# FY2022 ARC-Space Joint Research Program with Invited International Researchers Proposal Submission Guidelines

June 1, 2022 ARC-Space, The University of Aizu

# 1 Objective of the Program

The Aizu Research Center for Space Informatics (ARC-Space) aims to promote research in the field of space informatics, which integrates space science and informatics, through industry-academia collaboration, and to provide the results to the academic community, thereby contributing to the vitalization of research in the field and to the advancement of its technological development. ARC-Space was certified as a joint usage/research center for Lunar and Planetary Exploration Archive Science, by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT) in FY2019.

Lunar and planetary exploration archive science refers to a form of research in which new insights are obtained by combining data obtained and accumulated through past lunar and planetary exploration and observational research with the latest knowledge and analysis techniques.

With the aim of further internationalizing the activities of ARC-Space, we are now accepting proposals for the Joint Research Program with Invited International Researchers, which provides support for inviting researchers from universities or research institutes overseas to Japan. By promoting a wide range of joint research with overseas researchers, we aim to further expand the scope of activities of the Center for Lunar and Planetary Exploration and Archive Science and contribute to the internationalization of the academic community.

# 2 Details of the Program

This program provides grants for inviting overseas researchers to ARC-Space, the University of Aizu to conduct joint research. One or two proposals will be selected. Travel and accommodation expenses during the stay at the University of Aizu for invited researchers and joint research expenses will be covered. The maximum amount of the joint research expenses is 400,000 yen. The goal of this program is to create opportunities for close exchanges between domestic and overseas researchers in order to create new research achievements and develop human resources in the field of archive science. Invited researchers are expected to stay at the University of Aizu to conduct the joint research, but free to travel around Japan using funds other than this grant. During the stay at the University of Aizu, accommodation expenses will be provided with expenses regulations of the university. Applicants may also apply for the ARC-Space's Joint Research Program and Overseas Travel Grants Program. <Research Themes>

- (a) Analysis of lunar and planetary exploration data using existing tools
- (b) Evaluation of prototype lunar and planetary exploration data analytics tools
- (c) Investigation of new lunar and planetary exploration data analytics tools
- (d) Investigation of high value-added lunar and planetary exploration data
- (e) Other research related to lunar and planetary exploration archive science

# **3 Qualified Applicants**

Joint Research will be conducted by the following (1), (2), and (3). Those who fall under (1), (2), (3) a or (3b) must be listed in an application form. Researchers who will be invited in the

program fall under (3) Research Collaborators. At least one faculty member of ARC-Space must be included as a Principal Investigator or a Co-Investigator.

PIs and Co-Is must undergo research ethics training offered by their universities, research institutions, or JSPS prior to the start of joint research.

# (1) Principal Investigator

PI must be one of the following.

- a. Faculty members of national, public, and private universities, researchers of research institutes (including ARC-Space), or equivalent researchers (including technical staff of national, public, and private universities)
- b. Individuals recognized as equivalent to (a) by the Director of ARC-Space

# (2) Co-Investigators

Co-Is must be one of the following.

- a. Faculty members of national, public, and private universities, researchers of research institutes (including ARC-Space), or equivalent researchers (including technical staff of national, public, and private universities)
- b. Individuals from the private sector (including venture companies) or independent engineers/researchers
- c. Graduate students of national, public, and private universities
- d. Others who are deemed as particularly necessary by the Director of ARC-Space

# (3) Research Collaborators

Research Collaborators must be one of the following.

- a. Invited researchers of overseas universities or research institutions
- b. Researchers or graduate students of overseas universities or research institutions other than (a)
- c. Others engaged in the research in collaboration with the PI or CIs

# **4 Implementation Period**

The period of the joint research is is from the date of notification of acceptance to January 31, 2023 (Tuesday). The period of invitation must be limited to this research period.

# 5 How to Apply

(1) You can download the application form (Form 3) from ARC-Space's website. Please refer to the following URL:

https://arcspace.jp/jointresearch:top

- (2) E-mail the completed application form to the address in 12 Submission Address and Contact Information.
- (3) Before applying for the program, applicants may consult with the ARC-Space's faculty members regarding the joint research themes, research content, expenses, and the selection of researchers from among the ARC-Space's faculty members, and other topics, if necessary.
- (4) Application forms must be in English or Japanese.
- (5) Graduate students participating in the joint research must be covered by insurance coverage equivalent to or greater than the Personal Accident Insurance for Students Pursuing Education and Research (including the liability insurance) of the Japan Educational Exchanges and Services.

