

Call open for applications for a research grant (*bolsa de Investigação*, BI) within the framework of project PTDC/EME-MFE/113589/2009, entitled “**TURBOELAST – Turbulence modelling for viscoelastic fluids: RANS and LES approaches**”, co-financed by the Foundation for Science and Technology (FCT) and FEDER under the following conditions:

Duration and Applicable Regulations: The grant will have an initial duration of 6 months, with a predicted starting date of 1st of April 2011 (or nearest convenient date), and a possible extension up to a period of 36 months (never exceeding the end of the project or the legal limit of 36 months). Rules and regulations are those stated by FCT (<http://www.fct.mctes.pt/pt/apoios/formacao/ambitoprojectos>).

Academic Requirements: Prospective applicants should possess a Masters degree in Chemical Engineering, Mechanical Engineering, Physics or related areas, with adequate formation in fluid mechanics. Candidates interested in pursuing PhD studies and with research experience in areas related to the project are preferred. Only exceptionally, candidates with a 5 year degree (*pre-Bologna* agreement) will be considered.

Activity Outline: Development of various turbulence models for the Reynolds stresses (two-equation and second order models) for viscoelastic fluids, within the framework of RANS/RACE, and including also a turbulence model for the scalar Reynolds fluxes. The development of the turbulence models will be based on existing DNS data for fluids represented by the FENE-P rheological constitutive equation.

Stipend: At the time of publication, the grant stipend amounts to 980 EUR according to the values proposed by FCT (<http://alfa.fct.mctes.pt/apoios/bolsas/valores>).

Documents Required: Applications should clearly state the reference ANEURYSM_BI1 and must include: i) application letter; ii) Curriculum Vitae; iii) copy of identity card or passport; iv) academic degree certificate(s); v) certificate of completed curricular subjects with respective classifications. Other documentation, including reference letters, may also be sent, but are not mandatory.

Timeframe of the call: The call is open between March 1st and March 20th 2011.

Applications should be sent by mail to:

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