**Steven Battel** has 38 years experience as a consultant, engineer and manager in multiple aerospace and scientific disciplines. President of Battel Engineering since 1990, he provides engineering, development and review services to NASA, DOD, University, and Industrial clients. Areas of specialization include program management, systems engineering, precision electronics design, scientific instrument design, spacecraft avionics, power systems technology development and technology assessment. He is an expert on low-noise instrumentation power systems and internationally recognized for his expertise in the design and development of space high voltage systems especially for high voltage systems intended for operation in the Mars environment. Previous hardware projects include flight high voltage power, low voltage power and other electronic systems for Gravity Probe-B, the HST-COS instrument, Mars-Phoenix TEGA-MS sensor, the Mars Science Laboratory SAM Instrument, CRaTER detector electronics, AIM-CIP camera, LADEE-NMS and MAVEN-NGIMS and MAVEN-IUVS. Current flight high voltage and precision instrumentation work includes the ExoMars MOMA electronics system, Mars 2020 PIXL 28 kV high voltage system and 100 kV high voltage demonstration prototype for planetary pickup ion applications.

In addition to hardware consulting Mr. Battel participates in numerous NASA review and advisory activities. He was a member of the HST External Readiness Review Team for SM-2, SM3A, SM3B and SM4, the AXAF/Chandra Independent Assessment Team, the TDRS-H/I/J/K Independent Review Team, the Mars Polar Lander Failure Review Board and JPL Genesis Failure Review Board. Mr. Battel is a member of the NESC Power and Avionics teams and has served as a Red Team or IRT member for more than 70 NASA missions including GRACE, HESSI, MAP, CHIPS, AQUA, Contour, Cassini, Dawn, GLAST, STEREO, New Horizons, SIRTF, MESSENGER, Deep Impact, CloudSat, OCO, OCO-2, Dawn, SDO, SIM, Navigator/TPF, Aquarius, JUNO, RBSP, SMAP, MMS and Mars Odyssey missions. Current Standing Review Board memberships include TDRS L/M, GOES-R, OSIRUS-REx, SPP, GRACE-FO, SWOT, Europa, NISAR, ECOSTRESS, and ICON.

Outside of NASA, Mr. Battel has participated or currently participates in numerous advisory, teaching and mentoring activities as well as many "New Space" activities. He is a former member of the Space Studies Board (SSB) and a current member of the Aeronautics & Space Engineering Board (ASEB) for the National Academies. He is also a member of the board of directors for the BoldlyGo Institute, on the editorial board for New Space magazine, a member of the Space Telescope Institute Council (STIC), the University of Michigan AOSS National Advisory Board, the SKYBOX Imaging Technical Advisory Group and the B612 Asteroid Committee. Mr. Battel has participated in multiple National Academy reports including “A Decadal Strategy for Solar and Space Physics, the “Astro 2010 Decadal Survey for Astronomy and Astrophysics” Committee, the “Committee ON Assessment of Options for Extending the Life of the Hubble Space Telescope”, the "NASA Astrophysics Performance Assessment” and **“**The Role and Scope of Mission-Enabling Activities in NASA's Space and Earth Science Missions”.

Mr. Battel is a graduate of the University of Michigan. Prior to being President of Battel Engineering, he worked as an engineer, researcher and manager at the University of Michigan, Lockheed Palo Alto Research Laboratory, UC Berkeley, and the University of Arizona Lunar and Planetary Laboratory. At UC Berkeley, Mr. Battel was Project Manager for the Extreme Ultraviolet Explorer (EUVE) Project. He is the recipient of multiple awards including the NASA Public Service Medal and forty six NASA/GSFC/JPL individual and group achievement awards. Mr. Battel is a Fellow of the AIAA and is a National Associate of the National Research Council of the National Academies. He is the author or a co-author on twenty-four engineering and scientific papers and is a member of several engineering and scientific societies including Tau Beta Pi, Eta Kappa Nu, AIAA (Fellow), IEEE (Senior), ASME, SPIE, OSA, AIP, INCOSE, NYAS, SHOT and the AAAS.