

## Universidade de Lisboa Instituto Superior de Agronomia

### NOTICE OF OPENING nº 12476/2018

NOTICE OF OPENING OF AN INTERNATIONAL COMPETITION FOR THE RECRUITMENT OF A DOCTORATE UNDER THE ARTICLE 23 OF DECREE-LAW No. 57/2016, OF AUGUST 29, WITH THE AMENDMENTS INTRODUCED BY LAW 57/2017, OF 19 JULY AND COMPLEMENTARY LEGISLATION

#### Notice ISA nº13/CEF

1. After a favorable decision by the President of the Instituto Superior de Agronomia (ISA), following the proposal of its Science Council, in the meeting of 16th July 2018, and after the favorable decision taken by the Rector of the University of Lisbon in the 10 of August 2018, an international selection competition is open for one doctorate position for the exercise of activities of scientific research encompassing studies for biomass utilization, increasing added-value and contributing for a more sustainable use of the feedstock under the biorefinery concept. The focus is to develop efficient fractionation processes using biomass raw material residues of different types and to characterize the fractions with a main emphasis on the lignin derived fractions and on the phenolic based extractives by Py-GC/MS, 2D-NMR, DFRC, HPLC, GC-MS; with the evaluation of their potential for added-value products.
2. Applicable law:
  - a) Decree-Law No. 57/2016, of August 29, the regulations for hiring doctorates to stimulate scientific and technological employment in all areas of knowledge (RJEC), with the amendments introduced by Law No. 57/2017, dated July 19, also taking into account the provisions of Regulatory Decree No. 11-A/2017, of December 29.
  - b) “Código do Trabalho” (Labour Code, LFTP), approved by Law No. 7/2009, of February 12, in its current wording.

3. In compliance with article 13 of RJEC, the jury of the competition is composed as follows:

President: Head of the Research Unit Centro de Estudos Florestais, José Guilherme Calvão Borges, Professor Associado com Agregação do Instituto Superior de Agronomia

Members:

José Afonso Rodrigues Graça (Professor Auxiliar, Instituto Superior de Agronomia)

António Jorge Velez Marques (Professor Coordenador do Instituto Politécnico de Lisboa)

Ofélia Maria Serralha dos Anjos (Professor Adjunto, Escola Superior Agrária, Instituto Politécnico de Castela Branco)

Florabela Carvalheiro Amaro (Investigadora Auxiliar, Laboratório Nacional de Energia e Geologia)

4. The place of work is located in Instituto Superior de Agronomia, Tapada da Ajuda 1349-017 Lisboa.

5. The monthly remuneration to be attributed is that defined in paragraph 1 of article 5 of Regulatory Decree No. 11-A/2017, of December 29, corresponding to level 33 of the single remuneration table, approved by Administrative Rule no. 1553- C/2008, December 31, being 2,128.34 Euros (for cases covered by the Transitional Rule), without prejudice to paragraph 3 of article 5 of the Regulatory Decree-Law.

6. In view of the system of financing of the contracts resulting from this tender, this will cease, if the fellowship holder who originated its opening does not apply.

7. The contract is celebrated for a term of 3 years, automatically renewable by periods of one year, till the maximum term of 6 years, unless:

- a) The Science Council of ISA proposes its termination based on an appreciation of unsatisfactory research work development, under the terms of the School regulations, with communication up to 90 days before term of the initial contract or its renovation;
- b) By application of any of the causes of extinction referred in article 289 of LTFP;
- c) The public employer, or the worker, communicate in writing, 30 days before the term of the contract, the will for its non-renovation, with its consequent finalisation.

8. The competition is open for national candidates, foreigners and stateless persons who hold a doctoral degree in a branch of knowledge or specialty that covers the scientific area of Forest Engineering, as well as those to whom, under the terms of Decree-Law n No. 341/2007, of October 12, regulated by Administrative Rule no. 227/2017, of July 25, was recognized the totality of the rights inherent to the degree of Doctor, or to whom, under the terms of Decree-Law No 283/83 of June 21, has been granted equivalence or recognition to the degree of Doctor and are also holders of a scientific and professional curriculum that reveals an adequate profile to the activity to be developed.

