

Research Fellowship (M/F)

Underwater Acoustic Signal Processing

Applications are invited for a fellowship that will become available during the third trimester of 2009 in the Signal Processing Laboratory (SiPLAB), at the Center of Technological Research (CINTAL), University of Algarve, Faro, Portugal, under the Wave Energy Acoustic Monitoring (WEAM) project (FCT contract PTDC/ENR/70452/2006). 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 assist in tasks to be carried out within the scope of the WEAM project, whose main objective is to develop, implement and test a strategy for monitoring the underwater acoustic noise produced in farms of wave energy converters. In a first phase he/she will perform acoustic predictions in order to establish specifications of a noise monitoring scheme. This work will lead, in a second phase, to a noise generation model extrapolating single converter at sea collected measurements to distributed farms in various sea state conditions and spatial configurations. This model will be developed for more than one site.

Applicants must have a degree in electrical engineering, physics, or applied mathematics with a strong emphasis on signal processing, as well as good programming skills in MATLAB and C/C++. He/she should be fluent in written and spoken English. The successful applicant will be given a six month duration contract, renewable every six month, up to a total maximum of 18 months. The research work developed under this fellowship may be used for obtaining a PhD degree. Depending on candidate level the net monthly allowance will be 745 or 980 EUR plus an accident insurance and a social security scheme, at BSc or MSc level, respectively. Travel expenses will be reimbursed for candidates resident outside Portugal. CINTAL research positions are subject to fellowship regulation (see www.ualg.pt/cintal/ for more information).

Qualified candidates may apply sending their *Curriculum Vitae* together with a cover letter explaining how their experience and qualifications may fit to the requirements. Applications must be submitted either by ordinary mail addressed to: CINTAL - Centro de Investigação Tecnológica do Algarve, A/C Sérgio M. Jesus, Universidade do Algarve, Campus de Gambelas, 8005-139 Faro, or electronically to: scintal@ualg.pt.

Deadline for applications: May 1 to June 1, 2009 (applications received after the deadline may be considered until the position is filled).