

Research Fellowship Available (M/F)

Underwater Acoustic Modelling for Vector Sensor Arrays

Applications are invited for a fellowship position that will become available during the fourth trimester of 2010 in the Signal Processing Laboratory (SiPLAB) at the Center of Technological Research (CINTAL), University of Algarve, Faro, Portugal, under the project *A Vector Sensor Based System for Ocean Exploration (SENSOCEAN)* (FCT contract PTDC/EEA-ELC/104561/2008). SiPLAB is one of the European leading university laboratories in underwater acoustic signal processing, including prototype equipment development, source localization and sonar, model-based inversion algorithms and underwater communications (see details in www.siplab.fct.ualg.pt).

The successful candidate will join a group of researchers currently working in the development of light systems of geoacoustic inversion based on vector sensor arrays. The main task of the candidate is to collaborate on the development of acoustic propagation models suitable for vector sensor arrays.

Applicants must have a MSc degree in Physics (or Applied Mathematics or Electrical Engineering) with a strong emphasis on wave propagation and numerical methods, as well as good programming skills in FORTRAN/C/C++ and MATLAB. A high level of proficiency in spoken and written English is required. Desirable qualifications will be: experience in underwater acoustics, wave propagation modelling, ocean tomography and acoustic inversion. The work developed during this fellowship may be used for obtaining a degree.

The successful applicant will be given a contract of six month renewable every six month, up to a total maximum of 12 months. Renew after that period is possible for a fellow engaged in a PhD program and upon successful completion of the project. The monthly net allowance (free of tax) will be 980 Euro and include social security coverage and work accident insurance. Travel expenses incurred by the candidate to and from country of origin if leaving abroad from Portugal at the time of hiring will be reimbursed. CINTAL research positions are subject to Fellowship Regulation (see www.ualg.pt/cintal/ for additional information).

Qualified candidates may apply by sending their CV together with a cover letter explaining how their experience and qualifications fit to the requirements. Applications must be submitted by (a) ordinary mail addressed to *CINTAL - Centro de Investigação Tecnológica do Algarve, A/C Orlando Rodríguez, Universidade do Algarve, Campus de Gambelas, 8005-139 Faro, Portugal* or (b) electronically to scintal@ualg.pt.

Deadline for applications: September 17, 2010 (applications received after the deadline may be considered until the position is filled).