# 6 Research Expenses, etc.

# (1) Eligible Expenses

The following expenses can be applied for when conducting foreign joint research.

- a. Overseas travel expenses (round-trip travel between the residence of the invited researcher and the University of Aizu)
- b. Accommodation expenses during the stay at the University of Aizu (excluding living expenses)
- c. Expenses for the purchase of goods/consumables (limited to those used for joint research)
- d. Honoraria for research supporters (students, etc.)

# (2) Payment Method

ARC-Space will reimburse the joint research expenses upon request based on the designated documents submitted by the successful applicant. Items purchased for 100,000 yen or more will be regarded as equipment of the University of Aizu, and the handling of such items after the joint research period will be stipulated and notified separately.

# 7 Application Period

Wednesday, June 1, 2022 - Monday, July 4, 2022

# **8 Adoption of Joint Research Proposals**

- (1) Acceptance or rejection of applications will be discussed by the Proposal Solicitation and Selection Committee and decided by the Steering Committee.
- (2) During deliberations, applicants may be asked to provide explanations as necessary.
- (3) During deliberations, adjustments may be made with applicants regarding the details and amount of research funding required.
- (4) We will notify applicants of the result of acceptance or rejection. Please note that if accepted, the title of the research project, the names and affiliations of the applicants will be posted on ARC-Space's website.

# 9 Joint Research Report

- (1) Please submit the "Report on ARC-Space Joint Research" (hereinafter referred to as "Research Report") in an A4-sized Microsoft Word document in English or Japanese to the email address in 12 Submission Address and Contact Information by April 26, 2023 (Wednesday). The research report should also include a business travel report of the invited researcher.
- (2) Please note that if you fail to submit the Research Report by the deadline without a particular reason, we will not accept your application for this program for the following year. You can download the Research Report form (Form 4) from ARC-Space's website. Please refer to the following URL:

https://arcspace.jp/jointresearch:top

#### 10 Publication of Results

- (1) After the research period, the results of the joint research will be published on ARC-Space's website based on the contents of the "Publication Status of Results" in the Research Report. At this time, inquiries may be made to accepted researchers regarding the publication status of the results after the submission of the Research Report.
- (2) Applicants may be asked to present their research plans and results at conferences organized by ARC-Space.

- (3) If accepted researchers publish the results of joint research (including academic papers, conference presentations, etc.), please indicate in the acknowledgements section that the research was conducted jointly by ARC-Space. Please refer to the following example sentences.
  - This work was supported by MEXT Promotion of Distinctive Joint Research Center Program Grant Number JPMXP0619217839.

In addition, please submit information on the publication, bibliographic information on the paper, a copy of the paper, etc. to the e-mail or mailing address in 12 Submission Address and Contact Information.

# 11 Handling of Intellectual Property Rights Arising from Joint Research

In principle, intellectual property rights arising from joint research shall belong to the inventor in the case of an invention, etc., and to the author in the case of a publication. In consideration of the role of ARC-Space, it is assumed that software such as analysis tools, data to which value has been added, and services developed, and other products of the joint research shall be published at the same time as the Research Report is submitted and will be available for free use by researchers.

However, depending on the progress of the research, a period of exclusivity of up to one year after the end of the joint research period may be set. Regarding the server resources, etc. required for publication, applicants will be able to use the resources currently in operation at ARC-Space.

#### 12 Submission Address and Contact Information

Mailing Address:

90 Kamiiawase, Tsuruga, Ikki-machi, Aizuwakamatsu, Fukushima 965-8580 JAPAN Administrative Office of Aizu Research Center for Space Informatics, The University of Aizu (Planning and Collaboration Division)

Tel.: +81 242-37-2511 (business hours: 8:30-17:15)

Fax: +81 242-37-2546

E-mail: arcspace-kobo@u-aizu.ac.jp

#### [Reference]

If you need to consult with ARC-Space's faculty members regarding the joint research themes, research content, expenses, the selection of CIs from among the ARC-Space's faculty members, participation of companies, and other topics (see 5(3)), please refer to the list below.

Professor DEMURA Hirohide demui Senior Associate Professor HIRATA Naru naru@ Senior Associate Professor OGAWA Yoshiko yoshik Associate Professor HONDA Chikatoshi chond Associate Professor KITAZATO Kohei kitazai Associate Professor OKUDAIRA Kyoko okuda

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