

## Title: Research Grant for MSC

One research Grant for MSC Fellowship is opened within the project PTDC/NAN-MAT/30812/2017, “NeurOxide”/ NOVA.id.FCT – Associação para a Inovação e Desenvolvimento da FCT, which is financed by national funds from FCT/MCTES (PIDDAC).

- 1. Scientific area:** Micro and nanotechnology, Material science and Physics engineering.
- 2. Admission Requirements:** Candidates must have a master in Micro and Nanotechnologies Engineering, Materials Engineering, Physics and similar areas. Critical skills include hands-on experience with clean room processing, namely thin film deposition and photolithography processes, as well as on electrical characterization using probe stations. Excellent written and verbal communication skills will be required for technical reporting and problem solving.
- 3. Work Plan:** The candidate will work closely with team members to design and implement experiments leading to the optimization of deposition and patterning processes. This optimization will be required to improve the yield on fabricated memristors and thin film transistors and circuits based on oxide semiconductors, on flexible substrates. The candidate will also characterize electrically these devices/circuits using probe stations and parameter analyzers.
- 4. Rules and Regulations** A fellowship contract will be celebrated according to the regulations defined by FCT “Regulations for Advanced Training and Qualification of Human Resources”, in accordance with Law 40/2004, of 18 August, as amended and republished by Decree-Law No. 202/2012 of 27 August, and as amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of 29 January; Regulation of FCT (<http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2015.pdf>).
- 5. Working location and supervisor:** The work is to be carried out in clean room and electrical labs of CENIMAT at Faculdade de Ciências e Tecnologia da Universidade NOVA de Lisboa (FCT-NOVA) under the scientific supervision of Dr. Asal Kiazadeh and Dr. Jonas Deuermeier.
- 6. Fellowship duration:** The fellowship is for 12 months, eventually renewable during the project, beginning in January 2019.
- 7. Monthly maintenance allowance and benefits:** According to the regulations of the FCT Scientific Fellowships in Portugal (<http://alfa.fct.mctes.pt/apoios/bolsas/valores>) the net monthly maintenance allowance will be of 980,00 EUR/month, which will be paid monthly by bank transfer. The fellow will be covered by a personal accident’s insurance and can contribute voluntarily to the national social security system, according to Decree-Law nº

40/89, of 1 February.

- 8. Selection methodology:** Curriculum evaluation based on the criteria referred above and will include individual interviews in the final stage of the selection process, with its valuation: 70% curriculum evaluation (40% CV, 20% scientific domains and 10% Expertise) and 30% interview. Only those candidates who obtain at least 60% in the curricular evaluation (CV + Scientific Domain + Experience) will be called for the interview.
- 9. Jury members:** President of the Jury Dr. Asal Kiazadeh. Effective jurors are Prof. Pedro Barquinha, Dr. Jonas Deuermeier and substitute jurors Prof. Joana Vaz Pinto.
- 10. Notification of Results:** The evaluation results will be publicized through ranking list in a public, visible place at CENIMAT|I3N. Selected candidate will be notified by email.

#### **11. Application Procedure**

**The call for applications is open from** 2018-12-12 to 2018-12-26. Applications must be submitted by email to [cenimat.secretariado@fct.unl.pt](mailto:cenimat.secretariado@fct.unl.pt), CC: [a.kiazaden@fct.unl.pt](mailto:a.kiazaden@fct.unl.pt) indicating “Application to NeurOxide project” in the subject area, and the following documents attached in a single pdf file: (a) the Curriculum Vitae, (b) certificate of qualifications, (c) motivation letter and other supporting documents relevant to the final assessment.