

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

We would like to announce that a postdoctoral research position is open to develop the OpenMX software package (<http://www.openmx-square.org/>) for large-scale electronic structure calculations based on density functional theories (DFT). The position is expected to start from April 1<sup>st</sup>, 2016, and the mission is to develop highly efficient methods and codes for OpenMX to realize large-scale geometry optimization, molecular dynamics simulations, and electronic transport calculations.

The position will be involved in the national project of Japan for development of the next generation supercomputer which is expected to appear in 2020. 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 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, Institute for Solid State Physics (ISSP), the University of Tokyo in Kashiwa, Japan.
3. **Research:** Development of methods and codes for the OpenMX software package for large-scale geometry optimization, molecular dynamics simulations, and electronic transport calculations, which may include development of not only novel methods, but also highly efficient parallel codes.
4. **Requirements:** PhD degree in Physics, Condensed Matter Physics, Materials Science, Molecular Science, Information Science, Applied Mathematics, or related fields. The researcher is expected to have considerable expertise and experience in related methods and code development.
5. **Starting date:** April 1, 2016 (Later starting date is negotiable.)
6. **Contract:** One year, with a possible extension for another year, until March 31, 2018.  
\*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 five (or less) selected publications together with the description of your contributions



- (4) Summary of your researches and future prospects (1 page 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](mailto: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 Feb. 14<sup>th</sup>, 2016.

**11. Contact :**

Taisuke Ozaki, Project Professor

Center of Computational Materials Science

Institute for Solid State Science

The University of Tokyo

Kashiwanoha 5-1-5, Kashiwa, Chiba #277-8581 Japan

Tel: 078-940-5678, Fax: 078-304-0170, E-mail: [t-ozaki@issp.u-tokyo.ac.jp](mailto:t-ozaki@issp.u-tokyo.ac.jp)

Web page: <http://t-ozaki.issp.u-tokyo.ac.jp/>