

# Call for n. 1 Short Research Fellowship - Ca' Foscari University of Venice- Department of Molecular Sciences and Nanosystems

**HAVING REGARD TO** the Article 18, paragraph 5, letter f) of Law No. 240 of December 30, 2010, and subsequent amendments and integrations;

**HAVING REGARD TO** the Article 21 quinquies of Law No. 241 of August 7, 1990, and subsequent amendments and integrations;

**HAVING REGARD TO** Article 1 bis, paragraph 2, of Decree-Law No. 45 of April 7, 2025, as amended during conversion by Law No. 79 of June 5, 2025, which came into force on June 7, 2025, and which, in Article 4, paragraph 3, of Law No. 210 of July 3, 1998, abolished the favorable tax regime for short-term research fellowships post-graduation, establishing the application of IRPEF and IRAP taxes on such short-term research fellowships;

**RECALLED** the Regulation for the establishment of short-term research fellowships for post-graduate activities pursuant to Article 18 of Law No. 240 of December 30, 2010, issued with Rectoral Decree No. 300/2014 of April 14, 2014, and subsequent amendments and integrations;

WHEREAS the tax treatment of short-term research fellowships is subject to the legislation in force at the time of granting. Even if not expressly referred to in this notice, the applicable tax regime will be that provided for by current legislation pro tempore

The present document in English is to be considered as a mere translation of the provisions of the call which is available in Italian at the following <code>link https://www.unive.it/data/28824/</code>. The text in Italian is the official text of the notice of competition for all legal intents and purposes and, in the event of non-conformity with the present document, it shall prevail.

The Department of Molecular Sciences and Nanosystems of Ca' Foscari University of Venice, having regarding resolution of the Departmental Council Rep. n. 952/2025 prot.259687 del 22/10/2025 establishing the research programs for awarding of the short fellowships in "Flexible electronic transistors for neuromorphic applications", lasting 01 month with the possibility of renewal within the limits of art. 4 of the Regulations for awarding of university short research fellowships, regarding the fabrication and testing of flexible transistors for neuromorphic applications.

The expected starting date is around 15.11.2025.

The research fellowship is awarded for the purpose of collaboration with the following research program of the Department of Molecular Sciences and Nanosystems.

Abstract: Organic Electrochemical Transistors (OECTs) based on PEDOT:PSS are emerging as promising candidates for neuromorphic hardware due to their biocompatibility, low-voltage operation, and tunable ionic—electronic coupling. By modulating the channel conductivity through ionic exchange in the polymer matrix, these devices can emulate key synaptic functions such as Long-Term Potentiation (LTP), Long-Term Depression (LTD), and Spike-Timing-Dependent Plasticity (STDP). This work focuses on the fabrication, optimization, and electrical characterization of PEDOT:PSS OECTs to achieve reliable and reproducible synaptic behavior. The study aims to correlate fabrication parameters with device stability, switching dynamics, and analog memory performance. Such developments pave the way for scalable, low-power neuromorphic systems inspired by biological learning processes.

The amount of the short-term research fellowship is equal to 2.000,00 euro per month gross percipient and will be subject to taxation according to current regulations. It will be paid in bimonthly instalments after certification of the regular performance of the activity.



Deadline: 07<sup>th</sup> November 2025 at 12:00, Rome CET, noon time.

In case the deadline is on Saturdays, Sundays or on holidays it is extended to the first working day thereafter.

### Rules of eligibility - Beneficiaries

Citizens belonging to European Union member states and non-community citizens in possession of the following qualifications may take part in the selection:

People with master's degree in Electronics Engineering, Engineering Physics, Physics

Applicants must hold all the requisites within the call deadline. The qualifications will be evaluated by a Commission that examines the eligibility and qualifications of the candidates and makes a merit rank of them.

### Skills required:

- Knowledge of electronic devices (MOSFET);
- Experience in the characterization of neuromorphic devices.
- Knowledge of English language

#### Titles evaluable:

-Degrees and CV with relevant experencie.

#### Incompatibility

The short-term research fellowship may not overlap with:

- other short-term research fellowships granted in any capacity, apart from those granted by national or foreign research institutes in order to integrate with periods abroad the specific activity foreseen by the work plan of the appointed fellow;
- attendance of PhD courses with short-term research fellowship and medical specialization, in Italy and abroad;
- research grants "assegni di ricerca"

Short-term Research Fellowship holders may carry out self-employed work or occasional or permanent collaborations, as long as this is coherent with the ongoing research, upon approval and on the condition that:

- does not involve a conflict of interest with the specific research activity carried out;
- does not prejudice the university, in relation to the activities carried out.

Subordinate employment contracts holders, in addition to obtaining permission by the university, must provide the authorization of their employer.

In the specific case that the subordinate employment contract started prior to the awarding of the fellowship, compatibility with the existing employment will have to be assessed; if the assessment yields a negative result, the Short-term Research Fellowship will not be awarded; in the case of a positive result, the successful candidate will have to provide the authorization of his/her employer within 15 days.

