

B.21 HYABUSA PARTICIPATING SCIENTISTS PROGRAM

1. Scope of the Program

The Japanese HAYABUSA mission (formerly known as MUSES-C) was launched on May 9, 2003, on a 4-year mission to investigate asteroid (25143) Itokawa, and, in particular, to return a sample from that asteroid. The mission is currently planning to reach (25143) Itokawa in September 2005, and to return samples to Earth in June 2007. NASA participates in this mission under a Japanese/U.S. Memorandum of Understanding (MOU). Under the MOU, six U. S. scientists were selected in 1999 to join their Japanese colleagues on the HYABUSA Science Team in order to participate in this exciting mission to return the first sample from an asteroid. These six U.S. scientists, including one sample scientist, are currently working with their Japanese colleagues to assure the maximum science return from the mission. The MOU also provided the U.S. an opportunity to add another scientist to the Science Team after the launch, specifically for the purpose of adding another U.S. sample science team member to the HAYABUSA sample team. In particular, this individual would participate in sample site selection, in preliminary examination planning, and in the characterization of a portion of the total returned sample immediately following the return of that sample to Japan.

The HYABUSA science team member selected through this solicitation would possess skills and expertise in areas that complement those of the existing HYABUSA sample science team. Areas identified as particularly complementary are:

1. Trace element analysis, by an Inductively Coupled Plasma/Mass Spectrometer (ICPMS) or other comparable techniques.
2. Isotopic analysis, preferably by secondary ions mass spectrometry.
3. Organic analysis.

However, any proposer who brings experience with any sample analysis techniques that could be of special or unique importance to the initial characterization of the HYABUSA sample may apply.

Note that for NASA to properly evaluate the relevance to NASA goals of proposals submitted to its programs, as well as to track its progress towards achieving its goals as mandated by the Government Performance Review Act (GPRA), all research supported by NASA must demonstrate its relevance to NASA's Goals and Research Focus Areas (RFA's) as stated in the latest version of its Strategic Plan (follow links from the Web site <http://space.science.nasa.gov/>); see also the discussion in Section I(a) of the *Summary of Solicitation* of this solicitation. The analysis of samples of the asteroidal materials is relevant to at least: i) Goal I, Solar System Exploration, RFA 1(b); ii) Goal II, Solar System Exploration, RFAs 1(a), 1(b), 1(d), and 2(a); and iii) Goal II, Astronomical Search for Origins, RFAs 1(a) and 1(b). All proposers to this program must describe the relevance of their specific investigation to the Goals, Science Objectives, and RFA's given in Table 1 in the *Summary of Solicitation*. The appropriate place for this statement

of relevancy is in the introduction to the proposal's "Scientific/Technical/Management" section (see Section 2.3.5 in the *Guidebook for Proposers*). The index numbers in this table may be used to identify a specific RFA, for example, "Goal I, Sun-Earth Connection Theme, RFA 1(c)" or "Goal II, Astronomical Search for Origins, RFA 3(b)."

2. Sources of Information and Data

For more information on the HYABUSA mission, please contact the U.S. HYABUSA project scientist, Dr. Donald Yeomans (Telephone: 818-354-2127; E-mail: Donald.K.Yeomans@jpl.nasa.gov)

3. Supplemental Information

The period of performance of this effort is for 4 years.

4. Programmatic Information

It is anticipated that approximately \$375k will be available to support the effort, and that the funding profile should be approximately: \$40k in FY 2005; \$75k in FY 2006; \$120k in FY 2007; and \$140k in FY 2008.

IMPORTANT INFORMATION

The *Summary of Solicitation* of this NRA points out that NASA Headquarters now uses a single, unified set of instructions, entitled *NASA Guidebook for Proposers Responding to NASA Research Announcements – 2004*, that provides detailed guidance for the preparation and submission of proposals to most of its NRAs. By reference, the current edition, *Guidebook for Proposers*, is incorporated into this solicitation and is accessible by linking through the menu item "Helpful References" at the Web site <http://research.hq.nasa.gov> or it may be directly accessed at <http://www.hq.nasa.gov/office/procurement/nraguidebook/>. Proposers to this Program Element are urged to familiarize themselves with this document, in particular its Chapters 1, 2, and 3, before preparing a proposal. This NRA's *Summary of Solicitation* also contains instructions for the electronic submission of both the *Notice of Intent* (NOI) to propose, as well as a proposal's *Cover Page/Proposal Summary/Budget Summary* for the proposal, and the mailing address for the submission of proposals. The schedule for the submission of Notices of Intent (NOIs) to propose, which are not required but strongly encouraged, and of the hard copies of the proposals is:

- NOI Due Date November 19, 2004
- Proposal Due Date (4:30 p.m. EST) January 21, 2005

For further information contact the U.S. HYABUSA Program Scientist:

Dr. Thomas H. Morgan
Solar System Division
Science Mission Directorate
NASA Headquarters
Washington, DC 20546
Telephone: (202) 358-0828
E-mail: Thomas.H.Morgan@nasa.gov