MICHAEL S. RAMSEY *Bio Sketch*

Department of Geology
200 SRCC Building
University of Pittsburgh
Pittsburgh, Pennsylvania 15260, U.S.A.

phone: (412) 624-8772
fax: (412) 624-3914
email: mramsey@pitt.edu
webpage: http://www.pitt.edu/~mramsey/

Michael Ramsey is a Professor of Volcanology and Planetary Science at the University of Pittsburgh. He earned his Ph.D. in Geology from Arizona State University in 1996 and his B.S. in Mechanical Engineering from Drexel University in 1990. In 2000, he joined the University of Pittsburgh to start the Image Visualization and Infrared Spectroscopy (IVIS) Laboratory, which is a state-of-the-art image analysis, thernal infrared (TIR) spectroscopy, and planetary science facility supported by more than $15 million dollars in grants from National Aeronautics and Space Administration (NASA), the National Science Foundation (NSF) and the National Geographic Society (NGS). His research interests are varied but center on active volcanic process around the globe, instrument development, hazard mitigation, and planetary surface processes using TIR laboratory-, ground-, drone-, and satellite-based data analysis. Orbital or airborne remote sensing enables a synoptic view of a planet's surface with the laboratory and field studies providing critical validation. Ramsey created the multi-instrument Urgent Request Protocol (URP) sensor web system to detect new volcanic eruptions and monitor their hazards on Earth. He also serves as the PI for multiple planetary science studies ranging from volcanic and eolian studies of Mars to new projects applying lava flow modeling to Venus data in preparation for planned missions there later in the decade.

Appointed as an inaugural member of the Earth Science Subcommittee in 2006 by the NASA Administrator, Ramsey provided advising on matters of science implantation for the new National Academy of Sciences Decadal Survey at the time. He then served as member of the next Decadal Survey for NASA Earth Sciences in 2018. Ramsey is a science team member on three NASA instruments: the Earth-orbiting Advanced Spaceborne Thermal Emission and Reflectance Radiometer (ASTER); the Mars-orbiting Thermal Emission Imaging System (THEMIS); and the airborne Mineral and Gas Identifier (MAGI). Recently, he was appointed to the science definition team for the future Surface Biology and Geology (SBG) TIR instrument, with that work taking him to the Jet Propulsion Laboratory every summer until the launch. He is also working on mission proposal development to bring an operational NASA mission here to Pitt.

Ramsey's research group currently consists of several post-doctoral researchers, research/teaching professors, undergraduate students, and a computer programmer. He teaches courses for the Department including Natural Disasters, Introduction to Remote Sensing, and Remote Exploration of Mars. His field-based research takes him to volcanoes in Kamchatka, Alaska, Hawaii, Japan, Central America, Italy, Reunion Island, and the U.S. Cascades. Ramsey's work has been featured in local and national newspapers, local television, and radio, as well as NPR, CNN, BBC, and the Discovery Channel. Professor Ramsey has over 75 peer-reviewed papers and 300 conference abstract publications.