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SERVIZIO CONCORSI E PROCEDIMENTI
ELETTORALI

COMPARATIVE SELECTION FOR N. 2 SENIOR RESEARCH ASSOCIATES – ART. 24, PARAG. 3, LETTER B) OF LAW NO. 240 DATED 30 DECEMBER 2010 - FULL TIME - NON-RENEWABLE THREE-YEAR TERM

DEPARTMENT OF BIOTECNOLOGIE CHIMICA E FARMACIA

<u>N. 1 POSITION</u> Academic recruitment field: 03/A2 - Models and Methods for Chemistry Academic discipline: CHIM/02 – Physical Chemistry
Admission requirements: PhD in Chemical Sciences
Research Project “Design and characterization by Quantum Mechanic methods and Life Cycle Analysis of innovative materials for novel generation solar cells”
Research activities: The research will focus on the design and characterization by means of computational methods and life cycle analysis (LCA) of new materials for the production of new generation photovoltaic devices characterized by high efficiency and stability. The design will deal with: i) the research of structural patterns to impart specific optical characteristics to chromophores for the optimization of solar cells photovoltaic properties, and ii) the life cycle environmental impact analysis of materials and their reuse/recycling potential. Such project requires experience in the use of computational protocols, especially based on the Density Functional Theory (DFT) for the calculation and assessment of electronic and photophysical properties of the selected structures, and in the use of the LCA for inventories and dataset compiling and the environmental impact assessment
Hours of classroom teaching each academic year: 60
Foreign requested language: English - Level of proficiency: Excellent oral and written
Preferential titles: Documented experiences of research activity at foreign and/or international academic labs, at least for three months. High training Post-doctoral grants for multidisciplinary research. Participation to research projects founded by the European Union
Maximum of scientific publications: 12

DIPARTIMENTO DI SCIENZE STORICHE E DEI BENI CULTURALI

<u>n. 1 POSITION</u> Academic recruitment field: 11/B1 - Geography Academic discipline: M-GGR/01 - Geography
Admission requirements: PhD
Research Project: “Studies in the area of Geography and Historical Geography with specific attention to the



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topics of the evolution of historical landscapes in relation to the history of settlements and the dynamics of population”
Research activities: The researcher should conduct theoretical and field research activities in the area of Geography and Historical Geography, with specific attention to the issues of historical landscape evolution in relation to the history of settlements and to the dynamics of population. These activities include: the analysis of geo-historical documentation, with specific attention for contemporary and historical demographic sources, use of new technologies of spatial analysis and quantitative geography and, in particular, Geographic Information Systems for the production of thematic cartography and for the construction of GIS platforms of subjects connected to the research
Hours of classroom teaching each academic year: 72 hours.
Foreign requested language: English - Level of proficiency: Advanced (C1)
Preferential titles: Documented experience in the research fields of the project; teaching experience in the disciplinary scientific area of the call
Maximum of scientific publications: 12

ADMISSION REQUIREMENTS

Applications for the comparative selection procedure are accepted from candidates holding a PhD or equivalent completed in Italy or abroad, as indicated in art. 1 of the call.

Applicants must also:

- have been awarded the National Scientific Qualification to practice as first or second level professors as laid down in art. 16 of Law no 240/2010 for the tender sector object of the call for applications or for one of the sectors included in its macro-sector;

or:

have benefited for at least three years, including non-consecutive ones, from:

- contracts as laid down in Art. 24 - paragraph 3- point a) of Law 240/2010 (junior researchers), or contracts entered into pursuant to art. 1, paragraph 14 of Law 230/2005 or similar contracts in foreign Universities;
- research grants pursuant to art. 22 of Law 240/2010, research grants pursuant to art. 51, paragraph 6, of Law 449/97, as amended, or postdoctoral scholarships in accordance with art. 4 of Law 398/89, or similar grants or scholarships in foreign universities.

As concerns these postdoctoral contracts, grants or scholarships, the candidate must fully describe their nature and duration, particularly should they refer to activities carried out abroad, in order to define the analogy.

Applications are also accepted from non-EU citizens who meet the admission requirements stated above.

In relation to qualifications obtained abroad, it is necessary to attach the above-mentioned academic equivalence of the educational qualification in accordance with art 38 of Legislative Decree no 165/2001, or the certificate of equipollence with the PhD title in accordance with Italian University regulations issued pursuant to Paragraph 74 of



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Presidential Decree 382/1980, or the application for the request of the equivalence/equipollence certificate.

In the latter case, applicants will be provisionally admitted to the call, it being understood that the academic equivalence/equipollence certificate must be in their possession at the time of recruitment.

Candidates must be in possession of the requirements for admission to the selection procedure by the deadline of this call.

All candidates are admitted to the selection procedure conditionally, reserving the right to verify that they meet the requirements for admission to the selection procedure. The administration can, at any time and with justifiable reason, exclude candidates who fail to meet the selection requirements.

Applications cannot be accepted from the following people: retired or currently employed full or associate University professors or researchers; those who have a relationship of consanguinity or affinity up to and including the fourth degree with a professor employed at the Department proposing the activation of the contract, or with the Rector, the Registrar or a member of the University Council.

