

Job Title: Senior Research Scientist in Spectroscopy of Phonons in nanostructures
Employer: Institut Català de Nanotecnologia (ICN)
Location: Campus de la UAB, 08193 Bellaterra (Barcelona), Spain
Job Type: Full-time

The Institut Català de Nanotecnologia (<http://www.icn.cat>) is a non-profit research institute, founded in July 2003 by the Ministry of Universities, Research and Information Society of the Catalan Government and the Autonomous University of Barcelona (UAB), who are its patrons. ICN staff carry out research in nanoscience and nanotechnology, primarily via European, regional and national collaborative projects, and is actively involved in Technology Transfer in areas of internal expertise and co-development with private industry. In addition to its own research activities, the Institute also engages in collaborative research, dissemination, educational and managerial activities with other institutions such as universities, scientific institutes, government agencies and private companies, at regional, national and international levels.

The successful candidate will join the 14-strong Phononic and Photonic Nanostructures (P2N) Group, headed by Prof Dr Clivia M Sotomayor Torres (<http://www.icn.cat/phononic-photonic-nanostructures.ph>), which is supported by two project manager and group administrators and one senior Laboratory Engineer. At present the group is partner in several European projects, three national and two regional projects.

Job description:

The successful candidate will become responsible for the day-to-day research in nanophononics, and experimental optical spectroscopy of phonons in nanostructures in particular. She or he is expected to carry out research leading to publishable research work of the P2N group and to drive on day-to-day basis the P2N research projects in this field.

The responsibilities associated with the position include: (i) Perform research of the highest standards in optical spectroscopy of phonons in nanostructures; (ii) day-to-day supervision of research students in the P2N in the field; (iii) Participation in the dynamics of the P2N group concerning technical discussions, research plans, contribution to laboratory development, implementation of plans, participation in evaluations and planning of the laboratory development and targets; (iv) Responsibility for the relevant research project of the group and generation of new ideas for future work; (v) Dissemination of results in high impact journals and in the relevant major international conferences and workshops.

The candidate should hold a PhD in physics and have more than three years of postdoctoral research experience in light scattering in nanostructures and be familiar with near-field optical spectroscopy of phonons. The candidate should be familiar with solid state physics, in particular with: (a) phonon-photon and photon-electron coupling, (b) confined phonons, (c) spectroscopy of collective and elementary excitations, (d) micro-Raman scattering and Brillouin scattering measurements and simulations and (e) vacuum and cryogenic techniques. The applicant should have a solid track of record of scientific achievements. Knowledge of thermal properties in the nanoscale is crucial. She or he should have experience in the supervision of junior researchers, such as MSc and PhD students, scientific dissemination, project design, project technical and financial management and reporting. The candidate should also have a few years of experience in collaborative research at European level. Knowledge of the English language is essential (written, spoken and listening and reading comprehension). A working knowledge of the Spanish and or Catalan languages is desirable.

This is a stable career position subject to a continued positive evaluation. The salary will be commensurate with the candidate's qualifications and experience. Adequate support and professional development opportunities will be offered.

Starting date: 1st September 2011 (non-negotiable).

How to apply

Submit the following application documents to hr@icn.cat :

- Resume or CV
- List of the five most relevant scientific publications
- Summary of the applicant's research experience in nanophononics and experimental optical spectroscopy of phonons in nanostructures
- List of three referees with contact details.

Closing date for application:

Monday 20th June 2011 (5 pm CET)

(Where necessary, personal and or phone interviews will be conducted in the period of 11 to 13th of July or earlier).