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

## **Public Notice Number ISLANDS /IST-ID**

1. The Executive Board of the Association of Instituto Superior Técnico for Research and Development (IST-ID) took a decision to open an international selection competition for one doctorate position for the exercise of activities of scientific research in the scientific area(s) of Mechanical Engineering and Engineering Systems and Environmet and Global Changes in the form of an employment contract under an unspecified fixed-term work contract under the "Código do Trabalho" (Labor Code), aiming at (i) develop reverse supply chain (RSC) systems and regional approaches to manage waste from electrical and electronic equipment (WEEE) via reverse logistics; (ii) promote the environmental sound management of end-of-life vehicles (ELVs), and (iii) improve the management of hazardous wastes and increase the material flow of recyclables trough engagement of the private sector under the project "The Implementing Sustainable Low and Non-Chemical Development in Small Island Developing States (ISLANDS), funded by the Global Environment Facility (GEF).

The ISLANDS project seeks to address the sound management of chemicals and waste in Least Developed Countries (LDCs) and Small Island Developing States (SIDS). This ISLANDS programme covers four (4) geographical regions including the Caribbean, Indian Ocean, Pacific Islands, Atlantic Ocean Islands and is being implemented by the United Nations Environment Programme (UNEP), The United Nations Development Programme (UNDP), The Food and Agriculture Organisation of the United Nations (FAO) and the Inter-American Development Bank (IDB). The IST-ID is currently executing the Atlantic Child Project (GEF 10848) which involves three (3) countries (Cape Verde, Guinea Bissau, and Sao Tome and Principe).

The overarching goal of the ISLANDS programme is the sound management of chemicals and wastes in SIDS. The third component of the programme will support the achievement of this goal by promoting the Safe Management of Products (SMP) entering SIDS and Closing Material and Product Loops for Products.

The primary duties and responsibilities of the researcher under the guidance of IST-ID and in close collaboration with the national working groups of the project countries, include:

- 1. Supporting the Environmental Sound Management of WEEE in Atlantic SIDS. Under this activity, a comprehensive technical and economic assessment on lifecycle management of EEE in the three (3) project countries will be developed and based on this assessment, a suitable reverse supply chain will be designed.
- 1.1. The Researcher will coordinate the identification and assessment of existing WEEE management facilities (formal and informal) in each project country, and the comparison of current practices with Best Available Techniques (BAT) and Best Environmental Practices (BEP) for WEEE management. Based on this comparison, the Consultant will coordinate the develop of comprehensive BEP and BAT guidelines for managing WEEE within the subregional context.
- 1.2. The Researcher will coordinate the review of waste management facilities capacity for technical compliance with local legislation and regional policies for hazardous waste management and will also coordinate the assessment of potential gaps between current practices and requirements for managing hazardous materials such as POPs (Persistent Organic Pollutants) and mercury.

- 1.3. The Researcher will coordinate the proposal of the WEEE reverse supply chain (RSC) based on BAT and BEP for WEEE management and validation of these recommendations with key stakeholders from the project countries. It will also coordinate the estimation of the economic viability of the reverse supply chain proposed.
- 1.4. The Researcher will coordinate the development of one (1) regional assessment report on the technical and economic feasibility of RSC for WEEE management.
- 1.5. The Researcher will coordinate the development of one (1) regional roadmap developed on implementation of BAT/BEP guidelines for the management of WEEE.
- 2. Strengthened capacity to manage ELVs in Cabo Verde and São Tomé and Príncipe. Under this activity, a comprehensive technical and economic assessment on lifecycle management of ELVs in the two (2) project countries will be developed and based on this assessment, a suitable reverse supply chain will be designed.
- 2.1. The Researcher will coordinate the identification and assessment of existing ELVs management facilities (formal and informal) in two of the project countries, and the comparison of current practices with Best Available Techniques (BAT) and Best Environmental Practices (BEP) for ELVs management. Based on this comparison, it will coordinate the development of comprehensive BEP and BAT guidelines for managing ELVs within the subregional context.
- 2.2. The Researcher will coordinate the proposal of the ELVs reverse supply chain based on BAT and BEP for ELVs management and validation of these recommendations with key stakeholders from the project countries. It will coordinate the estimation of the economic viability of the reverse supply chain proposed.
- 2.3. The Researcher will coordinate the development of one (1) regional assessment report on the technical and economic feasibility of RSC for ELVs management.
- 2.4. The Researcher will coordinate the development of one (1) national roadmap developed on implementation of BAT/BEP guidelines for the management of ELVs in São Tomé and Príncipe.
- 3. Establishment/improvement of lifecycle management mechanisms for priority wastes and recyclables in the Atlantic SIDS.
- Under this activity, a comprehensive life cycle assessment on priority waste streams in Guinea-Bissau's agricultural sector and Cabo Verde and São Tomé and Príncipe tourism sector will be developed.
- 3.1. The Researcher will coordinate the identification of priority waste streams containing chemicals in Guinea-Bissau's agricultural sector, such as agricultural plastics (e.g., films and wraps) and highly hazardous pesticides.
- 3.2. The Researcher will coordinate the life cycle assessment of the identified priority waste streams containing chemicals in Guinea-Bissau's agricultural sector.
- 3.3. The Researcher will coordinate the evaluation of the technical capacity for managing agricultural waste streams in Guinea-Bissau and the comparison of current practices with Best Environmental Practices (BEP) and Best Available Techniques (BAT) for the industry.
- 3.4. The Researcher will coordinate the identification of priority waste streams generated along the tourism value chain in Cabo Verde and São Tomé and Príncipe, such as food waste and personal care product waste from hotel guests.
- 3.5. The Researcher will coordinate the development of a partnership with at least two hotels in Cabo Verde and São Tomé and Príncipe willing to allow their processes to be analysed for the purpose of the lifecycle assessment.
- 3.6. The Researcher will coordinate the life cycle assessment of the identified priority waste streams identified for the Cabo Verde and São Tomé and Príncipe tourism sector considering the value chain of the hotels with whom a partnership was developed.
  - 3.7. The Researcher is expected to contribute to the deliverables of written reports.

