

## One Research Fellowship for a Master holder

One Research Fellowship for a Master holder is opened within the scope of the project “Óptima - Monitorização ambiental de emissões de amoníaco através de uma plataforma óptica integrada e autónoma” / NOVA.id.FCT – Associação para a Inovação e Desenvolvimento da FCT, financed by the European Regional Development Fund (ERDF) through the Competitiveness and Internationalization Operational Program - COMPETE 2020 and by National Funds through FCT - Foundation for Science and Technology under the project POCI-01-0145-FEDER-031559, under the following conditions:

- 1. Scientific area:** Engineering.
- 2. Admission Requirements:** Master in Chemical Engineering, Materials Engineering, Nanotechnology or related fields. Preferably with:
  - experience in the design of optical sensors, characterization of molecular probes and methodologies for structuring materials
  - average classification of bachelor's degree (1<sup>st</sup> cycle) and master (2<sup>nd</sup> cycle) of 15 (out of 20) or more
  - good communication skills
  - good knowledge of spoken and written English
- 3. Work Plan:** The proposed work will focus on the development of optical sensors for detection of ammonia. The sensors will be designed using sol-gel techniques to incorporate molecular probes into a hybrid matrix. This work will aim to design the most appropriate methodologies to obtain micro-sensors with high sensitivity to ammonia and capable of rapid detection, with high reproducibility.
- 4. Rules and Regulations:** Law Nr. 40/2004, of 18th August altered and republish by Decree-Law n<sup>o</sup> 202/2012 of August 27th (Scientific Research Fellow Statute) and altered by the Decree-Law n<sup>o</sup>233/2012 of October 29th and by the Law n<sup>o</sup>12/2013 of January 29th. Regulations for Advanced Training and Qualification of Human Resources, I.P in force (<http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2018.pdf>).
- 5. Working location and supervisor:** The work will be developed at LAQV-Requimte, in the Laboratory of Membrane Process of the Chemistry Department of the Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa under the scientific supervision of Dr. Carla Portugal, Dr. Rosa Huertas and Professor João Crespo.
- 6. Fellowship duration:** The fellowship is for 12 months, eventually renewable during the course of the project, and is due to start during April 2019.
- 7. Salary and benefits:** According to the regulations of the FCT Scientific Fellowships in Portugal (<http://alfa.fct.mctes.pt/apoios/bolsas/valores>) the net salary will be of 980 EUR/month, which will be paid monthly by bank transfer.

- 8. Selection methodology:** The selection methods to be used will be the following: motivation letter and analysis of the *curriculum vitae* according to the requirements of admission. The candidates obtaining a classification in motivation letter and curricular analysis higher than 75 % will be selected for interview with the members of the jury. The final classification of each candidate after interview will be the weighted average of the evaluation obtained in the motivation letters and curricular analysis (with 50% weighting) and of the interview (50% weighting).
- 9. Jury members:** The jury will be composed of Doctor Carla Portugal (President), Professor João Crespo (effective member), Doctor Svetlozar Velizarov (effective member), Doctor Carla Brazinha (Substitute Member) and Professor Isabel Coelho (Substitute Member).
- 10. Notification of Results:** The results will be publicized through the display of ranking list in a public, visible place at the Chemistry Department at Faculdade de Ciências e Tecnologia da Universidade NOVA de Lisboa. The selected candidate will be notified by email.
- 11. Application Procedure:** Application is open from the 26<sup>th</sup> February to the 11<sup>th</sup> March 2019

Applications must be formalized by sending an application letter together with the following documents: *Curriculum Vitae*, the motivation letter, the certificate of bachelor and master degrees (indicating the final marks obtained in each academic degree and the detailed description of the marks obtained in the different subjects) and the name and contact of two references.

Applications must be submitted to Dr. Carla Portugal (cmp@fct.unl.pt), with reference to the "*Candidatura\_Projecto Óptima*" during the deadline for submission of applications referred to above. Applications received after the deadline will automatically be excluded from the competition.