

**Program-Specific researcher (Postdoctoral Fellowship)**

**Fukui Institute for Fundamental Chemistry (FIFC), Kyoto University, Kyoto, Japan**

**FIFC Fellow (General Research Division and Theoretical Research Division)**

A postdoctoral position to study with Professor Kazuo Takatsuka, Research Leader in General Research Division and Theoretical Research Division at the FIFC, Kyoto University.

**1. About FIFC:** FIFC, successor of the former Institute for Fundamental Chemistry, was founded in 2004 in Kyoto University to memorize the research activities of Professor Kenichi Fukui who was awarded Nobel Prize in chemistry (1981), together with Professor Roald Hoffmann, for their theories on the course of chemical reactions.

Our Web page is <http://www.fukui.kyoto-u.ac.jp/>. The research activities of the Institute cover the research fields of the researchers and research advisors given below.

**Research groups in FIFC are managed by**

Tohru Sato	Theoretical Chemistry
Shigeyoshi Sakaki	Theoretical Study of Complex Systems Including d-electrons
Kazuyoshi Tanaka	Theoretical Chemistry for Molecules and Polymers with Element-Blocks
Kazuo Takatsuka	Theory of Nonadiabatic Electron Dynamics and Chemical Reactions
Shigeru Nagase	Theoretical Study of Non-transition Metal and Transition Metal Chemical Species
Kimihiko Hirao	Theoretical Chemistry / Computational Chemistry

and

**Fields of research advisers are**

Katsuhisa Tanaka	Inorganic Solid-state Chemistry
Hirofumi Sato	Theoretical Chemistry
Shigehiko Hayashi	Theoretical Chemistry, Theoretical Biophysics
Tsuyoshi Koga	Physical Chemistry of Polymers, Statistical Mechanics
Haruyuki Atomi	Biological Chemistry
Shin-ichi Sasa	Statistical Physics
Jun Yamamoto	Soft Matter Physics
Hiroshi Watanabe	Molecular Rheology

Tetsuya Uda	Thermodynamics of Materials
Tsunehiro Tanaka	Catalysis Chemistry
Yoshitaka Tanimura	Theoretical Chemical Physics
Ryoichi Yamamoto	Soft Matters and Complex Fluids
Shoji Takada	Theoretical Biophysics

**2. Job title:** Program-Specific researcher

**3. Number :** 1

**4. Work Location:** Fukui Institute for Fundamental Chemistry, Kyoto University  
34-4 Takano-Nishihiraki-cho, Sakyou-ku, Kyoto

**5. Term:** The period of employment is two years from the date of employment. A further extension of two years may be possible, up to the maximum total period of four years. Kyoto University is promoting gender equality.

**6. Fields:** Professor Takatsuka, Research Leader has been working on the theory of nonadiabatic chemical reactions based on electron wavepacket dynamics, ranging from attosecond and femtosecond laser-driven electronic and nuclear dynamics, time-resolved molecular ionization, photochemical reactions including water splitting, excited state dynamics in highly quasi-degenerate electronic states. His group is also studying semiclassical and full quantum nuclear wavepacket dynamics of, for example, time-resolved photoelectron spectroscopy. Hence preference will be given to the candidates with backgrounds in either quantum chemistry, nonadiabatic reaction theory based on nuclear wavepacket dynamics, or theoretical ultrafast spectroscopy to a deep level. Ph.D. or a prospect to obtain Ph.D. is required.

**7. Salary:** To be determined in accordance with Kyoto University regulations. Research fund: 800,000 Japanese yen per year, from which some common expenses (such as printer supplies) will be deducted.

**8. Allowance :** No

**9. Social insurance :** Appointees will be eligible for MEXT mutual aid association membership, employees' pension, employment insurance, and workers' compensation

insurance.

**10. Business hours :** 7 hours and 45 minutes per day, 38 hours 45 minutes per week under a discretionary work system. Holidays: Weekends, National holidays, Year-end and New Year holidays, the University Foundation Day (June 18th), and summer vacation.

**11. Starting date to study:** At the earliest convenience of the applicant. (Negotiable)

**12. Trial period :** 6 months trial period

**13. What to submit:** The following documents should be submitted as e-mail attachments in PDF format. The title of the application e-mail should be 'Research Leader (Takatsuka group)'.

- (1) Curriculum vitae with photograph
- (2) Publication list (books, if any, can be sent separately in conventional mail)
- (3) One set of reprints of your five most important papers, if any, in PDF copies
- (4) A summary of research results: 1 page on A4 paper
- (5) Research proposal: 1.5 to 2 pages on A4 paper
- (6) One recommendation letter (to be directly sent from the recommenders to the institute).
- (7) Recommender's name, Organization Name, e-mail address

**14. Closing date of application:** April 5, 2019.

Early application is advised.

We will send a reply e-mail upon receiving the application mail. If you do not receive any response, please contact us.

**15. Address:**

e-mail to [application\\*fukui.kyoto-u.ac.jp](mailto:application*fukui.kyoto-u.ac.jp)

Professor Katsuhisa Tanaka

Director, Fukui Institute for Fundamental Chemistry, Kyoto University

The subject of the application mail should be 'FIFC Fellow (Takatsuka group)'.

If you need further information, please contact:

Professor Katsuhisa Tanaka, Director FIFC

E-mail: [application\\* fukui.kyoto-u.ac.jp](mailto:application*fukui.kyoto-u.ac.jp)

(Replace \* in the above mail addresses into @)

**16. Interview**

After document-based selection, interview through Skype may be asked.

**17. Notes :** The documents submitted will only be used for the selection process. We never disclose, transfer, nor lend the documents to a third party/person without a valid reason.

Note that the application documents submitted will not be returned to the applicants.

Expenses needed to apply for this project shall be borne by the applicants.

Kyoto University supports a gender-equal society.