Job opening in hyperspectral imaging of structural colors

Reference: Research position PTDC/CTM-MET/113352/2009

Main research fields:
Materials Science, Optics, Computer and Imaging Science.

Sub research field:
Colorimetry, Thin-Films.

Candidates holding a Master's degree in Physics, Optics, Informatics or Materials Science and specialized in one of the following areas: colorimetry, computer programming, digital image processing, hyperspectral imaging and optical engineering are welcome to apply for a Job opening at the Center for Physics of the University of Minho (CFUM), starting in January 2, 2012 for a minimum period of 6 months plus a possible extension for another 6 months. The project is funded by the Fundação para a Ciência e a Tecnologia, Portugal.

Description:
The scientific activity of the candidate will be within the existing project in the area of Materials Science. The research project comprises both the consecution and calibration of a hyperspectral imaging system for the analysis of structurally colored thin-films. The successful candidate is expected to collaborate in the design of the hyperspectral imaging system, its calibration and in the development of image processing algorithms.
Place:
The project will be implemented in the CFUM, Campus de Gualtar, Braga (Portugal). The CFUM is one of the largest Portuguese research centres in physics integrated into the School of Sciences. The CFUM has an international panel of members and counts with 71 researchers with PhD and some 30 research students. The CFUM facilities are organised in 30 research laboratories. The major research areas are: Condensed Matter Physics, Physics and Applications of Thin Solid Films, Molecular Physics, and Optics, Optometry and Vision Sciences. The CFUM was evaluated as Excellent by the by the Portuguese Science Foundation (http://www.fisica.uminho.pt). Braga is a multicultural and not expensive city located in the Minho region and around 57km from Porto (http://en.wikipedia.org/wiki/Braga). Porto international airport is around 45 km from Braga.
Requirements:
The candidate should have experience working in Matlab, C and C++. Knowledge of image processing analysis and basic and applied colorimetry are recommended.
Salary:
980 euros/ month, (social security included) in accordance with the level assigned in Portugal (http://alfa.fct.mctes.pt/apoios/bolsas/valores). Grant contracts are exempted from income tax.

Application:
Interested candidates are invited to send the curriculum vitae including a brief statement of research interests and any other document that can be considered relevant **until December 2, 2011**. These documents should be sent by e-mail to: jadiaz@ugr.es or jmanuel@fisica.uminho.pt. Please indicate on your submission "Research position PTDC/CTM-MET/113352/2009".