Research Scientist

Laboratoire d'Etude des Microstructures (LEM) ONERA-CNRS

28, Avenue de la Division Leclerc 92320 Chatillon, France

ONERA invites applications for a permanent position of Research Scientist for the LEM, a commun laboratory between ONERA and CNRS.

Profile

We are looking for a theoretician with a broad culture in various aspects of the physics of materials, mainly those connected to their electronic structure, in relation with several studies of the laboratory.

This concerns i) the modeling of structural and thermodynamic properties, principally in alloys and compounds (point defects, dislocations, phase diagrams, growth of nanostructures) using ab initio as well as semi-empirical energetic models, which requires also a good knowledge of thermodynamics and of statistical physics; ii) the modeling of spectroscopic properties: optical properties, electron and X-ray scattering, energy loss spectroscopy.

The candidate is expected to have a specific expertise in some of these topics, to strongly interact with the members of the laboratory, and to show his interest in experiments.

He will have to interact with several departments of Onera, those concerned with the structural aspects of materials with which the LEM has traditional links, and also with the departments concerned with functional materials (optical properties, nonlinear materials, plasmonics, ...)

Background

The applicants should hold a PhD, have postdoctoral research experience and should have a proven track-record of cutting-edge research (in theoretical condensed-matter physics / chemistry, or a related field), including an ability to interact effectively within a research team involving experimentalists as well as other theoreticians.

Interested candidates are expected to send before Mai 15, 2008 :

- (1) Full CV
- (2) List of publications.

to Dr D. Gratias (<u>Denis.Gratias@onera.fr</u>) and Dr A. Finel (<u>Alphonse.Finel@onera.fr</u>)

http://lem.onera.fr/ http://www.onera.fr/