Opening Recruitment of Specially Appointed Research Fellow of the International Research Collaboration Center (IRCC)

The International Research Collaboration Center (IRCC) at the National Institutes of Natural Sciences (NINS) in Japan has concluded the MoU (Memorandum of Understanding) with three research institutes of Max Planck Society (*) and Princeton University to promote international collaborative researches of the plasma physics which are common interests in the field of astrophysics and fusion sciences. Based on this MoU, the research unit of astro-fusion plasma physics has been established in IRCC (https://www.nins.jp/en/site/activity/1724.html).

Two overseas research branches will be started in Germany (**) and in the United States of America. IRCC will recruit a postdoctoral or more senior researcher to conduct the research activities in German branch promoting international research collaborations between NINS and Max Planck research institutes. The guidelines follow below.

(*) Max Planck Institute for Plasma Physics, Max Planck Institute for Astrophysics, Max Planck Institute for Solar System Research

(**) A branch in Germany will be set in the research institute where the appointed IRCC-AFP fellow will be located.

1. Title and number of positions to be filled
   Title: Specially Appointed Research Employee (IRCC-AFP fellow)
   Title in Max Planck research institute: NINS Postdoctoral Research Fellow
   Number: one person

2. Research fields
   Theoretical and computational research in plasma physics for astrophysics or fusion science. The applicant may select the research area from topics in plasma physics shown below (either by particle or MHD simulations). These topics are actively studied in the MPPC (Max Planck Center for Plasma Physics) in Germany and Princeton University.
   1) Turbulence, 2) Magnetic reconnection, 3) Magnetorotational instability and dynamo action, 4) Astrophysical effects of cosmic rays, 5) Stellarator optimization

3. Requirements for applicants
   (1) A Ph.D. degree (expected to have before the start date)
   (2) Strong interests in studying plasma physics topics listed in the previous section.
4. Research duties
IRCC-AFP fellow will conduct international collaboration research under the supervision of PI researchers in IRCC-AFP (Appendix shows a list of IRCC-AFP members), NIFS(*) or NAOJ(**), and among three research institutes of Max Planck Society (***) . An important role of IRCC-AFP fellow is activating the international collaboration between researchers in NINS and Max Planck institutes.

(*) National Institute for Fusion Science
(**) National Astronomical Observatory of Japan
(***) Max Planck Institute for Plasma Physics, Max Planck Institute for Astrophysics, Max Planck Institute for Solar System Research

It is possible to expand the international collaboration to include the Department of Astrophysical Sciences at Princeton University or Princeton Plasma Physics Laboratory (PPPL) based on the MoU between NINS and Princeton University.

5. Term of appointment
The successful candidate should be able to start on or after August 1, 2020. The term of the contract will be renewed annually (for up to a total of three years).

6. Salary
(1) The specially appointed research employee will be employed by NINS under an annual salary system and will receive a salary based upon the NINS standard taking into account the salary of a postdoctoral researchers in Max Planck institutes as reference. The salary will be paid monthly by installments.
(2) The specially appointed research employee will be eligible for enrollment in social insurance.
(3) Travel and relocation costs to IRCC-AFP will be covered, subject to the travel regulations of NINS.

7. Location of the collaboration research
The main working place for the IRCC-AFP fellow will be in the IRCC branch in Germany. The fellow also works in NIFS or NAOJ in Japan following to the plan of promoting the international collaboration.

8. Application deadline
Applications submitted by May 29, 2020 will be reviewed with priority. Recruitment will continue until an appropriate candidate is selected.
9. Reviewing and selection system
Selection will be made by the selection committee of IRCC-AFP. The first screening will be done based upon the examination of all submitted documents. After the first screening, we will have an interview as the second screening via the internet or face-to-face. The expense for the interview will not be covered by IRCC.

10. Documents to be submitted
Documents must be written in English for the international review.
(1) CV
(2) Publication list
(3) A brief summary of research history and a research plan. In addition, a research plan of working in two countries (institutes) for activating an international collaboration research. Names of planned supervisors in NINS (or IRCC-AFP) and Max Planck institutes. These documents should be 1 to 3 pages in length.
(4) Name and e-mail address, from whom recommendation letters can be requested. At least one person is necessary. Two or more persons are favorable.
(5) Any other documents useful for the review.
(6) It is recommended for the applicant to discuss with planned supervisors in NINS and the contact persons at the Max Planck institutes about the proposed research plan.

Send your application documents by e-mail to;
E-mail: nins-kokusai@nins.jp
Subject of e-mail: “Application for specially appointed research employee for IRCC-AFP”.

11. Contact Information for the International Research Collaboration Center
(1) Regarding application documents
Liaison and Planning Division, Administrative Bureau, National Institutes of Natural Sciences
E-mail: nins-kokusai@nins.jp
National Institutes of Natural Sciences, 2F Hulic Kamiyacho Building, 4-3-13 Toranomon, Minato-ku, Tokyo 105-0001, Japan

(2) Regarding research
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Wendelsteinstrasse 1, 17491 Greifswald, Germany

Prof. Shoichi Okamura  
E-mail: okamura@nifs.ac.jp  
Division of Astro-fusion Plasma Physics, International Research Collaboration  
Center, National Institutes of Natural Sciences  
Research Enhancement Strategy Office, National Institute for Fusion Science,  
Oroshi 322-6, Toki, Gifu, 509-5292, Japan

12. Miscellaneous  
(1) Please submit application documents by e-mail to IRCC.  
(2) Application documents will not be returned after submission. IRCC will not use  
application documents for any other purpose but this selection. Application  
documents will be disposed after the selection.  
(3) Policy for Equal Employment Opportunity: Abiding by the Equal Employment  
Opportunity Act for Men and Women, IRCC is committed to the realization of a  
society with gender equality. If two candidates are deemed equal in their  
performance evaluation, IRCC will take positive action to employ women.  
If an applicant has taken one or more leaves of absence for the purpose of  
maternity, child-care, and/or family-care (including shorter working hours for the  
purpose of child-care and/or family-care), or has been absent from research  
activities due to illness or an injury that occurred in the workplace or while  
commuting, please describe this in the CV. IRCC will take this information into  
consideration in the selection process.
APPENDIX

Members of IRCC-AFP in Japan

Prof. Shoichi Okamura (National Institutes of Natural Sciences)
Prof. Kohji Tomisaka (National Astronomical Observatory of Japan)
Prof. Yasushi Todo (National Institute for Fusion Science)
Prof. Ryoji Matsumoto (Chiba University)
Prof. Yasushi Ono (The University of Tokyo)
Prof. Tomo-hiko Watanabe (Nagoya University)
Prof. Kengo Tomida (Tohoku University)