,217,60</td>
<td>€96,647,51</td>
<td>€21,600</td>
<td>€660,00/month for researchers with a family – if Country correction coefficient (CCC) is not applicable.</td>
</tr>
</tbody>
</table>

The family allowance is due if the researcher has a family at the time of recruitment. “Family means persons linked to the researcher by marriage (or a relationship with equivalent status to a marriage recognized by the legislation of the country where this relationship was formalized) or dependent children who are actually being maintained by the researcher.

Research Project
“European Spectroscopy Laboratory to model the materials of the future – EUSpecLab- Project N. 101073486, Program: HORIZON-MSCA-2021-DN-01, Marie Sklodowska Curie Actions Doctoral Networks

Research Title
Reverse Monte Carlo atomistic structural modelling of materials constrained by X-ray absorption spectroscopy (Researcher 5)

CUN Area
Competition Sector
Scientific Disciplinary Sector
FIS/01 – EXPERIMENTAL PHYSICS

Position 1
Description / Research Aims
Researcher 5

Objectives:
The main goal is the experimental study of the microscopic structure of materials by X-ray absorption spectroscopy (XAS). The project will address disordered systems such as oxide and chalcogenide glasses at different pressure-temperature conditions and hydrogen charged metals. This objective will require the further development of a data
An analysis approach based on Reverse Monte Carlo to build three-dimensional structural models having the best agreement with one or more sets of experimental data (XAS but also complementary wide and small angle x-rays and neutron scattering).

The Researcher will:

• develop and implement suitable computational strategies (and the related codes) to include wide/small angle scattering data, coordination constraints and/or ab-initio calculated multiple scattering EXAFS signals within the RMC modelling (implementation of genetic and machine learning algorithms to enhance the sampling efficiency will be explored).

• validate the approach and the developed code modules on test cases such as simple molecular systems

• perform and interpret X-ray absorption experiments on specific systems, such as prototypical oxide and chalcogenide glasses at different conditions of pressure and temperature

• in the framework of an intersectoral secondment, explore the capabilities of the approach to investigate local-medium range structure effects on steels or tungsten samples charged with hydrogen of interest for industrial applications (H reservoirs, fusion reactors).

**Planned secondments**: EUSpecLab adopts complementary measures to expose Researcher to multiple (research) environments. Through the system of academic and non-academic secondments, every Researcher will be exposed to both academic and non-academic (research) environments. While in the academic secondment the emphasis will be mainly on acquiring and applying research skills, the non-academic secondments will enable the acquisition of transferable skills, and the dissemination and valorization of research.

**Academic Secondment**:

Univ. Toyama (Japan): to learn the fundamentals of multiple scattering calculations in X-ray absorption spectroscopy for its implementation in the RMC code.

AALTO (Finland): to learn ML methods and explore integration into Reverse Monte Carlo modelling.

**Non-Academic Secondment**:

RINA (Italy): to develop knowledge of the industrial R&D on hydrogen charged steels or tungsten. Preparation of samples and TEM/SEM characterizations.

**Location**

School of Science and Technology - Physics Division – University of Camerino – Italy

**Required Language**

English

**Contacts**

Prof. Angela Trapananti - Research Project Coordinator
### Taxation, social security, insurance and benefits

As for taxation and social security matters, the provisions of art. 22, para. 6, Law No 240/2010 will apply. The University provides insurance coverage for personal injury and third-party liability for research grant holders.

### General Admission Requirements

**Candidate Eligibility Criteria**

The Researcher can be of any nationality as long as the rule of mobility is met. At the time of recruitment by the host organization, researchers must not have resided in the country where the research training activities take place for more than 12 months in the 3 years immediately prior to the recruitment date (and not have carried out their main activity – work, studies, etc - **in the hosting country, namely Italy**). The beneficiary must be, at the date of recruitment, doctoral candidates, i.e. not already in possession of a doctoral degree at the date of the recruitment. At the time of recruitment, the candidate must hold a Master Degree in Physics, Material Science or related disciplines. Solid background in condensed matter physics, some skills in programming (languages Fortran, C/C++, Python and Linux), experience with molecular simulations or x-ray spectroscopy or scattering would be seen very favorably.

### Incompatibility and non-overlapping

The Researcher cannot be awarded to tenured academic staff employed by Universities, Astronomical or Astrophysical Observatories, public bodies, public research and experimentation agencies, research institutions as defined in accordance with art. 8, D.P.C.M. No 593/1993 and subsequent amendments and integrations, the National Agency for New Technologies, Energy and Sustainable Development (ENEA), the Italian Aerospace Agency (ASI). This Research Grant cannot be aligned with other employment contracts and scholarships.

---

**Article 2**

**Admission requirements and Application and presentation deadline**

The application and the related attachments must be submitted exclusively through the computer application system adopted, available at the link indicated on the webpage on which the Notice of the Selectin Procedure was published.