The equivalence, degree recognition or register of the doctoral degree should be obtained till the term of contract is signed in the case the candidate is ranked in an eligible position and it has obtained the doctoral degree in a foreign country.

9. Formalization of applications:

9.1 Applications are formalized by means of an application form, made available at [http://www.isa.utl.pt/files/pub/ee/servicos/drh/Form\\_INVESTIG.docx](http://www.isa.utl.pt/files/pub/ee/servicos/drh/Form_INVESTIG.docx), addressed to the President of the Instituto Superior de Agronomia, stating the identification of this notice (Refª ISA nº 1/CEF), full name, affiliation, number and date of identity card, Citizen Card, or number identification number, date and place of birth, marital status, profession, residence and contact address, including e-mail address and telephone contact.

9.2 The application shall be accompanied by documents proving the conditions laid down in point 8 for admission to this invitation to tender, in particular:

- a) Copy of certificate or diploma;

- b) PhD thesis or equivalent document (s) that determined the award of the academic degree of PhD;
- c) Detailed curriculum vitae, structured in accordance with the items in points 13 and 15, indicating the works, and adding a copy of them, that the candidate considers most relevant to each of the items in points 13 and 15;
- d) Scientific project to develop research to develop research activity encompassing studies for biomass utilization, increasing added-value and contributing for a more sustainable use of the feedstock under the biorefinery concept. The focus is to develop efficient fractionation processes using biomass raw material residues of different types and to characterize the fractions with a main emphasis on the lignin derived fractions and on the phenolic based extractives by Py-GC/MS, 2D-NMR, DFRC, HPLC, GC-MS; with the evaluation of their potential for added-value products.
- e) Other documents that the candidate justifies to be relevant to the analysis of his/her application.

9.3 Applicants submit the documents referred to in 9.1 and 9.2 in PDF format to the e-mail address [concursos57@isa.ulisboa.pt](mailto:concursos57@isa.ulisboa.pt) issued up to the last day of the tender opening period, which is fixed at 30 working days after publication of this Notice at the Portuguese Diário da República with the number 12476/2018. An applicant may, by reason of the impossibility or excessive costs of sending any of the documents referred to in 9.1 and 9.2 by e-mail, deliver them on physical support, respecting the above date, by registered mail with acknowledgment of receipt to the address postal service, Núcleo de Recursos Humanos do Instituto Superior de Agronomia, Tapada da Ajuda 1349-017 Lisboa, or by hand at Núcleo de Recursos Humanos do Instituto Superior de Agronomia, Tapada da Ajuda Lisboa. Not being accepted the justification of the candidate for the delivery of documents only in physical format, the President of the Jury will give a reasonable time to present them also in digital support.

9.4 The application and documents may be submitted in Portuguese or English, although the President of the Jury, and when a member of the Jury is a non-native Portuguese speaker, may request that, within a reasonable time, the candidate translates into English a document previously presented in Portuguese.

10. By decision of the President of ISA, candidates who do not comply with the provisions of point 9 are not admitted to the competition, and neither the candidates not having submitted the application form, or that delivered the documents in an unreadable or invalid way. The jury is also entitled to require any candidate, in case of doubt and for the purposes of admission to competition, to present documentary evidence of the declarations in the submitted documents.

11. Approval on absolute merit:

11.1 The Jury will deliberate on its approval or rejection on absolute merit, by a justified vote where no abstentions are admitted.

11.2 A candidate is considered approved on absolute merit when he/she obtains a favorable vote of more than half of the members of the jury.

11.3 Candidates who have a scientific and curricular path relevant to the scientific area(s) of the competition and taking into account their suitability for the additional weighting criteria identified in 15.5 will be approved on absolute merit.

11.4 The unfavorable vote to approval on absolute merit can still be justified by the failure to fulfill the following circumstance: The Scientific Project prepared by the candidate is shown to be clearly insufficient and misaligned with the scientific area (s), suffering from serious inaccuracies or not supported by previous work of the candidate.

12. According to article 5 of RJEC, the selection is made through the evaluation of the scientific and curricular path of the candidates.