Travel may be required for the workshops as well as any national stakeholder engagement/information gathering initiatives as determined by the consultant's approach to work. The travel and visa requirements will be provided by IST-ID.

## 2. Applicable law:

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.

"Código do Trabalho" (Labor Code), 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: Tânia Rodrigues Pereira Ramos, Associate Professor, President
  Ana Isabel Cerqueira de Sousa Gouveia Carvalho, Associate Professor DEG/IST, member
  Helga Marise Jordão Ferreira, Assistant Professor DER/IST, member.
- 4. The place of work is located at CEGIST, Instituto Superior Técnico, Alameda Campus, Lisboa, Portugal.
- 5. In compliance with the provisions of the Regulatory Decree No. 11-A / 2017, of December 29, this tender is open for the remuneration level (NR) 33 of the single remuneration table (TRU), which corresponds to a monthly remuneration of 2351.53 Euros.
- 6.1 Decree Law no. 57/2016, of August 29, which approved the regulations for hiring doctorates to stimulate scientific and technological employment in all areas of knowledge (RJEC), is an enabling norm for this international selection competition.
  - 6.2 The opening of this competition is intended for the selection of a doctorate's place for the exercise of scientific research activity under an unspecified fixed-term work contract under the "Código do Trabalho" (Labor Code) approved by Law No. 7/2009, of February 12, in its current wording, being the basis of contracting the execution of a service determined, precisely defined and non-durable, being the contracting necessarily financed regardless of its provenance.
  - 6.3 The maximum duration of the unspecified fixed-term work contract is the duration of the especific task of the project supporting it, and which is, expectedly, 12 months.
  - 6.4 Termination of the financing, termination of the project or completion of the tasks that are the subject of this competition shall determine the expiration of the contract that will operate with the communication referred to in article 345 (1) of the "Código do Trabalho" (Labor Code), meaning that the employer shall notify the termination of the contract to the employee, at least seven, 30 or 60 days in advance, according to whether the contract lasted up to six months, six months to two years, or per longer period."

7. The competition is open for national candidates, foreigners and stateless persons who hold the degree of "Doutor" or hold the recognition of that degree under the terms of the Decree-Law n.º 66/2018, of August 16, in a branch of knowledge or specialty that covers the scientific areas of Mechanical Engineering and Engineering Systems and Environmet and Global Changes or related scientific area, and are also holders of a scientific and professional curriculum that reveals an adequate profile to the activity to be developed.

## 8. Formalization of applications:

8.1 Applications are formalized by means of an application form, made available at <a href="https://istid.pt/recursos-humanos/investigadores/">https://istid.pt/recursos-humanos/investigadores/</a> electronic address, addressed to the President of Instituto Superior Técnico Association for Research and Development (IST-ID), stating the identification of this notice, 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.

The recognition of the "Doutor" degree should be obtained by the date of the act of contracting. In the application form, the candidate must indicate his / her consent so that the communications and notifications in the context of this hiring procedure can take place by electronic mail, to the electronic address indicated in that application form.

