

William Abbey

Address:

Jet Propulsion Laboratory
M/S 183-301
4800 Oak Grove Drive
Pasadena, CA 91109

Phone:

818-393-2749

Fax:

818-393-4445

Education

- B.S. Geology, George Washington University (1992)
- M.S. Geology, George Washington University (1997)

Professional Experience

- Staff Technician, Planetary Science Section, Jet Propulsion Laboratory (2001-present)
- Research Assistant, California Institute of Technology (2000-2001)
- Teaching Assistant, University of California, Los Angeles (1998-1999)
- Laboratory Technician, George Washington University (1998)
- Independent Geologic Consultant, University of Arizona (1997)
- Teaching Assistant, George Washington University (1993-1997)

Selected Publications

- Douglas, S., **Abbey, W.**, and Kanik, I., The Borate Mineral, Ulexite, A Wet Haven for Life in Death Valley, *in prep.*
- Peters, G.H., **Abbey, W.**, Bearman, G.H., Mungas, G.S., Smith, J.A., Anderson, R.C., Douglas, S., and Beegle, L.W., Mojave Mars simulant - Characterization of a new geologic Mars analog, *Icarus* 197, 470-479, 2008.
- Bhartia, R., Hug, W.F., Salas, E.C., Reid, R.D., Sijapati, K.K., Tsapin, A., **Abbey, W.**, Conrad, P.G., Nealson, K.H., and Lane, A.L., Classification of Organic and Biological Materials with Deep UV Excitation, *Applied Spectroscopy* 62 (10), 46-53, 2008.
- Douglas, S., **Abbey, W.**, Mielke, R., and Conrad, P. and Kanik, I., Textural and mineralogical biosignatures in an unusual microbialite from Death Valley, California, *Icarus* 193, 620-636, 2008.
- Tsapin, A., and **Abbey, W.**, New application of X-ray tomography for life detection inside rocks - Blueberries, abstract at Bioastronomy Conference, 2007.
- Brunner, B., Mielke, R.E., **Abbey, B.**, and Coleman, M., Degassing of sulfur dioxide during acid pyrite leaching: consequences on oxygen and sulfur isotope composition and S:Fe stoichiometry of solution chemistry, abstract at European Geosciences Union, General Assembly, 2007.
- Guerrero, J.L., Reiter, J.W., Rumann, A., Wu, D., Wang, G.Y., Meyers, M., Craig, J., **Abbey, W.**, and Beegle, L.W., Robotic Drilling Technology and Applications to Future Space Missions, abstract at American Geophysical Union, Fall Meeting, 2006.
- Beegle, L.W., **Abbey, W.J.**, Tsapin, A.T., Dragoi, D., and Kanik, I., Extraction of Organic Molecules from Terrestrial Material: Quantitative Yields from Heat and Water Extractions, poster presentation at 35th Lunar and Planetary Science Conference, Lunar and Planetary Institute, NASA Johnson Space Center, 2004.
- Tsapin, A., Priscu, J.C. and **Abbey, W.**, Chirality as a biomarker: A new approach for life detection, *Geophysical Research Abstracts*, Vol. 5, #13776, 2003.
- Tsapin, A., MacDonald, G.D., Bhartia, R., **Abbey, W.**, Hug, W., and Reed, R., Fluorescence and amino acid measurements in water column of Antarctic subglacial lakes, abstract at NASA Astrobiology Institute General Meeting, *Astrobiology* 2 (4), 632, 2003.