

Steve Battel is a graduate of the University of Michigan with 45 years of experience as a system engineer, designer and manager for NASA and DOD space projects. He is 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 Sciences and Engineering at the University of Michigan. Before 1990, Steve held design engineer, staff engineer and project management positions at the University of Michigan, Lockheed, Berkeley and the University of Arizona.

Steve's areas of specialization include low-noise instrumentation, electromagnetic compatibility, avionics, and power systems for space applications. He has more than 60 inventions and is internationally recognized for his expertise in the design and development of space high voltage electronics especially for systems intended for operation in challenging planetary environments and down-hole oil well environments. Past space hardware projects include high voltage and other electronic systems for Mars 2020, ExoMars, Mars Science Laboratory, Mars-Phoenix, Cassini, Huygens, HST, Rosetta, AIM, LADEE, MAVEN, IMAGE, SOHO, CRRES, AMPTE, Gravity Probe-B and Dynamics Explorer.

Current projects include power electronics for a miniature Hall thruster, a +/- 75 kV power module for a radiation dipole system, a 50 kV high voltage system for the SPICES instrument, a 40 kV Faraday Cup prototype system, a 100 kV high voltage demonstration prototype for planetary pickup ion measurements and precision electronics 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 the Aerospace Science and Engineering Board (ASEB) and has participated in four Decadal Surveys and five other committees for the National Academies.

Steve has participated in over 100 review and advisory boards for NASA and commercial missions. Past missions include JWST, Mars 2020, IXPE, JUNO, Deep Impact, TDRS, B612, SPIRE, SkyBox, Planet and Landsat9. Current missions include Mars Sample Return, Europa Clipper, Europa Lander, GOES, OSAM-1, Tracers, LISA, NISAR, SWOT, Lynk and MethaneSat. In addition to space hardware and advisory activities, Steve, for the past 20 years, has also dedicated approximately twenty percent of his time in a "give-back" role to the engineering profession and in service to the nation as a mentor to STEM students and young engineers at several universities and companies.