

**Category/position/scholarship:** Post-doc position

**Reference:** CeNTI-PD1/2013

**Scientific Area:** Chemical Engineering, Mechanical Engineering, Material Science/Engineering

**Specific Scientific Area:** Numerical Simulation (FEM) of materials thermal and mechanical performance

Call open for application for a postdoctoral research grant within the framework of the project “**SUSCON - Sustainable, innovative and energy-efficient Concrete, based on the integration of all-waste materials**” (FP7-NMP Ref: 285463), to be developed at CeNTI - Centre for Nanotechnology and Smart Materials, under the following conditions:

1. **Grant duration:** initial duration of 12 months, with possible extension up to 24 months. The grant renewal requires a positive evaluation of the previous work. The tentative start date is March 25<sup>th</sup>, or as soon as possible thereafter. The regulations from FCT – Fundação para a Ciência e Tecnologia will be followed.
2. **Activity outline:** to conduct numerical FEM-based analysis of the thermal, mechanical and acoustic performance of concrete-based materials, with very diverse thermal and mechanical properties.
3. **Academic requirements:** PhD in Chemical Engineering, Mechanical Engineering, Material Science/Engineering or related areas. The successful candidate should have strong background in numerical simulation (CFD/FEM) of the thermal and mechanical performance of materials. A good command of English will be appreciated.
4. **Stipend:** The grant stipend will be 1495 EUR per month, in line with the regulations of “FCT – Fundação para a Ciência e Tecnologia” for post-doctoral scholarships.

5. **Applicable legislations:** Portuguese law, in particular “Estatuto do Bolseiro de Investigação Científica”, law nº 40/2004, of August 18th.
6. **Work place:** The work will be conducted in the Product Optimization and Characterization Laboratory, Centre for Nanotechnology and Smart Materials (CeNTI), under the supervision of Dr. Tiago Sotto Mayor.
7. **Selection procedure:** The selection will be based on curricular evaluation. A strong background in numerical simulation is required. In a second step, interviews (either at CeNTI or through video conference) will be conducted on a number of selected candidates, in order to evaluate the motivation and adequacy of the candidate’s expertise for the proposed work.
8. **Required documents:** Applicants should clearly state the reference CeNTI-PD1/2013 and include: application letter (maximum 1 page), *Curriculum Vitae* and academic degree certificate(s). Other documents (e.g. reference letters) may be included but are not mandatory.
9. **Timeframe of the call:** applications should be received between 4<sup>th</sup> of March and 18<sup>th</sup> of March, by email to [centi@centi.pt](mailto:centi@centi.pt).