

# Venus Exploration Analysis Group (VEXAG)

## Terms of Reference

### Purpose

The Venus Exploration Analysis Group (VEXAG) is NASA's community-based forum designed to provide scientific input and technology development strategies for planning and prioritizing the exploration of Venus over the next several decades.

The overarching community-vetted science Goals for exploration are (in non-prioritized order):

- Goal #1. Understand Venus' early evolution and potential habitability to constrain the evolution of Venus-sized (exo)planets;
- Goal #2. Understand the atmospheric composition and dynamics on Venus; and
- Goal #3. Understand the geologic history preserved on the surface of Venus and the present-day couplings between the surface and atmosphere

### Community

Membership in VEXAG and participation in its activities are open to all members of the planetary science and exploration community, particularly those scientists, engineers, technologists, and other professionals—in academia, industry, government, or the commercial sector—who are interested in the exploration of Venus. International participation is welcome.

### Activities

The Venus Exploration Analysis Group:

- Regularly evaluates—on the basis of the widest possible community outreach—Venus exploration goals, objectives, investigations, and required measurements, using these assessments to publish and maintain the VEXAG “Goals, Objectives and Investigation (GOI) document”;
- Provides findings, analysis, and other information that can be used to inform decisions on the science, technology, and operational content and priorities for Venus missions;
- Upon request of NASA (or NASA advisory committees), provides reviews or other assessments related to the study and exploration of Venus;
- Provides a regular forum for broad discussion of Venus exploration science, technology, and operational issues, and allows a conduit for community input into Venus exploration activities and planning; and
- Communicates its findings and assessments to the planetary science community and to NASA. VEXAG will present those findings for which a formal response from NASA is desired to the Planetary Science Advisory Committee (PAC). Findings in response to requests from NASA or its advisory committees will also be reported to the originator(s) of the request. All findings are posted to the VEXAG's website.

## Organization and Process

The Chair of VEXAG is drawn from the U.S. planetary science community and is appointed, for a term of three years, in consultation with the Director of NASA's Planetary Science Division (PSD). The Chair is responsible for reporting findings (as described above) to the PAC. The Chair must not be a PAC member.

The Chair is assisted by a NASA headquarters liaison (a PSD staff member, appointed by the PSD Director), who serves as the single point of contact with NASA, and a Steering Committee that support the Group's planning and activities. The NASA Liaison serves as an Ex Officio member of the Steering Committee. Nominations for the Steering Committee are solicited through an open call to the community, and appointments are made by the VEXAG Chair, in consultation with the Steering Committee. The Steering Committee is constituted from members of the Venus exploration and planetary science community to achieve functional balance and diversity. The nominal term for Steering Committee members is three years.

The VEXAG Chair provides final approval, prioritization, and scheduling of requested tasks after consultation with the VEXAG NASA Liaison and Steering Committee.

VEXAG may choose to organize sub-groups (e.g., science analysis workgroups, or SAWs) to deal with specific issues; these sub-groups report their findings to the Steering Committee and the full community. Reports are formally approved by the VEXAG Chair, after review by the VEXAG Steering Committee, and typically after discussion in an open VEXAG forum.

VEXAG meets at least once per year, or as otherwise requested by NASA. The VEXAG Chair and NASA Liaison set the regular annual meeting schedule, in consultation with the Steering Committee.

The VEXAG meeting and status reports are posted to the VEXAG website and are provided to the PAC and NASA PSD.

Logistical and organizational support for VEXAG activities is provided by SMD.

Last Updated by May 1, 2020.