In the event that the subordinate employment contract will start once the fellowship is ongoing, the successful applicant is required to notify this change at least 30 days before the start of the employment contract for an assessment of compatibility; if the assessment is negative, the fellowship will cease by the start of the employment contract; in the event of a positive outcome, the successful applicant must provide the authorization of his/her employer within 15 days.

The awarding of the short-term research fellowship does not imply the establishment of any employment contract, nor does it give rise to any rights of access to positions of employment at the university



#### How to apply

Candidates should submit:

- 1. The application form;
- 2. Applicants must declare in the application, under their own responsibility:
  - educational qualification held;
  - the possession of a residence permit valid at the deadline of the call for applications, in case he/she is a non-European citizen residing in Italy;
  - that they understand that the short-term research fellowship is not compatible with the positions referred to in Art. 12 of the present Regulations and current legislation;
  - to be medically fit to discharge his/her duties for the fellowship;
  - not to have received measures restricting personal freedom at the time of submitting the application;
  - not to have a degree of kinship or affinity, up to and including the fourth degree, with any professor belonging to the department or facility issuing the call or with the Rector, the General Manager or a member of the University Board of Directors and that they are aware of the provisions of the Law no 240/2010, Art. 18, para. 1, letter b);
  - any benefit under L. 104/92.
- 3. A CV in European format (<a href="http://www.unive.it/data/28900/">http://www.unive.it/data/28900/</a>), duly dated and signed.
- 4. A copy of a valid identity document (e.g. Identity Card or Passport).
- 5. All documents, qualifications and publications relevant for the selection procedure.

#### How to submit your application

Applications, together with all the required documentation, have to be submitted exclusively online at the following webpage:

https://apps.unive.it/domandeconcorso-en/accesso/dsmn-ohsalvatore

not later than noon time (12:00 Rome CET) of 07<sup>th</sup> November 2025.

The candidate, after the uploading, will receive a submission number and an e-mail acknowledging receipt of their application. The candidate if necessary could access the procedures for updating any data and materials through the link and submission number provided in the e-mail until the call deadline expires.

Please note that the University can be contacted for any support needs by the candidate until 24 hours prior to the deadline. For further information please contact the research office: ricerca.dsmn@unive.it, ph: 041 234 8633/8514. Please note that in case of a high number of applications and / or weight of the materials loaded by the candidates the system might become slower. Therefore, it is suggested not to start the process close to the deadline.

Incomplete applications, those without the required data and the compulsory attachments will not be taken into consideration. Furthermore, the applications which, for any reason, reach this University beyond the deadline indicated above cannot be accepted.

The declarations made in the application shall be considered issued in accordance with the DPR no. 445/2000 and subsequent amendments, by candidates entitled to use the simplified administrative certifications permitted by the above decree.



### **Selection and Evaluation Procedure**

The selection is made by assessment of the scientific-professional qualifications of the candidates, by a Selection Committee appointed by order of the Director of the research department taking into account, whereas possible, gender balance.

The Commission compiles a ranking and specifies the winning applicant, having regard to the score appointed to experience and qualifications, interview and any other test, as specified by the call. In the event of two or more candidates obtaining the same score at the end of the selection, the younger candidate will be preferred.

## Awarding of the Short-term Research Fellowship

Having received the selection documents, and at the outcome of the checks, the Director approves, by his own decree, the classification and the selection procedure reports and makes them public.

Notification, including the start date of the short-term research fellowship, shall be sent to the winning candidate.

The winner must accept the short-term research fellowship within seven days of receipt of the written notification referred to above, under penalty of revocation. In the event of withdrawal, the short-term research fellowship shall be awarded to the next available candidate, following the order of the final ranking of merit.

Publication of the results of all the selection phases shall be published in the online University notice board, on the specific Department web page (<a href="https://www.unive.it/pag/28233">https://www.unive.it/pag/28233</a>) and on the University website(<a href="https://www.unive.it/web/en/497/home">https://www.unive.it/web/en/497/home</a>).

Access to the selection documents is guaranteed pursuant to the law of August 7th 1990, no. 241 and subsequent amendments and additions and relative internal implementation regulation.

#### Processing of personal data

Personal data provided by the candidates in their applications for participation in the selection procedures, are processed pursuant to the legislative decree of June 30th 2003, no. 196 and subsequent amendments and additions and to EU Regulations 2016/679. Comprehensive information on personal data processing can be found here.

#### Person in charge of the procedure

Pursuant to the provisions of art. 5 of the law of August 7th 1990, no. 241 and subsequent amendments and additions, the person in charge of the administrative procedure for this selection is Sonia Barizza, head of the Secretary of the Department.

#### **Final provisions**

For anything not specified in this call, see the University current regulations regarding the awarding for Short-term Research Fellowship and the current legislation.

The Head of Department
Prof. Maurizio Selva

Responsible for administrative procedure
The Secretary of Department: Mrs. Sonia Barizza