

**Journal Articles**

Warner, N.H., **M. Sowe**, S. Gupta, A. Dumke, K. Goddard. Fill and spill of giant lakes in the eastern Valles Marineris region of Mars. *Geology* (G34172).

**Sowe, M.**, L. Wendt, P.C. McGuire, G. Neukum. Hydrated Minerals in the Deposits of Aureum Chaos. 2012. *Icarus*, 218, 406-419.

Wendt, L., C. Gross, T. Kneissl, **M. Sowe**, J.-Ph. Combe, L. Le Deit, P.C. McGuire, G. Neukum. Sulfates and Iron Oxides in Ophir Chasma, Mars, based on OMEGA and CRISM observations. 2011. *Icarus*, 213, 1, 86-103.

**Book Chapter**

**Sowe, M.**, R. Jaumann, G. Neukum. A Comparative Study of Interior Layered Deposits on Mars. *In: Balme, M, S Gupta (Eds.) Geomorphology of Mars and other planets.* 2011. *Geol. Soc. London SP*, 356, 281-300, doi:10.1144/SP356.14.

**Conference presentations and abstracts (selection)**Extended conference abstracts

Tirsch, D., **M. Sowe**, T. Kneissl, R. Jaumann. Constraining the exposure time of dark dune material on Mars. *LPSC 44*, The Woodlands, Texas, March 18-22, 2013, Abstract #1928 .

Gross, C., **M. Sowe**. Soffen Crater in the Terra Cimmeria region of Mars. *LPSC 44*, The Woodlands, Texas, March 18-22, 2013, Abstract #2470 .

Gross, C., A. Airo, M. Al-Samir, **M. Sowe**, S. Nabhan, J.L. Bishop, S. van Gassel. Martian crater-lake environments and their potential range of biological deposits. *LPSC 44*, The Woodlands, Texas, March 18-22, 2013, Abstract #2452 .

McGuire, P.C., R.E. Arvidson, J.L. Bishop, A.J. Brown, S. Cull, R.O. Green, C. Gross, C.D. Hash, E. Hauber, D.C. Humm, R. Jaumann, L. Le Deit, E.R. Malaret, T.Z. Martin, G.A. Marzo, M.F. Morgan, S.L. Murchie, J.F. Mustard, G. Neukum, M. Parente, T. Platz, T.L. Roush, F.P. Seelos, K.D. Seelos, M.D. Smith, **M. Sowe**, D. Tirsch, S. Walter, L. Wendt, S.M. Wiseman, M.J. Wolff. Mapping Minerals on Mars with CRISM: Atmospheric and Photometric Correction for MRDR Map Tiles, Version 2, and Comparison to OMEGA. *LPSC 44*, The Woodlands, Texas, March 18-22, 2013, Abstract #1581 .

Warner, N.H., **M. Sowe**, S. Gupta, A. Dumke, K. Goddard. Flood Integration of Chaotic Basins in the Eastern Valles Marineris Region of Mars. *Conference on Early Mars 3*, Lake Tahoe, Nevada, May 21-25, 2012, Abstract #7036.

Gross, C., **M. Sowe**, L. Wendt, J.L. Bishop, A.G. Fairén. Phyllosilicates in Bamberg Crater, Mars. *LPSC 43*, The Woodlands, Texas, March 19-23, 2012, Abstract #2356.

Warner, N.H.\*, **M. Sowe**, S. Gupta, A. Dumke, K. Goddard. Connecting Valles Marineris to the Northern Plains: Linkage by Lake Overspill and Catastrophic Flooding. *LPSC 43*, The Woodlands, Texas, March 19-23, 2012, Abstract #1237.

**Sowe, M.\***, L. Wendt, P.C. McGuire, G. Neukum. Habitability and its Correlation with Hydrated Minerals—Evidence from Deposits in Aureum Chaos. *Exploring Mars Habitability*, Lisbon, Portugal, June 13-15, 2011, Abstract #2165237.

