

Postdoctoral position

Computational Materials Science at the University of Milano-Bicocca

DFT study of the vibrational properties of materials for neutron moderators

A postdoctoral position is available in the group of Prof. Marco Bernasconi at the Department of Materials Science of the University of Milano-Bicocca in Milano, Italy (see <https://en.unimib.it/marco-bernasconi>)

The position is funded by a Horizon2020 project on the development of high intensity neutron source at the European Spallation Source in collaboration with several European universities and research centers.

A task of the research unit of Milano-Bicocca within the project is the calculation of the vibrational properties of crystalline materials for moderators of cold neutrons by means of electronic structure calculations and molecular dynamics simulations based on density functional theory. Nanocrystalline, layered and cage-like materials will be addressed.

The potential candidate must hold a Phd in physics or materials science and a strong background in the application of electronic structure methods to the study of condensed matter systems. Experience with density functional perturbation theory as implemented in the Quantum-Espresso package is an advantage. Very good oral and written proficiency in English is compulsory.

The initial appointment is for 18 months starting in Spring 2021 with possible renewal up to three years. The net monthly salary is in the range 2100-2200 euros.

To apply please write to marco.bernasconi@unimib.it before December 15th, 2020 providing a curriculum vitae (including research interests and accomplishments, full publications list, relevant certificates/diplomas/awards list) and full contact details of one referee supporting the application. Selected candidates will be interviewed via teleconference.