Dr. Nicolas D. Greber

Curriculum vitae

A. Personal Data

Title:	PhD in Earth Sciences, University of Bern
Address:	The University of Chicago Department of the Geophysical Sciences Origins Laboratory 5734 South Ellis Avenue Chicago, IL 60637 United States of America
	greber@uchicago.edu
Citizenship:	Switzerland

B. Scientific Experience

Since 02/2015	Lab Manager and Post-doctoral researcher Origins Laboratory, The University of Chicago Chicago, USA Advisor: Prof. Nicolas Dauphas
01/2011-10/2014	PhD student Institute of Geological Sciences, University of Bern Bern, Switzerland Advisor: Prof. Thomas Nägler
06/2008-10/2014	Scientific Assistant (25%) Earth Science Department, Natural History Museum Bern Bern, Switzerland Advisor: PD Dr. Beda Hofmann
10/2011-12/2011 and 09/2012-10/2012	Civil service Lake Sediments and Paleolimnology, Oeschger Centre University of Bern Bern, Switzerland Advisor: Prof. Martin Grosjean

C. Education

01/2011-10/2014	Dr. sc. University of Bern Thesis title: «Investigation on the molybdenum isotope evolution of Earth's mantle and crust», defended on October 31st, 2014 Examiner: Prof. Thomas Nägler Co-examiners: Prof. Robert Frei; Prof. Flavio Anselmetti

09/2008-09/2010	MSc in Earth Sciences, University of Bern Thesis title: «Molybdenum isotope composition of molybdenites and their weathering products from the Aarmassif, Switzerland» Thesis advisor: Prof. Thomas Nägler
10/2003-10/2006	BSc in Earth Sciences, University of Bern Thesis title: «Graphite-thermometry on metasediments in the Simplon profile» Thesis advisor: Prof. Martin Engi

D. Teaching Experience

01/2011-05/2014	Teaching assistant in introductory practical course «Praktikum Grundzüge Erdwissenschaften I» («Fundamentals in Earth Sciences I – Practical course ») University of Bern, Bern Switzerland
01/2011-05/2014	Teaching assistant in introductory practical course «Praktikum Grundzüge Erdwissenschaften II» («Fundamentals in Earth Sciences II – Practical course») University of Bern, Bern Switzerland
09/2012-05/2013	Co-Supervision of BSc thesis, University of Bern Bern Switzerland
09/2011-05/2013	Co-Supervision of MSc thesis, University of Bern and Natural History Museum Bern, Bern Switzerland

E. Awards and Scholarships

01/2015	Early PostDoc.Mobility Fellowship, Swiss National Science Foundation, 70’650 USD
01/2015	Faculty price for best PhD thesis in the Geosciences 2014 University of Bern, 3000 CHF
10/2014	Early-career researchers support to attend the American Geophysical Union Fall Meeting, San Francisco, USA Faculty of Science, University of Bern, 1000 CHF
05/2013	PhD student grant for the EnvironMetal Isotopes conference, Arosa, Switzerland Sponsored by the European Association of Geochemistry, 250 CHF

F. Analytical Skills

- MC-ICP-MS (Nu instruments and Neptun)
- X-ray diffraction
- Scanning electron microprobe
- Wavelength dispersive electron microprobe
- Raman spectroscopy
- Different optical microscopes

List of Publications

A. Peer Reviewed

Greber, N. D., Mäder, U. and Nägler. T.F., 2015, Experimental dissolution of molybdenum-sulphides at low oxygen concentrations: A first-order approximation of late Archean atmospheric conditions*, Earth and Space Science*, v2(5), 173-180.

Greber, N.D., Puchtel, I.S., Nägler, T.F., and Mezger, K., 2015, Komatiites constrain molybdenum isotope composition of the Earth's mantle, *Earth and Planetary Science Letters*, v. 421, no. C, p. 129–138.

Greber, N.D., Pettke, T., and Nägler, T.F., 2014, Magmatic-hydrothermal molybdenum isotope fractionation and its relevance to the igneous crustal signature, *Lithos,* 190–191, 104-110.

Voegelin, A.R., Pettke, T., **Greber, N.D.**, von Niederhäusern, B. and Nägler, T.F., 2014, Magma differentiation fractionates Mo isotope ratios: Evidence from the Kos Plateau Tuff (Aegean Arc), *Lithos*, 190–191, 440-448.

Nägler, T.F., Anbar, A.D., Archer, C., Goldberg, T., Gordon, G.W., **Greber, N.D.**, Christopher, S., Yoshiki, S., and Vance, D., 2014, Proposal for an international molybdenum isotope measurement standard and data representation, *Geostandards and Geoanalytical Research,* v. 38, no. 2, p. 149–151.

Gnos, E., Hofmann, B.A., Halawani, M.A., Tarabulsi, Y., Hakeem, M., Al Shanti, M., **Greber, N.D.**, Holm, S., Alwmark, C., Greenwood, R.C., and Ramseyer, K., 2013, The Wabar impact craters, Saudi Arabia, revisited, *Meteoritics and Planetary Science,* 48(10), 2000-2014.