- 8.2 The application shall be accompanied by documents proving the conditions laid down in point 7 for admission to this invitation to tender, in particular:
  - a) Copy of certificate or diploma;
  - b) "Tese de doutoramento" or equivalent document(s) that determined the award of the academic degree of "Doutor";
  - c) Detailed curriculum vitae, structured in accordance with the items in points 12 and 14, indicating the works, and adding a copy of them, that the candidate considers most relevant to each of the items in points 12 and 14;
  - d) Scientific project, focusing on Life cycle management of electrical and electronic waste and end-of-life vehicles for the countries of Cape Verde, São Tomé and Príncipe, and Guinea-Bissau:
  - e) Other documents that the candidate justifies to be relevant to the analysis of his/her application.
  - 8.3 Applicants submit the documents referred to in 8.1 and 8.2 in PDF format at the electronic address above indicated, issued up to the last day of the tender opening period, which is fixed at 15 working days after publication of this Notice. An applicant may, by reason of the impossibility or technical difficulty of sending any of the documents referred to in 8.1 and 8.2 by e-mail, deliver them on physical support, respecting the above date, by registered mail with acknowledgment of receipt to the address postal service "Av. Rovisco Pais, 1. 1049-003 Lisboa" or by hand at IST-ID Human Resources Division. 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.
  - 8.4 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.

- 9. By decision of the President of IST-ID, candidates who do not comply with the provisions of point 8 are not admitted to the competition. Candidates who do not submit the application using the form or who do not deliver all the documents referred to in points 8.2 (a) to (d) or who present them unreadable, incorrectly completed, or invalid are eliminated. 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.
- 10. Approval on absolute merit:
- 10.1 The Jury will deliberate on its approval or rejection on absolute merit, by a justified vote where no abstentions are admitted.
- 10.2 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.
- 10.3 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 14.5 will be approved on absolute merit.
- 10.4 The unfavorable vote to approval on absolute merit can still be justified by the failure to fulfill the following circumstance:
  - a) 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.
- 11. According to article 5 of RJEC, the selection is made through the evaluation of the scientific and curricular path of the candidates.
- 12. 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.

- 13. 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.
- 14. The assessment criteria are set out in this entry, with the option mentioned in point 14.5, with particular emphasis on the curriculum vitae and the contributions considered to be of higher relevance by the candidate in the last 5 years:
- 14.1. 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 45% 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;
  - 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) Recognition by the international scientific community: a parameter that takes into account:
  - prizes from scientific societies;
  - 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.
  - iii) 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.
  - iv) Dynamization of scientific activity: a parameter that takes into account the capacity of coordination and leadership of research teams demonstrated by the candidate.
  - v) 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.
- 14.2. 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 40% 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.
- 14.3. 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) 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.
- ii) 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.
- iii) 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.
- 14.4. 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 5% 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.
- 14.5. In weighing the evaluation criteria listed in paragraphs 14.1 to 14.4, each jury member may consider the following additional parameters under the following conditions:
  - 14.5.1. a relevance and quality of the scientific project proposed in/for Life cycle management of electrical and electronic waste and end-of-life vehicles for the countries of Cape Verde, São Tomé and Príncipe, and Guinea-Bissau.;
  - 14.5.1.b Experience in environmentally sound management of chemicals and waste management of the scientific area in which the competition is open
  - 14.5.1.c Experience in data collection and inventory management and Experience in life cycle assessment.
  - 14.5.1.d Experience in conducting stakeholder meetings and desktop reviews.
  - 14.5.1.e Demonstrated knowledge of the chemicals and waste management MEAs and previous experience working in the Atlantic region and /or other SIDS (considering the capacity and eligibility to work in the three (3) participating countries)
  - 14.5.1.f Fluent in Portuguese and English languages.

- 15. 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.
- 16. 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.

## 17. Classification of candidates

- 17.1. Each member of the jury assigned a classification to each of the candidates in each evaluation criterion, on a scale of 0 to 100 points, ranking the candidates according to their classification consisting on the sum of the partial classifications assigned in each evaluation criterion, and taking into account the weighting factor given to each parameter.
- 17.2. Candidates shall be ordered by applying the successive voting method.
- 17.3. The jury decides by absolute majority, and abstentions are not allowed.
- 17.4. The final classification of each candidate is the one corresponding to his/her ranking resulting from the application of the method referred to in point 17.2.
- 18. 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.
- 19. The final deliberation of the jury is approved by the President of IST-ID, and it is his responsibility to establish the respective contract.
- 20. The false statements made by the candidates will be punished according to the law.
- 21. The list of admitted and excluded candidates as well as the final ranking list advertised on the website of IST-ID, and the applicants will be notified by email with receipt of delivery of the notification.
- 22. Prior Hearing and Deadline for Final Decision: After being notified, candidates have 10 working days to submit a formal rebuttal. Within the term of 90 days, counted from the deadline for the presentation of the candidacies, the final decisions of the jury are given.

- 23. 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.
- 24. Non-discrimination and equal access policy: IST-ID 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.
- 25. 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.