# Postdoctoral position for development of first-principles electronic structure methods

We would like to announce that a postdoctoral research position is available for development of the OpenMX software package (<u>http://www.openmx-square.org/</u>), expected to start from April 1st, 2017. The aim of the research position is to develop accurate and efficient first-principles methods, based on density functional theories and many body perturbation theories, of calculating response properties of materials to external perturbations such as electric and magnetic fields, interaction with photons, and strain field. The position will be involved in a national project of Japan for development of computational materials science. 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 materials science. The researcher shall stay in the Institute for Solid State Physics (ISSP) in Kashiwa, Japan.

The outline of the position is given below.

- 1. **Position :** Project Researcher
- 2. **Working place:** The Taisuke Ozaki Research Group, the Institute for Solid State Physics (ISSP), the University of Tokyo in Kashiwa, Japan.
- 3. **Research:** Development of computational methods and codes for the OpenMX software package. Primarily, we aim at developing accurate and efficient first-principles methods to calculate response properties of materials to external perturbations such as electric and magnetic fields, interaction with photons, and strain field, based on density functional theories and many body perturbation theories.
- 4. **Requirements:** PhD degree in Physics, Condensed Matter Physics, Materials Science, Molecular Science, or related fields. The researcher is expected to have considerable expertise and experience in related methods and code development.
- 5. Starting date: April 1, 2017 (Later starting date is negotiable.)
- 6. **Contract:** One year, with a possible extension for another year, until March 31, 2019. \*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:

- (1) Working days: Mondays Fridays
- (2) Working hours: 8:30 17:15 (Break time: 12:00 13:00)
- (3) 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 rules of the University of Tokyo. 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 three (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 address:

# t-ozaki@issp.u-tokyo.ac.jp

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 Jan. 22<sup>nd</sup>, 2017.

# 11. Contact :

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