

## Curriculum Vitae

### Ulf-Niklas Berninger

Citizenship: German

### *Scientific education*

- since 2012 Ph.D.-Thesis co-tutelle at Géosciences et Environnement Toulouse (GET), UMR 5563, CNRS, Université Toulouse III – Paul Sabatier, France and Ludwig-Maximilians-Universität München (LMU), Germany
- Macroscopic and microscopic investigation of dolomite growth kinetics.  
Main macroscopic and microscopic techniques:  
- Hydrothermal Batch/Mixed Flow Reactor  
- Hydrothermal Atomic Force Microscopy  
supervisors: Prof. E. Oelkers, Prof. G. Jordan
- 2009 - 2011 Geomaterials and Geochemistry, LMU  
M.Sc.-Thesis: Influence of citrate on the growth kinetics of magnesite.  
supervisor: Prof. G. Jordan  
Master of Science degree
- 2006 - 2009 Geosciences, Technische Universität München (TUM), Germany  
B.Sc.-Thesis: Scanning Tunnel Microscopy investigation of concentration dependent occupancy in a supramolecular host-guest system.  
supervisor: Prof. M. Lackinger  
Bachelor of Science degree

### *Research project assistance*

- 2010/11 Can organic ligands help to reduce atmospheric CO<sub>2</sub> by facilitating the formation of anhydrous magnesium carbonate?  
Project of Bayerisch-Französisches Hochschulzentrum (BFHZ)  
Prof G. Jordan (LMU), Prof. J. Schott (GET)
- 2010 Quantification of quartz grain-boundary networks.  
Project of Deutsche Forschungsgemeinschaft (DFG)  
Prof. J. Kruhl (TUM), Prof. C. Wilson (Univ. of Melbourne, Australia)
- 2009/10 Quantification of magmatic structures in granitoids.  
Prof. J. Kruhl (TUM), Prof. B. Clarke (Dalhousie Univ., Canada)

- 2009 Volcán de Colima.  
Project of the Centre of Exchange and Research in Volcanology  
N. Varley (Observatorio Vulcanológico de la Univ. de Colima, Mexico)
- 2008/09 Fabric quantification in plutonic and metamorphic rocks.  
Project of THESIS-International Graduate School  
Prof. J. Kruhl (TUM), A. Gerik
- 2008 Tectonically induced drainage network reorganization of central Zagros mountains (Iran) and its pattern quantification.  
Prof. A. Friedrich (LMU), B. Guest (Univ. of Calgary, USA)

### **Conference contribution**

Berninger, U.-N., Gautier, Q., Jordan, G. & Schott, J. (2012): How citrate slows magnesite growth: a high temperature AFM study. – 22<sup>nd</sup> V.M. *Goldschmidt Conference*, held 24-29 June in Montréal, Canada.

Berninger, U.-N., Gautier, Q., Schott, J. & Jordan, G. (2011): Citrate induced effects on magnesite growth kinetics. – *Joint Meeting DGK, DMG, ÖMG*, held 20-24 September in Salzburg, Austria.

Gautier, Q., Bénézech, P., Jordan, G., Berninger, U.-N. & Schott, J. (2011): Magnesite growth inhibition by organic ligands: Complexation and adsorption. – 21<sup>st</sup> V.M. *Goldschmidt Conference*, held 14-19 August in Prag, Czech Republic.

Kruhl, J.H., Berninger, U.-N., Clarke, D.B. & Peterzell, M. (2011): Quantification and interpretation of mineral distribution patterns from the South Mountain Batholith (Canada). – *VII Hutton Symposium on Granites and Related Rocks*, held 4-9 July in Avila, Spain.

Goldstein, F., Varley, N., Bustillos, J., Kueppers, U., Lavalley, Y., Dingwell, D.B. & the ColTungu Team [Alatore, M., Becker, S., Berninger, U.-N., Douillet, G., Hanson, J. & Kolzenburg, S.](2010): Comparing Pyroclastic Density Current (PDC) deposits at Colima (Mexico) and Tungurahua (Ecuador) volcanoes. – *EGU General Assembly 2010*, held 2-7 May in Vienna, Austria.