

Arno Rohrbach

1) General information

- Rohrbach, Arno, Dr. rer. nat., date of birth: 12/04/1976, male.
- Westfälische Wilhelms-Universität Münster, Institut für Mineralogie, Corrensstr. 24, D-48149 Münster, Tel.: +49 251 83 36138, e-mail: arno.rohrbach@uni-muenster.de.
- Current position: Junior Professor (W1)

2) Academic education and degrees

- Mineralogie (1998 – 2003), WWU Münster, Diploma (Prof. Dr. C. Ballhaus)

3) Scientific degrees

- Doctoral degree: Dr. rer. nat., Mineralogie, WWU Münster, 2008 (Prof. Dr. C. Ballhaus)

4) Professional experience

- 2011 – present Junior Professor for Analytical Petrology, WWU Münster, Institut für Mineralogie.
- 2007–2011 Postdoctoral researcher, ETH Zürich, Institute of Geochemistry and Petrology
- 2004–2007 Research assistant, doctoral candidate, WWU Münster, Institute for Mineralogy and Rheinische Friedrich-Wilhelms-Universität Bonn, Steinmann Institut für Endogene Dynamik.

5) Professional activities

- Journal reviewer for: Nature, Earth Planet. Sci. Lett., Contrib. Mineral. Petrol., J. Petrol., Chem. Geol., Am. Mineral., Chem. Erde–Geochem.
- Memberships: DMG, AGU, G5.
- Award: Bernd Rendel Prize for young geoscientists, German research council, 2008

6) Publications

Published or accepted peer-reviewed publications, book chapters, etc.

Schmidt, M.W., Gao, C., Golubkova, A., Rohrbach, A., Connolly, J.A.D. (2014) Natural moissanite (SiC) – a low temperature mineral formed from highly fractionated ultrareducing COH-fluids. *Prog. Earth Planet. Sci.* 1:27.

Rohrbach, A., Ghosh, S., Schmidt, M.W., Wijbrans, I., Klemme, S. (2014) The stability of Fe–Ni carbides in the Earth's mantle: evidence for a low Fe–Ni–C melt-fraction in the deep mantle. *Earth Planet. Sci. Lett.*, 388, 211–221.

Wijbrans, C.H., Niehaus, O., Rohrbach, A., Pöttgen, R., Klemme, S. (2014) Thermodynamic and magnetic properties of knorringite garnet (Mg₃Cr₂Si₃O₁₂) based on low temperature calorimetry and magnetic susceptibility measurements. *Phys. Chem. Minerals*, 41, 341–346.

Rosa, A.D., Mezouar, M., Garbarino, G., Bouvier, P., Ghosh, S., Rohrbach, A., Sanchez-Valle, C. (2013) Single-crystal equation of state of phase D to lower mantle pressures and the effect of hydration on the buoyancy of deep subducted slabs. *J. Geophys. Res. Solid Earth*, 118, 6124–6133.

Ballhaus, C., Laurenz, V., Münker, C., Fonseca, R.O.C., Albaréde, F., Rohrbach, A., Lagos, M., Schmidt, M.W., Jochum, K.P., Stoll, B., Weis, U., Helmy, H. (2013) The U/Pb ratio of the Earth's mantle—A signature of late volatile addition. *Earth Planet. Sci. Lett.*, 362, 237–245.

Rohrbach, A. & Schmidt, M.W. (2011) Redox freezing and melting in the Earth's deep mantle resulting from carbon–iron redox coupling. *Nature*, 472, 209–212.

Rohrbach, A., Ballhaus, C., Ulmer, P., Golla-Schindler, U., Schönbohm, D. (2011) Experimental Evidence for a Reduced Metal-saturated Upper Mantle. *J. Petrol.* 52, 717–731.

Rohrbach, A., Ballhaus, C., Golla-Schindler, U., Ulmer, P., Kamenetsky, V. S., Kuzmin, D.V. (2007) Metal saturation in the upper mantle. *Nature*, 449, 456–458.

Rohrbach, A., Schuth, S., Ballhaus, C., Münker, C., Matveev, S., Qopoto, C. (2005) Petrological constraints on the origin of arc picrites, New Georgia Group, Solomon Islands. *Contrib. Mineral. Petrol.*, 149, 685–698.

Schuth, S., Rohrbach, A., Münker, C., Ballhaus, C., Garbe-Schönberg, C., Qopoto, C. (2004) Geochemical constraints on the petrogenesis of arc picrites and basalts, New Georgia Group, Solomon Islands. *Contrib. Mineral. Petrol.*, 148, 288–304.