For the online submission of the application, candidates must have an ordinary e-mail address (not certified e-mail), for the purposes of registering with the system. Registration must be done at the time of first access.

Please note that the e-mail address indicated by the candidate during registration will be used by this Administration for all subsequent communications relating to the selectin procedure in question.
The application must be submitted exclusively through the online procedure indicated in the Notice, containing the following wording, which differs according to the position announced:

“Selection procedure for the conferment of one (1) Doctoral Researcher at the Science and Technology - Physics Division - of the University of Camerino – Scientific Disciplinary Sector FIS/01 “Experimental physics” - Research Title: “Reverse Monte Carlo atomistic structural modelling of materials constrained by X-ray absorption spectroscopy (Researcher 5)” - Head of Research Project: Prof. Angela Trapananti (Program: HORIZON-MSCA-2021-DN-01”).

Applications presented in ways other than online will not be considered admissible and therefore will be excluded.

Applications for participation must be sent electronically, under penalty of exclusion, by 11:59 p.m. (Italian time) on the thirtieth day following that of publication of this Notice on the website.

If the deadline of the Notice falls on a Saturday or a public holiday, the deadline will be postponed to the first next working day.

Each candidate can send only one application.

The application and its attachments must be sent in one of the following formats: PDF, JPG, JPEG, PND (maximum size for each attachment 5MB).

Successful application and date of receipt of the application is certified by the computer system by means of a receipt, which will be automatically sent to the e-mail address provided by the candidate during registration.

The computer application system for submitting the application will remain active even on any days when the University is closed.

After the deadline for submitting applications, the system will no longer allow submissions.

Assistance with the online compilation may be requested by sending a specific support request directly from within the platform and will be suspended starting from the twenty-ninth day from publication of the Notice, and until the deadline for the online compilation and submission of the application.

In the application, candidates must declare, assuming full civil, criminal, and administrative responsibility, the following:

1) Their last name, name, place, and date of birth;
2) To have citizenship of one of the Member States of the European Union or non-EU;
3) To have no criminal convictions, or any pending criminal proceedings;
4) The Masters’ degree obtained with the date on which the degree was awarded and the University from which it was obtained;
5) To hold no other scholarship, fellowship, or research grant, and undertaking to renounce them in case of becoming successful candidates in this selection procedure;
6) Their residence;
7) Citizens of the Member States of the European Union or non-EU must also declare that they enjoy civil and political rights in the Country of their origin or provenance;
8) To have no degree of kinship or affinity, up to and including the fourth degree, with a Professor working at the School publishing the Notice, or with the Rector, Director-General, or a member of the University’s Board of Governors; Failure to present this last declaration shall result in the exclusion from the procedure.

Candidates with disabilities, pursuant to Law No. 104 of 05 February 1992, in their application must make an explicit request in relation to their disability and regarding the aid necessary for the completion of the interview.

Candidates must attach the following to the application:
1) **Curriculum vitae, duly filled, originally signed and dated.** A copy of the curriculum, omitting the personal data (pursuant to Art. 4, paragraph 3 of Legislative Decree No. 33/2013), must also be sent in PDF format to one of the following e-mail addresses: anna.silano@unicam.it, in order to have it published on the University website.

2) **All documents and qualifications deemed relevant for the purposes of the procedure, and a list of the same** (publications, degree thesis, courses, various diplomas, etc.).

3) **The qualification(s) obtained abroad, required for the purposes of admission to this selection.**

   Is a necessary condition for the stipulation of the contract (for candidate’s citizens of non-EU countries, who are not yet in possession of a residence permit in Italy, the delivery of the qualification(s) according to these methods is a necessary condition for the research activity).

4) **Copy of a valid identification document.**

   The University Administration reserves the right to verify the veracity and authenticity of the statements produced.

   Candidates are admitted to the selection with reserve (conditional admission).

   The Administration may decide at any time, on the basis of its own motivated provision, even after the tests have been carried out, to exclude a candidate from the selection procedure. The exclusion will be communicated to the interested party.

   Certificates issued by the competent authorities of foreign Countries must comply with the provisions in force in that Country and must also be authenticated by the competent Italian consular authorities.

   Publications must be presented in the original language; they must be translated into one of the following languages: Italian, French, English, German, and Spanish, only if the original language is not one of the above. Documents, degrees, and publications sent to the University after the deadline for submitting applications shall not be taken into consideration.

---

**Article 3**

**Selection Committee and evaluation criteria**

The Selection Committee is appointed by the Rector and is composed of three members, upon proposal of the School Board, and it is composed by the Responsible of Research project and by other two members plus a proxy, Professors or Researchers whose competences and skills belong to research area of the project. Their curricula will be published on the University website.

In order to keep record of the selection procedure, minutes are taken by the Selection Committee.

