KAIST-ISSP joint postdoctoral position for first-principles electronic structure calculations

We would like to announce that a KAIST-ISSP joint postdoctoral research position is open to develop the OpenMX software package, which is expected to start from September 1st, 2015. The mission of the position is developing methods and codes for the first-principles spectral simulations such as X-ray absorption spectra, ultraviolet-visible absorption, infrared, Raman, and phonon spectra, and applying them to correlated materials such as complex oxide heterostructures, Fe-based superconductors, cuprates, and iridates.

The position will be a joint appointment between Institute for Solid State Physics (ISSP) in the University of Tokyo and Physics Department in Korea Advanced Institute of Science and Technology (KAIST). The candidate should have considerable expertise and experience in method and code development (preferably C-language), and is expected to have interests on researches of strongly correlated materials. The researcher in the joint position shall stay in both ISSP (Kashiwa, Japan) and KAIST (Daejeon, Korea), traveling between two institutes. The staying period in each place will be flexible depending on the research progress and the budget situation.

The outline of the position is given below.

1. **Position :** Postdoctoral Researcher

2. **Working place:** The Taisuke Ozaki Research Group, Institute for Solid State Physics, the University of Tokyo and the the Myung Joon Han Research Group, Department of Physics, Korea Advanced Institute of Science and Technology (KAIST). He/She is expected to stay in both the places depending on the project progress to promote the international collaboration between the two groups. The regular visiting to the other place will be expected depending on the research progress.

3. **Research:** Development of methods and codes in the OpenMX software package for first-principles spectral simulations such as X-ray absorption spectra, ultraviolet-visible absorption spectra, and infrared, Raman, and phonon spectra, and their applications to strongly correlated materials such as oxide heterostructures , Fe-based superconductors, cuprates, and iridates.

4. **Requirements:** Computational Materials Scientist with PhD degree in Physics, Condensed Matter Physics, Materials Science, or related fields. The researcher should be specialized in the development of first-principles electronic structure calculation methods, and is expected to have interests on the correlated material research.

5. **Starting date:** September 1, 2015 (Earlier or later starting date is negotiable.)

6. **Contract:** One year, with a possible extension for another year, until August 31, 2017. *Renewal/nonrenewal of the contract will be made by mutual agreement by the end of the first contract considering the progress and performance at work.

7. **Working days and hours:**

   Working days: Mondays – Fridays

   Working hours: 8:30 – 17:15 (Break time: 12:00 – 13:00)

   Days off: Saturday and Sundays, National holidays, Year-end and New Year holidays

8. **Salary:** The salary will be determined on the basis of the educational background and job experience, etc. in accordance with the KAIST rules. He/She shall join in Social Insurance (Health insurance, Employee's pension insurance, and Employment insurance).

9. Application materials:

(1) Curriculum Vitae

(2) Publication list

(3) List of five (or less) selected publications together with the description of your contributions

(4) Summary of your researches and future prospects (1page in A4 or in letter size)

(5) Possible starting date

(6) Names and contact addresses of two (or more) references

(7) Your full contact address including e-mail address

*Application materials should be sent via email to the following two addresses:

t-ozaki@issp.u-tokyo.ac.jp and mj.han@kaist.ac.kr

10. Deadline: The review process will start immediately and continue until the position filled. We may not guarantee the full consideration for the application materials sent after April 30th.

11. Contact :

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