13. The evaluation of the scientific and curricular path focuses on relevance, quality and timeliness:

- a) Of the scientific, technological, academic, cultural or artistic production during the last five years and considered more relevant by the candidate;
- b) Of the applied or practice-based research activities developed over the last five years and considered as having the greatest impact by the candidate;
- c) Of the activities of extension and dissemination of knowledge developed during the last five years, in particular in the context of promoting the culture and scientific practices considered by the candidate to be of greater relevance;
- d) Of the activities of science, technology and innovation programs management or of the experience in observing and monitoring the scientific and technological system or higher education, in Portugal or abroad.

14. The period of five years referred to in the preceding paragraph may be increased by the jury, at the request of the candidate, when justified on grounds of suspension of scientific activity for socially protected reasons, namely for reasons of parental leave, prolonged serious illness, and other situations of unavailability for work legally protected.

15. The assessment criteria are set out in this entry, with the option mentioned in point 15.5, with particular emphasis on the curriculum vitae and the contributions considered to be of higher relevance by the candidate in the last 5 years:

15.1. Quality of the scientific, technological, cultural or artistic production, considered more relevant by the candidate, and relevant to the project to be developed, which was given a weighting factor of 70% considering:

- (i) Scientific publications: a parameter which takes into account books, chapters of books, articles in scientific journals and international conference proceedings of which the applicant was the author or co-author, considering:
  - Its nature;
  - Its impact;
  - The scientific/technological level and innovation;
  - Diversity and multidisciplinary;
  - International collaboration;

- The importance of contributions to the advancement of the current state of knowledge;
  - the importance of the works that have been selected by the candidate as most representative, in particular as regards their contribution to the development and evolution of the scientific area for which the competition is open.
- ii) Creation and strengthening of laboratory resources: a parameter that takes into account the participation and coordination of initiatives by the candidate that have resulted in the creation or reinforcement of laboratory infrastructure of an experimental and/or computational nature in support of research.
- iii) Recognition by the international scientific community: a parameter that takes into account:
- Prizes from scientific societies;
  - Editorial activities in scientific journals;
  - Participation in editorial bodies of scientific journals;
  - Coordination and participation in program committees of scientific events;
  - Invited lectures in scientific meetings or in other institutions;
  - Participation as a member of competitive admission scientific societies and other similar distinctions.
- iv) Authorship and co-authorship of patents, models and industrial designs, taking into account their nature, territorial scope, technological level and the results obtained.
- v) Coordination and participation in scientific projects: a parameter that takes into account the participation and coordination of scientific projects by the candidate, subject to competitive bidding, considering:
- The territorial scope and its size;
  - The technological level and the importance of the contributions;
  - Innovation and diversity.
- vi) Dynamization of scientific activity: a parameter that takes into account the capacity of coordination and leadership of research teams demonstrated by the candidate.
- vii) Accompaniment and orientation of students, trainees and research fellows: a parameter that takes into account the orientation of doctoral students, master's and undergraduate students, trainees and research fellows taking into account the number, quality, scope and scientific/technological impact of the resulting publications, theses, dissertations and final course papers, distinguishing especially the awarded works and the international recognition.

15.2. Activities of applied or practice-based research, considered to be of greatest impact by the candidate, and relevant to the project to be developed, which was given a weighting factor of 10% considering:

- (i) Vocational training actions: a parameter which takes into account the participation and coordination of technological training actions aimed at enterprises and the public sector, taking into account their nature, technological intensity and results achieved.
- ii) Provision of services and integrated consultancy in the institutional mission: a parameter that takes into account participation in activities involving the business community and the public sector, taking into account the type of participation, size, diversity, technological intensity and innovation.
- (iii) Design, project and production of scientific outputs: a parameter which takes into account the value for the Institute's activities of relevant professional experience.

