

Curriculum Vitae (CV)

MICHAEL SIGL

PERSONAL INFORMATION

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Citizenship: German

EDUCATION

08/2005 – 10/2009 University of Bern, (Bern, Switzerland)
Department of Chemistry and Biochemistry
Ph.D. in Chemistry and Molecular Sciences, October, 22, 2009
Ph.D. Advisor: Prof. Dr. H. W. Gäggeler
Dissertation: *“Ice-core based reconstruction of past climate conditions from Colle Gnifetti, Swiss Alps”* passed with *“signi cum laude”*

11/1998 – 11/2004 University of Regensburg, (Regensburg, Germany)
Department of Geography
Diploma in Geography, September 2004
Diploma Thesis: *“Ecologic and palaeo-ecologic investigations regarding forest decline in the Asir Mountains of Saudi-Arabia”* (in German)

EMPLOYMENT HISTORY

Since 03/2019 Assistant Professor *Bern, Switzerland*
University of Bern, Climate and Environmental Physics, Physics Institute
& Oeschger Centre for Climate Change Research

04/2018 – 09/2018 Postdoctoral Research Fellow *Oslo, Norway*
University of Oslo, Department of Geosciences

01/2015 – 09/2018 Postdoctoral Research Fellow *Villigen, Switzerland*
Paul Scherrer Institute, Laboratory of Environmental Chemistry

07/2014 – 12/2015 Affiliate Assistant Research Professor *Reno, USA*
02/2011 – 06/2014 Postdoctoral Research Fellow
Desert Research Institute, Ultra-Trace Chemistry Laboratory

11/2009 – 12/2009 Postdoctoral Research Fellow *Bern, Switzerland*
University of Bern, Department of Chemistry and Biochemistry

08/2005 – 10/2009 PhD Student *Bern, Switzerland*
University of Bern, Department of Chemistry and Biochemistry

PUBLICATIONS

Summary: 60 ISI-listed peer-reviewed publications, including first-author publications in *Nature* and *Nature Climate Change*, and additional co-author publications in *Nature*, *Nature Geosciences*, *Nature Climate Change*, *Nature Communications* and *Proceedings of the National Academy of Sciences*; 2150 citations, h-index is 23 (Web of Science).

TOP 10

- Sigl, M.**, Winstrup, M., McConnell, J. R., Welten, K. C., Plunkett, G., Ludlow, F., Büntgen, U., Caffee, M., Chellman, N., Dahl-Jensen, D., Fischer, H., Kipfstuhl, S., Kostick, C., Maselli, O. J., Mekhaldi, F., Mulvaney, R., Muscheler, R., Pasteris, D. R., Pilcher, J. R., Salzer, M., Schüpbach, S., Steffensen, J. P., Vinther, B. M., and Woodruff, T. E.: Timing and climate forcing of volcanic eruptions for the past 2,500 years, *Nature*, 523, 543-549, doi: 10.1038/nature14565, 2015.
- Sigl, M.**, McConnell, J. R., Toohey, M., Curran, M., Das, S. B., Edwards, R., Isaksson, E., Kawamura, K., Kipfstuhl, S., Krüger, K., Layman, L., Maselli, O. J., Motizuki, Y., Motoyama, H., Pasteris, D. R., and Severi, M.: Insights from Antarctica on volcanic forcing during the Common Era, *Nat Clim Change*, 4, 693-697, doi: 10.1038/nclimate2293, 2014.
- Toohey, M. and **Sigl, M.**: Volcanic stratospheric sulfur injections and aerosol optical depth from 500 BCE to 1900 CE, *Earth Syst Sci Data*, 9, 809-831, doi:10.5194/essd-9-809-2017, 2017.
- Sigl, M.**, Abram, N. J., Gabrieli, J., Jenk, T. M., Osmont, D., and Schwikowski, J., 19th century glacier retreat in the Alps preceded the emergence of industrial black carbon deposition on high-alpine glaciers, *The Cryosphere*, 12, 3311-3331, doi: 10.5194/tc-12-3311-2018, 2018.
- Manning, J. G., Ludlow, F., Stine, A. R., Boos, W. R., **Sigl, M.**, and Marlon, J. R.: Volcanic suppression of Nile summer flooding triggers revolt and constrains interstate conflict in ancient Egypt, *Nat Commun*, 8, 900, doi:10.1038/s41467-017-00957-y, 2017.
- Bethke, I., Outten, S., Otterå, O. H., Hawkins, E., Wagner, S., **Sigl, M.**, and Thorne, P.: Potential volcanic impacts on future climate variability, *Nat Clim Change*, 7, 799-805, doi:10.1038/nclimate3394, 2017.
- Sigl, M.**, Fudge, T. J., Winstrup, M., Cole-Dai, J., Ferris, D., McConnell, J. R., Taylor, K. C., Welten, K. C., Woodruff, T. E., Adolphi, F., Bisiaux, M., Brook, E. J., Buizert, C., Caffee, M. W., Dunbar, N. W., Edwards, R., Geng, L., Iverson, N., Koffman, B., Layman, L., Maselli, O. J., McGwire, K., Muscheler, R., Nishiizumi, K., Pasteris, D. R., Rhodes, R. H., and Sowers, T. A.: The WAIS Divide deep ice core WD2014 chronology - Part 2: Annual-layer counting (0-31 ka BP), *Clim Past*, 12, 769-786, doi: 10.5194/cp-12-769-2016, 2016.
- Büntgen, U., Myglan, V. S., Ljungqvist, F. C., McCormick, M., Di Cosmo, N., **Sigl, M.**, Jungclaus, J., Wagner, S., Krusic, P. J., Esper, J., Kaplan, J. O., de Vaan, M. A. C., Luterbacher, J., Wacker, L., Tegel, W., and Kirdyanov, A. V.: Cooling and societal change during the Late Antique Little Ice Age from 536 to around 660 AD, *Nat Geosci*, 9, 231-236, doi: 10.1038/ngeo2652, 2016.
- Sigl, M.**, McConnell, J. R., Layman, L., Maselli, O., McGwire, K., Pasteris, D., Dahl-Jensen, D., Steffensen, J. P., Vinther, B., Edwards, R., Mulvaney, R., and Kipfstuhl, S.: A new bipolar ice core record of volcanism from WAIS Divide and NEEM and implications for climate forcing of the last 2000 years, *J Geophys Res-Atmos*, 118, 1151-1169, doi: 10.1029/2012JD018603, 2013.
- Toohey, M., Krüger, K., **Sigl, M.**, Stordal, F., and Svensen, H.: Climatic and societal impacts of a volcanic double event at the dawn of the Middle Ages, *Climatic Change*, 136, 401-412, doi:10.1007/s10584-016-1648-7, 2016.