

One or Two Postdoctoral position(s) or specially appointed assistant professor, The Research Center of Mathematics for Social Creativity (MSC), the Research Institute for Electronic Science (RIES), Hokkaido University

The JST/CREST “Intelligent measurement analysis” grant entitled *Development of Accelerated Measurement Technology for Cell Diagnosis by bridging Single-Cell Raman Imaging and Information Science* (PI: Tamiki Komatsuzaki and Co-PI: Atsuyoshi Nakamura) has started from 2016 Oct 1. In this project, we develop a new technology for molecular Raman measurements that constantly feeds optimal conditions back to the measuring equipment. Using the techniques of information science and statistical mathematics to analyze spectral imaging data of cells and living tissues, the technology aids in speedy and highly accurate diagnoses.

Along this project, we recruit one or two postdoctoral position(s) or specially appointed assistant professor, and would like to seek candidates from a variety of fields. We would appreciate it if you could forward this job-opening information to well-qualified person. Interview may be carried out in the process of selection.

1. Position Title: Postdoctoral fellow or specially appointed assistant professor at The Research Center of Mathematics for Social Creativity (MSC), the Research Institute for Electronic Science (RIES), Hokkaido University

2. Area of Specialization: Information science (machine learning, data science), statistical physics, and relevant area of research fields, interdisciplinary science to bridge theory and experiments.

3. Qualification: Applicants are required to have a Ph.D. or doctoral degree.

4. Employment Status:

The employment is a one-year basis but renewable by mutual agreement up to five years from April 1, 2017.

5. Expected Start Date:

April 1st, 2017

6. Documents to Be Submitted:

- (1) Curriculum vitae (with photograph, telephone number, and e-mail and mailing address) including educational records, professional career records, activity records in academic society, publication and awards.
- (2) Reprints or copies of five significant articles (original papers and/or review articles).
- (3) Brief statement of applicant's research interests and appealing points, including the summary of applicant's past and present research (~2 pages in A4-size sheet).
- (4) Contact information of at least two reference persons (affiliation, telephone number and e-mail address).

7. Deadline

January 10th, 2017 (Applications must be postmarked by January 10th, 2017 for postal mail from domestic).

8. Mailing Address and Notice

We will accept the application by e-mail or internet file attachment from foreign countries (Note that only the postal mail is accepted from Japan). The documents will not be returned. Submitted documents are strictly protected and we do not use the obtained personal information for any purpose other than the screening. Applicants must indicate "Application Documents for MSC, RIES, Hokkaido Univ." in the subject of e-mail (or on the envelop for postal mail from Japan to the postal mailing address below), and send both to Ms. Maiko Ishida-Muramoto <muramoto@es.hokudai.ac.jp> with carbon copy to Prof. Tamiki Komatsuzaki tamiki@es.hokudai.ac.jp, and Prof. Atsuyoshi Nakamura atsu@main.ist.hokudai.ac.jp.

Postal Mailing Address

Prof. Tamiki Komatsuzaki
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Or

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9. Inquiries

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Or

Prof. Atsuyoshi Nakamura, email: atsu@main.ist.hokudai.ac.jp

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10. The candidate should have a certain level of knowledge with methodology and concepts of any of the following: information science (e.g., theories of sparse modeling and online learning), statistical science, and relevant mathematical sciences. For example; those who are familiar with bandit theory and are interested in developing a method to bridge information science and biology; those who know the underlying theory of nano measurements and are interested in developing information scientific approaches; those who have theoretical background and experience with advanced measurements and are interested in developing information scientific approaches; those who have a background in physics such as statistical mechanics and are able to develop information scientific approaches by looking the actual data, are preferred.