MEMORANDUM OF UNDERSTANDING

CONCERNING

THE UNIVERSITY SPACE RESEARCH ASSOCIATION'S LUNAR AND PLANETARY INSTITUTE, HOUSTON, TEXAS, AND THE CENTER FOR PLANETARY SCIENCE OF GRADUATE SCHOOL OF SCIENCE, KOBE UNIVERSITY, KOBE, JAPAN

This agreement, made and entered into at Houston, TX, U.S.A., and Kobe, Japan, this 28th day of October 2011, by and between the University Space Research Association's Lunar and Planetary Institute hereinafter referred to as LPI and the Center for Planetary Science, Graduate School of Science, Kobe University, Kobe, Japan, hereinafter referred to as CPS, is intended to further the development of basic scientific and applied research at both institutions, notably in the area of space, earth and planetary sciences, including cooperative activities associated with planned and current NASA and ISAS/JAXA missions. The parties to this Memorandum of Understanding are represented by Dr. Stephen Mackwell, Director of the LPI and Prof. Yoshitsugu Nakagawa, Director of CPS.

Pursuant to the above, LPI and CPS agree as follows:

- 1. That both institutions are united by common interests and objectives in research, and that they wish to maintain and promote channels of communication that permit the exchange of academic and scientific knowledge.
- 2. That this MOU is not intended to create a legal and binding obligation of any kind, by either party, but it is a bona fide statement of the intent of the Parties.
- 3. That, for the future, the general framework for the exchange of academic knowledge will be represented by this or similar Memoranda of Understanding, and that individual working agreements, should they arise, will be executed for specific projects under this Memorandum of Understanding.
- 4. The aforementioned working agreement (s) may be developed for, but need not be limited to:
 - A. The exchange of faculty scientists and graduate students for participation in conferences, symposia, courses, direction of theses, research projects and the development of research proposals;
 - B. The short-term exchange of faculty and staff for the enhancement of scientific and technical skills;
 - C. The exchange of publications and other teaching and research materials;
 - D. The facilitation of access to, and collaborative research on, extraterrestrial samples under curation at the Astromaterials Research and Exploration Science facility at NASA Johnson Space Center.

- 5. Specific substantive areas for which working agreements may be developed include, but are not limited to, space, earth and planetary sciences. The parties shall enter into discussions to determine when it may be mutually advantageous to enter into binding working agreements of any kind to fulfill the ends set forth in 4 above, inleuding but not limited to, nondisclosure agreements, leases, visiting faculty arrangements, contracts or subcontracts, as may be necessary.
- 6. Each institution will appoint a liaison. The liaisons will together be responsible for tracking cooperative efforts, facilitating mutual assistance, and making an annual report to both institutions of the previous year's joint activities and the initiatives in progress for the next year.
- 7. Each institution will be responsible for the travel and subsistence costs of its own assigned personnel other than students.
- 8. Each institution will take action to make the substance of this Memorandum of Understanding known to its appropriate personnel, and will provide normal and reasonable assistance to such personnel in regard to the administrative details for exchanges and work agreements.
- 9. This Memorandum of Understanding will become effective on the date of official signature and remain effective for three years from that date. This MOU can be terminated, without prejudice to the completion of ongoing collaborative programs/projects, by either party in writing upon thirty (30) days prior written notice to the other party or any time by mutual agreement in writing, signed by an authorized representative for each party.
- 10. The Parties intend, as a matter of policy and good faith, to comply with all applicable laws and regulations of the Government of Japan, including prefecture or local regulations, and all federal, state and local laws and regulations including Executive Orders of the President of the United States. The Parties further agree that they will not directly or indirectly pay, offer or authorize payment of anything of value (either in the form of compensation, gift contribution or otherwise) to any person, entity, or organization contrary to applicable law, including the laws of the United States and of Japan, or otherwise create the appearance of impropriety.
- 11. Any news releases, public announcements, advertisements or publicity to be released by either party in connection with this marketing effort or MOU shall have the prior written approval of the other Party, which shall not be unreasonably withheld, except that this MOU may be made known to the U.S. Government or Government of Japan by either Party at any time, without the permission of the other Party.
- 12. This Memorandum of Understanding may be modified or extended by written consent of both parties as provided by its officially authorized representatives.
- 13. This Memorandum of Understanding does not oblige either CPS or LPI to undertake any financial expenditures or other contractual obligations.

- 14. Each party shall act as an independent contractor and not as agent for, partner of, or joint venturer with the other party. No other relationship outside of that contemplated by the terms of this agreement shall be created.
- 15. All Intellectual Property discussed or utilized in the course of this MOU remains the property of the party that created it. If the Parties determine that any Intellectual Property discussed may be created as a result of the discussions and collaboration contemplated herein, they will enter into a separate binding agreement to determine their respective and joint rights therein.
- 16. With respect of any mutual exchange of sensitive goods/technologies, CPS is obliged to comply with the Foreign Exchange and Foreign Trade Act and LPI is obliged to comply with the Export Administration Regulations.
- 17. The assignment of this agreement to any other party or parties is expressly prohibited except with the written concurrence by the appropriate authorities of both LPI and CPS.
- 18. This agreement constitutes the entire agreement of the parties; and any future agreement, understanding, or waiver, to be binding upon the parties must be reduced to writing signed by the parties.
- 19. This agreement is written in English and Japanese in duplicate, and each party will retain one copy each of the authentic texts. The parties agree that, for the purposes of this Memorandum of Understanding, the English language document shall take precedence.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed as and of the day and year first written above.

Director, LPI

Director, CPS