

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
2101 NASA Parkway
Houston, Texas 77058-3696



March 23, 2010

Reply to Attn of: KA-10-005

To whom it may concern,

I acknowledge that Professor Hiroyuki Kawamoto currently at the Department of Mechanical Engineering, Waseda University, 3-4-1 Okubo, Shinjuku, Tokyo 169-8555, Japan, is our valued collaborator.

Professor Kawamoto's work on dust mitigation and dust management has far-reaching implications for continuing collaborative research, including areas such as in-situ resource utilization (ISRU) and physical properties of the finest fraction of lunar dust.

Advancing the technology for transporting lunar soil is essential for ISRU and for long-term lunar exploration. Professor Kawamoto is developing a particle transport system that uses electrostatic traveling waves. This approach is innovative and may be especially effective on the moon where reduced gravity and lack of water vapor will enhance the performance of electrostatic dust control systems. This system is simple, consumes less power compared to other methods, has no mechanical moving parts, and is therefore highly reliable.

I will continue to feature his work at relevant NASA meetings and planning sessions, as well as international meetings where appropriate. We look forward to continuing collaboration with Professor Kawamoto.

A handwritten signature in dark ink that reads "David S. McKay".

Sincerely,

David S. McKay, Ph.D.
Senior Scientist for Astrobiology
Senior Scientist for Planetary Science and Exploration