The selection is based on the evaluation of qualifications and on interview (in presence or by skype).

Qualifications, relevant to the research activity will be taken into account as follows:

- Academic qualifications: master’s degree or equivalent awarded in Italy or abroad.
- Scientific professional curriculum: scientific track record documenting aptitude to research, contracts stipulated with and/or fellowships awarded by Italian, overseas, international institutions, educational and research achievements deemed useful for the selection and prized by the Committee in relation to the research activity to be performed, etc...
The Selection Committee will also evaluate creativity and autonomy shown by candidates’ scientific publications.

**Article 4**

**Rights and duties of grant holders**

Grant holder carries out research activities under the research programme adopted by the School. In order to carry out his/her research activity, grant holder is entitled to use facilities, equipment and services provided for researchers in accordance with the School regulations in force.

The research activities can be developed in other partner Institutions as provided by the Grant Agreement and with the authorization of the Principal Investigator.

The recruited researcher must respect:
- the obligation to work full-time;
- the obligation to work in the premises of the Host institution;
- the obligation to work exclusively for the action;
- the obligation not to receive for activities carried out in the frame of the action, other income than those received from the beneficiary (or any other entity referred to in Annex 1 of the Grant Agreement);
- the obligation to carry out the activities foreseen in the research project with the diligence required, taking into account the particular scientific and professional content of the activities and taking into account that these activities are necessary for the University to fulfill the obligations arising from the Grant Agreement;
- the obligation to comply with the directives and the request of the Principal Investigator in order to allow the University to fulfill its results and reporting obligations within the foreseen deadlines.
- the obligation to inform the beneficiary as soon as possible of any events or circumstances likely to affect the Agreement;
- the arrangements related to the intellectual property rights between the beneficiary and the researcher during implementation of the action and afterwards;
- the obligation to maintain confidentiality;
- the obligation to ensure the visibility of EU funding in communications or publications and in applications for the protection of results;

Grant holder are obliged to submit a detailed semestral written report to the School Board covering the research activities carried out and results achieved together with an opinion by the coordinator. Further detailed periodical written report may be requested by the Principal Investigator to the researcher. Those additional requested reports must be considered as mandatory. Grant holder’s contract may be terminated, in case:
- the research activity is unjustifiably postponed;
- a negative evaluation on the research activity by the department, where the grant holder is working, is given;
- a negative evaluation regarding the diligent implementation of the activities foreseen in the research project, taking into account the particular scientific and professional content of the activities and taking into account that these activities are necessary for the University to fulfill the obligations arising from the Grant Agreement;
d. of negative overall assessment in the eighteenth month;
e. The researcher does not respect the obligations above listed.

Delays and interruptions can be justified just in case of duly attested serious illness or force majeure. Parental leave is regulated by the Decree of the Ministry of Labour and Social Security of 27 July 2007, published in the Italian Official Journal no. 247 of 23 October 2007, while matters regarding sick leave are regulated by art. 1, para. 788, Law no. 296/2006 and subsequent modifications. During the period of obligatory maternity leave, the maternity subsidy paid by INPS in accordance with art. 5 of the abovementioned Decree of 27 July 2007 shall be supplemented by the University to match the entire amount of the remuneration due to the research grant holder.

Grant holders may withdraw from the contract upon 30 days written notice.

In any case the length of the research contract cannot exceed the expiration date of the project. The Fellow Research contract is ruled by the Unicam - University of Camerino Regulation “Regolamento per Assegni di Ricerca”.

**Article 5**

**Contractual arrangement**

The fellowship is governed by a contract of the Director General. The winner of the selection procedure is invited to stipulate a private law contract usually effective from the beginning of the following month. As such, the contract does not in any way imply academic staff permanent employment and does not count towards tenure track positions at Italian University.

Upon termination of the contract, grant holder will have to submit a report on his/her research activity.

**Article 6**

**Fiscal and social security provisions**

Allowances referred to in this Regulation are subject to the fiscal provisions of art. 4, Law No 476/1984 and subsequent amendments and integrations, and to the social security provisions of art. 2, para. 26, Law No 335/1995 and subsequent amendments and integrations.

**Article 7**

**Processing of personal data**

The personal data transmitted by the candidates within the applications for participation in the selection procedure, pursuant to EU Regulation 2016/679, will be processed exclusively for the purposes of this selection procedure, and of assignment procedures for the grants in question, if any.

**Article 8**

**Publication**

In accordance with transparency requirements as of Legislative Decree No 33 of 14 March 2013, this selection procedure announcement will be published on Euraxess site at
http://ec.europa.eu/euraxess, while the announcement, the list of candidates, their curricula and the final results of the selection procedure will be published on the University of Camerino website at http://www.unicam.it/bandi.

THE RECTOR
Prof. Claudio Pettinari

PETTINARI
CLAUDIO
21.11.2022
10:05:18
UTC