



## CALL FOR AWARDING RESEARCH FELLOWSHIPS WITHIN PROJECT GRANTS AND R&D INSTITUTIONS

1 *Research Grant* (Bolsa de Investigação) for a holder of a *Master Degree* is open at the **Fundação da Faculdade de Ciências da Universidade de Lisboa**, for the Strategic Project/Centro de Ciências Moleculares e Materiais, PEst-OE/QUI/UI0536/2014, financed by national funds by FCT / MEC (PIDDAC) under the programme *Strategic Programme*, under the following conditions:

1. **Scientific Area:** *Analytical Chemistry*
2. **Requirements for admission:** *Master Degree in Analytical Chemistry. Expertise in Physical Chemistry of pH buffer solutions and experience in pH measurement at high metrological level, acquired in international environment.*
3. **Work plan:** *Measurements of Harned cell potentials in HCl (aq) in single or mixed saline solutions (NaCl, KCl, CaCl<sub>2</sub>, MgCl<sub>2</sub>, Na<sub>2</sub>SO<sub>4</sub>) at various concentrations and temperatures to produce data, further treated both numerically and graphically, in order to get information on electrostatic and specific effects on mean and single ion activities, namely for Cl<sup>-</sup> and H<sup>+</sup>, to be used for assessing the validity of electrolyte solutions models. Validated assumptions are introduced in experimentally assessed acidity function for artificial seawater, ASW, leading to information on species activities, concentrations and equilibria relations. Conclusions are to be further used to define values of reference pH buffer solutions aiming at the development and implementation of analytical strategies, methods and procedures, contributing to improve the quality of estimated pH values and related pH quantities of seawater. These tools are to be used for routine determination of pH in seawater using potentiometric and spectrophotometric methods. Establishment of traceability chains enabling the comparability of results, reported with associated uncertainties, fit for the purpose of expanding the biogeochemical knowledge of processes that take place in the aquatic environment.*
4. **Legislation framework:** 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 January 29, and Decree-Law No. 89/2013 of 9 July. And also by the FCT, I.P. Fellowships Regulation of 2013 approved by Regulation No. 234/2012, of June 25, as amended by Regulation No 326/2013 of 27 August 2013, in force ([www.fct.pt/apoios/bolsas/regulamento.phtml](http://www.fct.pt/apoios/bolsas/regulamento.phtml))
5. **Place of work:** The work will be developed at the *Group of Analytical and Environmental Chemistry, Centro de Ciências Moleculares e dos Materiais, Department of Chemistry and Biochemistry, Faculty of Sciences of the University of Lisbon*, under the scientific guidance of *Professor Maria Filomena Camões*.
6. **Fellowship duration:** This position is initially opened for 4 months and will begin on September 2014; in accordance with the provisions of Regulation of Research Fellowships from the Foundation for Science and Technology, I.P. - 2013.
7. **Monthly allowance:** The fellowship amounts to € 980,00, according to table values of the fellowships awarded directly by the FCT, IP. (<http://www.fct.pt/apoios/bolsas/valores>).  
The fellowship holder will have a personal accident insurance and, if not covered by any social protection scheme can ensure the right to social security through adherence to the voluntary social insurance scheme, pursuant to Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social.  
The fellowship will be paid monthly by bank transfer.
8. **Selection method:** Candidates will be assessed by the quality of their CV (50 %) and *interview* (50 %)



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9. **Selection Committee:** *Maria Filomena Camões (President), Ricardo Bettencourt da Silva, Cristina Maria Oliveira.*
  
10. **Publication/notification of results:** The final results of the evaluation will become public, through ordered list by final grade obtained which will be posted at the entrance hall of the Fundação da Faculdade de Ciências da Universidade de Lisboa, located at the Faculdade de Ciências da Universidade de Lisboa, C1 bldg – 3<sup>rd</sup> floor, Campo Grande, 1749-016 Lisboa, and the selected candidate will be notified by *e-mail*.
  
11. **Deadlines:** This call for applications is open from August, 4<sup>th</sup> 2014 to August, 18<sup>th</sup> 2014.
  
12. **Application:** Applications may be sent via e-mail to [mfcamoes@fc.ul.pt](mailto:mfcamoes@fc.ul.pt) , by attaching the following documents: *Curriculum vitae and accompanying letter of motivation*.  
Applications may also be sent by mail to *M.F. Camões, FCUL, C8, Campo Grande, 1749-016 Lisboa*.