McGuire, P.C.\*, R.E. Arvidson, J.L. Bishop, A.J. Brown, S. Cull, R.O. Green, C. Gross, C.D. Hash, E. Hauber, D.C. Humm, R. Jaumann, L. Le Deit, E.R. Malaret, T.Z. Martin, G.A. Marzo, M.F. Morgan, S.L. Murchie, J.F. Mustard, G. Neukum, M. Parente, T. Platz, T.L. Roush, F.P. Seelos, K.D. Seelos, M.D. Smith, **M. Sowe**, D. Tirsch, S. Walter, L. Wendt, S.M. Wiseman, M.J. Wolff. Mapping Minerals on Mars with CRISM: Atmospheric, Thermal, and Photometric Correction for MRDR Map Tiles and Comparison to OMEGA. *EPSC 5*, Rome, Italy, September 20-25, 2010, Abstract #163.

Wendt, L.\*, C. Gross, T. Kneissl, **M. Sowe**, J.-Ph. Combe, L. Le Deit, P.C. McGuire, G. Neukum. Sulfates and Iron Oxides in Ophir Chasma, Mars. *LPSC 41*, The Woodlands, Texas, March 1-5, 2010, Abstract #1699.

**Sowe, M.\***, L.H. Roach, E. Hauber, R. Jaumann, J.L. Mustard, G. Neukum. Interior Layered Deposits on Mars: Insights from elevation, image- and spectral data of Ganges Mensa. *EPSC 3*, Muenster, Germany, September 21-26, 2008, Abstract #510.

**Sowe, M.\***, E. Hauber, R. Jaumann, K. Gwinner, F. Fueten, R. Stesky, G. Neukum. Interior Layered Deposits in the Eastern Valles Marineris and Chaotic Terrains on Mars. *LPSC 38*, League City, Texas, March 11-16, 2007, Abstract #1538.

Other conference and workshop presentations and abstracts

(invited) **Sowe M.\***, L. Wendt, P.C. McGuire, G. Neukum. Sulfates and phyllosilicates in Aureum Chaos, Mars. *AGU Fall Meeting*. San Francisco, California, December 3-7, 2012, Abstract # P14B-06.

**Sowe, M.\***, C. Gross, S. Walter, J.L. Bishop, M. Ramsey, M. Al-Samir. The Peruvian Pisco Formation as analogy for layered sulphate deposits on Mars. *3<sup>rd</sup> Conference on Terrestrial Mars Analogues*, Marrakech, Morocco, October 24-27, 2012.

Le Deit, L.\*, R. Jaumann, E. Hauber, G. Erkeling, L. Wendt, **M. Sowe**, M. Al-Samir, C. Gross, D. Tirsch, T. Kneissl, A. Nass. Habitability of Mars: Implications from aqueous minerals. *11<sup>th</sup> European Workshop on Astrobiology*. Cologne, Germany, July 11-14, 2011.

**Sowe, M.\***, G. Neukum. Mineralogical applications in mapping by the example of Aureum Chaos. *Geological Mapping of Mars: A Workshop on new concepts and tools*. October 12-14, 2009, Il Ciocco, Italy.

**Sowe, M.\***, L.H. Roach, E. Hauber, R. Jaumann, J.L. Mustard, G. Neukum. A comparative study of Interior Layered Deposits on Mars. *EGU 11*, Vienna, Austria, April 19-24, 2009, Abstract #8613.

**Sowe, M.\***, E. Hauber, R. Jaumann, G. Neukum. Layered deposits in chaotic terrains on Mars. *EGU 10*, Vienna, Austria, April 13-18, 2008, Abstract #8318.

**Sowe, M.**, K. Gratz, F.R. Schilling. Heat transport properties of olivines. *DMG 83*, Aachen, Germany, September 18-21, 2005, Abstract #553.

**Unpublished Theses**

**Sowe, M.** Interior Layered Deposits in chaotic terrains on Mars, *PhD thesis*, 174 pp, Freie Universitaet Berlin, 2009.

**Sowe, M.** Wärmetransport eisenreicher Olivine. *Diploma thesis*, 59 pp, GFZ Potsdam/ Freie Universitaet Berlin, 2005.

**Sowe, M.** Geologie des Teutoburger Waldes-Blatt Dissen (3815). *Diploma Mapping*, Freie Universitaet Berlin, 2003.