15.3. Activities of extension and dissemination of knowledge, particularly in the context of the promotion of culture and scientific practices, considered of greater relevance by the candidate, and relevant to the project to be developed, which was given a weighting factor of 10% considering;

- i) Industrial and intellectual property;
- ii) Legislation and technical standards: a parameter which takes into account the participation in drafting legislative and standards projects taking into account their nature, territorial scope and technological level.
- iii) Publications of scientific and technological outreach: parameter that takes into account the articles in magazines and national conferences and other publications of scientific and technological diffusion, taking into account their professional and social impact.
- iv) Services to the scientific community and to society: a parameter that takes into account the participation and coordination of scientific and technological dissemination initiatives and taking into account the nature and results achieved by them when carried out towards:
  - The scientific community, including the organization of conferences and conferences;
  - The media;
  - Companies and the public sector.

15.4. Contribution to activities related to the management of science, technology and innovation programs, or experience in the observation and monitoring of the scientific and technological system or higher education, in Portugal or abroad, and relevant to the project to be developed, with a weighting factor of 10% considering;

- i) Positions in boards of the university, school, or research unit: a parameter that takes into account the nature and the responsibility of the position;
- ii) Other positions: parameter that takes into account the exercise of positions in national and international scientific organizations.

15.5. In weighing the evaluation criteria listed in paragraphs 15.1 to 15.4, each jury member may consider the following additional parameter under the following conditions: relevance and quality of the scientific project referred in 9.2d);

16. The jury may decide to select up to 3 candidates who will be called to hold a session presenting the results of their investigation, following which the jury members should stimulate an open debate on its content and innovative character. This presentation session does not constitute a selection method and is not classified, aiming merely to obtain explanations or clarifications of elements contained in the candidates' curricula.

17. The Jury, when it deems it necessary, may request the candidate to present additional documents proving the candidate's statements, which are relevant to the analysis and classification of his/her application.

18. Classification of candidates:

18.1. Each member of the jury assigned a classification to each of the candidates on a scale of 0 to 20 points, ranking the candidates according to their final classification, based on the sum of the partial classifications obtained for each criteria, and the ponderation given to each parameter.

18.2. Candidates shall be ordered by applying the successive voting method according to the point 3 and following of the article 20 of the General Regulation of Calls from the University of Lisbon, published on the national official journal by the Dispatch 2307/2015, of March 5<sup>th</sup>.

18.3. The jury decides by absolute majority, and abstentions are not allowed.

18.4. The final classification of each candidate is the one corresponding to his or her ranking resulting from the application of the method referred to in point 18.2.

19. Minutes of the jury meetings are drawn up, which contain a summary of what has taken place in them, as well as the votes cast by each of the members and their reasons, being available to the candidates whenever requested.

20. The final deliberation of the jury is approved by the President of ISA, and it is his responsibility to establish the respective contract

21. The false statements made by the candidates will be punished according to the law.

22. The list of admitted and excluded candidates as well as the final ranking list are advertised on the ISA facilities, and the applicants will be notified by email with receipt of delivery of the notification, without losing the dispositions indicated in articles 110 to 114 of the Administration Procedure Code.

23. Prior Hearing and Deadline for Final Decision: After being notified, candidates have 10 working days to submit a formal rebuttal. Within the maximum term of 60 working days, counted from the deadline for the presentation of the candidacies, the final decisions of the jury are given.

24. This tender is exclusively intended to fill the vacancy (s) indicated and may be terminated until the homologation of the final ranking list of candidates and expiring with the respective occupation of the working position on offer.

25. Non-discrimination and equal access policy: the Instituto Superior de Agronomia actively promotes a policy of non-discrimination and equal access, so that no candidate can be privileged, benefited, disadvantaged or deprived of any right or exemption from any duty owing, in particular, to ancestry, age, sex, sexual orientation, marital status, family status, economic situation, education, social origin or condition, genetic heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological beliefs and trade union membership.

26. Under the terms of D.L. No. 29/2001, of February 3, a disabled candidate has a preference when in equal classification, which prevails over any other legal preference. Candidates must declare on the application form their respective degree of disability, the type of disability and the means of communication/expression to be used in the selection process, under the terms of the aforementioned diploma.

27. The contract celebration is conditioned by the acceptance of its financial terms as eligible by FCT, and the celebration of the contract of program between ISA and FCT, including the respective Annex II.

The 31 of August 2018 — The President of Instituto Superior de Agronomia, Professor  
Doctor António José Guerreiro de Brito