



Steven Battel is a graduate of the University of Michigan with 43 years of experience as a system engineer, designer and manager for NASA and DOD space projects. He is well known within the space community for his science and engineering leadership related to the development of unique electronic systems and scientific space instruments for Earth observing, planetary geochemistry, space physics and astrophysics applications. President of Battel Engineering since 1990, Steve is also a professor of practice in the departments of Electrical Engineering and Climate and Space at the University of Michigan.

Steve's areas of specialization include low-noise instrumentation, avionics and power systems for space applications. He is internationally recognized for his expertise in the design and development of space high voltage systems especially for systems intended for operation in challenging planetary environments. Space hardware projects include high voltage and other electronic systems for Gravity Probe-B, Cassini, Huygens, HST-COS, Mars-Phoenix TEGA-MS, Mars Science Laboratory-SAM, Rosetta-IES, AIM-CIP, LADEE-NMS and MAVEN-NGIMS, MAVEN-IUVS.

Current projects include high voltage, power, and precision instrumentation hardware for the ExoMars MOMA instrument, a 33 kV x-ray high voltage system for the PIXL instrument on Mars 2020, power electronics for a miniature Hall thruster, a +/- 75 kV power module for a radiation dipole system, a 50 kV high voltage system including specialty high voltage isolators for the IMAP SPICES instrument, a 100 kV high voltage demonstration prototype for planetary pickup ion measurements and preliminary architectural design work for the DraMS instrument on the DragonFly mission.

Steve is a member of the National Academy of Engineering (NAE), a Fellow of the American Institute of Aeronautics and Astronautics, a Fellow of the American Association for the Advancement of Science, a Senior Member of IEEE and a member of Sigma Xi. He is a former member of the Space Studies Board (SSB) and a current member of the Aerospace Science and Engineering Board (ASEB) for the National Academies. He is a National Advisory Board member for the University of Michigan Space Physics Research Laboratory and for the University of Colorado Department of Electrical Engineering.

Steve had participated in more than 95 review and advisory boards for NASA missions. Current missions he is involved with include JWST, Europa Clipper, Europa Lander, GOES, RESTORE-L, Mars 2020, Mars Sample Return, Landsat9, NISAR, SWOT, WFIRST, IXPE and MethaneSat. In addition to space hardware and advisory activities, Steve, for the past 12 years, has dedicated approximately twenty percent of his time in a "give-back" role to the engineering profession and in service to the nation. He teaches on multiple engineering and management topics and also works as a mentor for STEM students and young engineers at several universities and companies.