

Meet the Authors



Victor R. Baker is Regents' Professor of planetary sciences, geosciences, and hydrology and water resources at The University of Arizona. For 40 years, he has studied geological aspects of floods and other

hydrological phenomena. Since the discovery of large fluvial channels on Mars in the early 1970s, he has also worked on problems of planetary geomorphology. He is also interested in methodological and philosophical issues in the Earth and planetary sciences. He is a fellow of the American Association for the Advancement of Science, the American Geophysical Union, the European Union of Geosciences (Honorary Fellow), and the Polish Academy of Sciences (Foreign Fellow). In 1998, he was the president of the Geological Society of America.



Philip R. Christensen is a Regents' Professor and the Korrick Professor in the School of Earth and Space Exploration at Arizona State University. He completed his PhD in geophysics and space

physics at UCLA in 1981. His research focuses on composition, physical properties, and processes on planetary surfaces using infrared spectroscopy, radiometry, field observations, and numerical modeling. A major element of his research has been the development of spacecraft infrared instruments, including the Mars Odyssey THEMIS, the Mars Global Surveyor TES, and the Mars Exploration Rover Mini-TES instruments. Christensen received NASA's Exceptional Scientific Achievement Medal in 2003 and was elected a fellow of the American Geophysical Union in 2004.



John Grotzinger is the Fletcher Jones Professor of Geology at Caltech. A field geologist interested in the co-evolution of surficial environments and life on Earth and Mars, his research addresses the chemical

development of the early oceans and atmosphere and the environmental context of early evolution. Field mapping studies are the starting point for more topical laboratory-based studies involving geochemical, paleontological, and geochronological techniques. Currently, Grotzinger's research is focused on the reconstruction of environmental conditions associated with the Cambrian radiation of animals in Oman and Namibia. Grotzinger is also a member of the Mars Exploration Rover Athena Science Team.



Bradley L. Jolliff received a BS degree in geology at Furman University and, after five years of active duty with the Army Corps of Engineers, a PhD from the South Dakota School of Mines and

Technology. Now at Washington University in St. Louis, he studies the geology, geochemistry, and mineralogy of the Moon and Mars, and analyzes planetary materials either in the lab or working with exploration missions such as the Mars Exploration Rovers (MER). His involvement on MER has been as a long-term planner, along with co-author Scott McLennan, and he has worked primarily with the Opportunity Rover.



Andrew H. Knoll is the Fisher Professor of Natural History at Harvard. A paleontologist by training, he has spent more than two decades working to integrate geological and biological perspectives on

the early Earth. Current projects stress the insights that physiology can bring to studies of Earth history, including reconstruction of the silica cycle in Archean oceans, quantitative modeling of fluid flow in Paleozoic land plants, and the diversification of photosynthetic organisms across Proterozoic-Cambrian continental shelves. Knoll is a member of the Mars Exploration Rover Athena Science Team, whose goal is to evaluate the evidence for water on the early surface of Mars.



Laurie A. Leshin is Director of Sciences and Exploration at NASA's Goddard Space Flight Center. In this capacity, she leads the largest science organization within NASA, with responsibility for

ensuring the scientific integrity of Earth-observing missions, space-based telescopes, and instruments exploring the Moon, Mercury, Mars, Saturn, comets, and more. Before joining NASA in August 2005, Dr. Leshin was The Dee and John Whiteman Dean's Distinguished Professor of Geological Sciences and director of the Center for Meteorites Studies at Arizona State University. She received the NASA Distinguished Public Service Medal in 2004. She received her BS in chemistry from Arizona State University and her PhD in geochemistry in 1994 from California Institute of Technology.



Scott M. McLennan is a professor of geochemistry in the Department of Geosciences at the State University of New York at Stony Brook. For many years he carried out research in the area of terrestrial

sedimentary geochemistry and continental crustal evolution. Recently he has focused his attention on surficial processes, sedimentary geochemistry, and crustal evolution on Mars using a combination of laboratory experiments and data returned from the various orbital and landed missions. He is a member of the Athena Science Team for the Mars Exploration Rovers and is a collaborator on the Mars Odyssey Gamma Ray Spectrometer.



Harry Y. McSween Jr. is University Distinguished Professor of Science and professor of Earth and planetary sciences at the University of Tennessee.

His research focuses on the petrology of meteorites, cosmochemistry, and planetary exploration. He was one of the original proponents of the idea that some meteorites are Martian rocks, and he has participated on the science teams of various Mars spacecraft missions (Mars Pathfinder, Mars Global Surveyor, Mars Odyssey, and Mars Exploration Rovers), as well as the Dawn asteroid orbiter mission.



Edward Vicenzi is a research geochemist and director of the Analytical Laboratories in the Smithsonian Institution's Department of Mineral Sciences. Prior to joining the National Museum of

Natural History, he co-managed the Imaging and Analysis Center at Princeton University. He received his PhD from Rensselaer Polytechnic Institute, an MS from the University of Oregon, and a BSc from McGill University, all in Earth sciences. Currently on the executive council of the Microbeam Analysis Society, his research interests include elemental and molecular imaging of Earth and planetary materials.



Michael B. Wyatt is a research scientist at the Mars Space Flight Facility at Arizona State University. His research interests include the origin and evolution of Martian igneous compositions, the effects of chemical

alteration on surface materials, and terrestrial analogs in the Dry Valleys of Antarctica and the Atacama Desert in Chile. He is a member of the Mars Exploration Rovers Mini-TES science team and has worked extensively on the analysis and interpretation of thermal infrared data from Mars orbiting spacecraft.