Baldwin G.J., Nägler T.F., **Greber N.D.**, Turner E.C., Kamber B.S., 2013, Mo isotopic composition of the mid-Neoproterozoic ocean: an iron formation perspective, *Precambrian Research*, 230, 168-178.

Elbert, J., Wartenburger, R., von Gunten, L., Urrutia, R., Fischer, D., Fujak, M., Hamann, Y., **Greber, N.D.**, and Grosjean, M., 2012, Late Holocene air temperature variability reconstructed from the sediments of Laguna Escondida, Patagonia, Chile (45° 30'S), *Palaeogeography, Palaeoclimatology, Palaeoecology,* 369, 482–492.

Greber, N.D., Siebert, C., Nägler, T.F. and Pettke, T., 2012, $\delta^{98/95}$Mo values and molybdenum concentration data for NIST SRM 610, 612, and 3134: towards a common protocol for reporting Mo data, *Geostandards and Geoanalytical Research*, 36(3), 291-300.

Greber, N.D., Hofmann, B.A., Voegelin, A.R., Villa, I.M., and Nägler, T.F., 2011, Mo isotope composition in Mo-rich high- and low-T hydrothermal systems from the Swiss Alps, *Geochimica et Cosmochimica Acta*, 75(2), 6600–6609.

B. Popular Scientific Articles

Greber, N.D. und Hofmann, B.A., 2013, Minerale der Molybdänitlagerstätte am Alpjuhorn im Baltschiedertal (VS): *Schweizer Strahler*, no. 1, p. 1–6.

Zurfluh, F.J., Hofmann, B.A., Gnos, E., Eggenberger, U., **Greber, N.D.,** and Villa, I.M., 2012, Weathering and strontium contamination of meteorites recovered in the Sultanate of Oman: *Meteorite*, p. 1–5.

C. Conference abstracts

Greber, N.D., Puchtel, I.S., Nägler T.F., and Mezger, K., 2014, Molybdenum isotopic composition of the Archean mantle as inferred from studies of komatiites, *AGU Fall Meeting 2014, San Francisco.*

Mészáros, M., Hofmann, B.A., Korotev, R.L., Gnos, E., **Greber, N.D.,** Greenwood, R.C., 2014, Petrology and geochemistry of lunar meteorite Abar Al'Uj, *77th Annual Meteoritical Society Meeting, Casablanca*

Hofmann, B.A., Gnos, E., **Greber, N.D.,** Federspiel, N., Burri, T., Zurfluh, F.J., Al-Battashi, M., Al-Rajhi, A., 2014, The Omani-Swiss meteorite search project: Update and the quest for missing irons, *77th Annual Meteoritical Society Meeting, Casablanca*

Hofmann, B.A., **Greber, N.D.,** Greenwood, R.C., 2014, New data for NWA 7906, 7907 and 8171, pairings of Mars breccia NWA 7034, 77th *Annual Meteoritical Society Meeting, Casablanca*

Greber, N.D., Nägler, T.F., and Mäder, U., 2013, Experimental investigation of molybdenum solubility under low atmospheric O_2 concentrations: Implications for pre GOE conditions, *11th Swiss Geoscience Meeting, Lausanne*

Greber, N.D., Voegelin, A.R., Pettke, T., and Nägler, T.F., 2013, Magmatic and linked hydrothermal processes fractionate Mo isotopes, *Goldschmidt Abstract, Mineralogical Magazine*, 77(5), 1212

Greber, N.D., Nägler, T.F., Pettke, T. and Voegelin, A.R., 2013, Systematic Mo isotope fractionation in igneous systems: implications for earth's crustal signature, *EarthMetalIsotope (EMI) Conference, Ascona*

Greber, N.D., Neubert, N., and Nägler, T.F., 2012, Do Mo isotope fractionation processes accompany the dissolution of molybdenites? Studying the interface of water, molybdenite and their weathering products, *10th Swiss Geoscience Meeting, Bern.*

Hofmann, B., **Greber, N.,** and Van Kranendonk, M.J., 2012, 3D-Visualization of well-preserved subsurface carbonaceous filaments of Archaean age from the Pilbara Craton, Australia, *10th European Workshop on Astrobiology, Paleontological Journal*, 46, 9, 1060.

Greber, N.D., Nägler, T.F. and Pettke, T., 2012, Mo-isotope composition of molybdenites: Implications for magmatic and hydrothermal isotope fractionation, *EGU General Assembly 2012, Vienna.*

Zurfluh, F.J, Hofmann, B.A., Gnos, E., Eggenberger, U., Villa, I.M., **Greber, N.D.,** and Jull, A.J.T., 2011, New insights into the strontium contamination of meteorites, *74th Annual Meeting of the Meteoritical-Society, London, Meteoritics and Planetary Science,* 46, A264