Post-doctoral position in "Atomistic Simulation or Multi-scale Modeling" at the LEMTA & the IJL

The LEMTA (Laboratoire d'Energetique et de Mécanique Theorique et Appliquée) and the IJL (Institut Jean Lamour), both research laboratories of the University of Lorraine and CNRS, located in Nancy, (FRANCE) have an immediate opening for a **POSTDOC POSITION IN ATOMISTIC OR MULTI-SCALE MODELING**. This position is funded by the Carnot Institute ICEEL in the frame of a 3 year project on enhancement of thermoelectric devices involving Bi_2Te_3 nanowires.

Job Description and Qualifications:

The main research topic of this position is about computational simulation in the frame of "nano-materials" and "energy recovery" and "nanotechnologies". The studied materials for energy applications will be the thermoelectric ones. The computational methods would be ab-initio simulations and/or molecular dynamics and/or Monte Carlo simulations according to the experience of the recruited researcher.

The candidate should have a PhD Degree in Physics or Engineering or Materials Science from an internationally recognized institution or university. Expertise in atomistic simulations such as DFT / ab initio calculations or classical molecular dynamics, or multi-scale modeling is mandatory. The candidate will have to develop or improve skills in calculating electronic or phononic transport properties of nanostructured materials (single nanowire, core/shell nanowire …). Previous experiences of multi-scale modeling or using some atomistic simulation packages, including but not limited to VASP, SIESTA, and LAMMPS, are strong advantages. Candidates should have the ability to think creatively with high motivation and have an excellent English written ability and excellent communication skills in general. French language is not required but could be useful.

According to the standard policy and salary rates of the University of Lorraine the net salary will be between 2000€ and 2150€, depending on the experience of the candidate. The initial contract will be for one year and can be extended upon mutual agreement.

Additional Notes:

The candidate has opportunities of direct access to and communications with the international scientific community. The starting date is January 2014. Interested candidates may send a complete CV including list of publications, all transcripts at B.S., M.S., and PhD levels, and a list of at least two (2) references with contact information. All application materials must be in English.

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