Application Procedure

Applications for admission to the procedures and the documents indicated below must be lodged by certified email to rettore@pec.unisipec.it or email to concorsi@unisi.it within 30 days starting the day after the publication of this call in the *Gazzetta Ufficiale della Repubblica Italiana*.

Proof of receipt will be considered as: for applications sent by certified email (PEC) rettore@pec.unisipec.it - the date of the delivery receipt sent automatically by the system; for those sent by email: concorsi@unisi.it, the date of the University terminal that receives them. The University administration declines any responsibility for non-receipt of applications due to third party liability. To check whether an application has been received and is deemed complete, candidates can contact the University's *Servizio Concorsi e Procedimenti Elettorali* (tel. + 39 0577 235060 - 235058 - 235059). Applications must be accompanied by a copy of the candidate's identity document under art. 38 of Presidential Decree no. 445 of 28 December 2000.

Applications must be compiled according the enclosed model (Annex A), providing all the information required.

Candidates must enclose with the application:

- scientific publications and its signed list;
- a signed curriculum vitae
- Declaration in lieu of certification (Annex B)
- copy of the candidate's identity document.

Publications must be submitted in the original language which, if other than English, French, German and Spanish, must be translated into one of said languages. The translated texts must be submitted as a certified true typed copy as required by current regulations.

Documents written in a foreign language other than English, French, German and Spanish, must be accompanied by an Italian translation, certified as true to the original text by the competent diplomatic or consular representation, or by an official translator.



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EXAMINING COMMISSION

The Examining Commission is composed of three full professors or researchers (including one from outside the University of Siena) belonging to the academic recruitment field or to an academic discipline in the same group of academic recruitment fields.

Prior to the start of the selection, the candidate must declare under his/her own responsibility, pursuant to article 7 of the University Code of Ethics, that he/she does not have a relationship of consanguinity or affinity up to and including the fourth degree with any member of the Committee, and that the Committee does not include his/her spouse or partner or any persons with whom he/she has business relations.

EVALUATION OF QUALIFICATIONS, PUBLIC INTERVIEW AND ORAL EXAM

Prior to the start of the selection, the candidate must declare under his/her own responsibility, pursuant to article 7 of the University Code of Ethics, that he/she does not have a relationship of consanguinity or affinity up to and including the fourth degree with any member of the Committee, and that the Committee does not include his/her spouse or partner or any persons with whom he/she has business relations.

The selection is made by through a preliminary evaluation of candidates and a reasoned analytical judgment of their academic qualifications, curriculum and scientific productivity, including their doctoral thesis, if applicable, based on the criteria and parameters specified in Ministerial Decree 243 dated 25.05.2011.

Following the preliminary evaluation, the top 10 to 20 per cent of the most merit-worthy candidates, and in any case no less than six, will be admitted to a public interview with the Commission concerning their qualifications and scientific work. If only six or less candidates apply, all of them will be admitted to the interview.

On the same occasion as the interview, candidates will be required to take an oral exam in a foreign Language, to ascertain their proficiency, as declared in their academic qualifications. Candidates who do not pass the oral exam are not considered eligible.

Should the candidates be foreign nationals, they must demonstrate an adequate knowledge of the Italian language during the interview.

Following the interview, a score is given to the qualifications and each publication presented by the candidates who have passed the oral exam, according to criteria established in advance by the Commission itself.

The Commission writes up a report at the end of each individual meeting.

A notice inviting candidates for the interview and oral exam will be sent to the individual candidates at least fifteen days before the date of the interview and exam. This notice need not be given fifteen days in advance if all candidates admitted to the selection provide their explicit written consent.

Candidates must bring their identity document.

EU nationals must bring their passport or identity document issued by their country of origin. Candidates from non-EU countries must only bring their passport.

RANKING LIST AND PROPOSAL OF EMPLOYMENT

Upon completion of the selection procedure, the Commission draws up a ranking list of eligible candidates. This list is valid for two years.



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CONTRACT AND ACTIVITIES

The successful candidate will be offered an individual, non-renewable three-year, fixed-term contract of employment regulated by the provisions in force concerning salaried employment, also in relation to tax, healthcare and social security contributions applicable to income from employment.

The University will pay for insurance against accidents and third party liability.

The total annual commitment to teaching, supplementary teaching and student support is equivalent to 350 hours; for the purposes of reporting on the research project, the research, supplementary teaching and student support together are figuratively equal to 1500 each year. In the case of public funding, the contract will be terminated should the funding not be received. The trial period lasts three months.

INCOMPATIBILITY AND OTHER COMMITMENTS

The research contract is not compatible with the following:

- any other contract of employment with a public or private body;
- research grants from other Universities;
- teaching contracts regulated by the relevant provisions in force;
- doctoral or post-doctoral research grants or, in general, any grant or scholarship for any purpose awarded by the University or any third party;

PUBLICATION

This call and the summary in English are published on the University's Albo on line, on the web page at the following address: <http://www.unisi.it/ateneo/concorsi>, on the website of the Ministry for Education, University and Research (www.miur.it) and on the European Union portal (<http://ec.europa.eu/euraxess/>).

Date digital signature

The Registrar
Marco Tomasi

Procedure manager
Maria Bruni

ATTACHMENTS

- 1 Annex – A
- 2 Annex – B
- 3 Annex C