



Open call for applications for a research project within the framework of LEONARDO DA VINCI or ERASMUS Mobility Programs, entitled “**THERMOREGUL 2.0 – Numerical study on the human thermoregulation**”, under the following conditions:

Duration and funding: The project will have an initial duration of 9 months (minimum 1 semestre) with a predicted starting date of September 2012 (or February 2013; dates are flexible), and a possible extension up to a total period of 12 months (to be discussed). In addition to any grant offered by the sending institution (under LEONARDO DA VINCI or ERASMUS Mobility Programs), the host institution (CeNTI) will offer a monthly allowance of 250€ during the agreed duration of the project.

Academic Background: Applicants should be last-year students or possess a Master degree (or higher) in Chemical Engineering, Mechanical Engineering, Bioengineering, Physiology, Biophysics, Mathematics or related areas, with particular interest for heat and mass transfer and simulation/programming. Previous experience in programming or numerical simulation (with FLUENT, COMSOL, or similar) is preferable but not mandatory.

Project outline: The research work will be developed in the Products Characterisation Laboratory at CeNTI (Centre for Nanotechnology and Smart Materials) and will focus on the numerical simulation of the human thermoregulatory functions. The project will involve the study and use of thermoregulation models, for further coupling with heat and mass transfer (CFD) models of products used over the body (e.g. clothing, bedding items, footwear, helmets, seats). The goal is to develop strategies to obtain information about the products characteristics that optimise thermal comfort.

Required documentation: Applications should be sent by email to the contact given below. The applications should mention the reference THERMOREGUL 2.0 and include: 1) application letter, 2) Curriculum Vitae, 3) academic degree certificate (if applicable) and 4) list of completed curricular subjects with associated classifications.

Applications should be sent by email to:

Dr. Tiago Sotto Mayor (tsottomayor@centi.pt)
 Products Characterisation Laboratory
 Centre for Nanotechnology and Smart Materials
 Rua Fernando Mesquita, 2785
 4760-034 V.N.Famalicão, Portugal
www.centi.pt/productcharacterisationlab

