

## PUBLICATIONS (PEER-REVIEWED)

Itrax operators, Bloemsma, B., Croudace, I., Daly, J.S., Edwards, R.J., Francus, P., Galloway, J.M., Gregory, B.R.B., Huang, J.-J., Jones, A.F., Kylander, M., Löwemark, L., Luo, Y., MacLachlan, S., Ohlendorf, C., Patterson, R.T., Pearce, C., **Profe, J.**, Reinhardt, E.G., Stranne, C., Tjallingii, R., Turner, J.N., 2019. Practical guidelines and recent advances in the Itrax XRF core-scanning procedure. *Quaternary International* 514: 16-29. doi: [10.1016/j.quaint.2018.10.044](https://doi.org/10.1016/j.quaint.2018.10.044)

**Profe, J.**, Ohlendorf, C., 2019. X-ray fluorescence scanning of discrete samples – An economical perspective. *Quaternary International* 514: 68-75. doi: [10.1016/j.quaint.2018.09.022](https://doi.org/10.1016/j.quaint.2018.09.022)

**Profe, J.**, Wacha, L., Frechen, M., Ohlendorf, C., Zolitschka, B., 2018. XRF scanning of discrete samples – A chemostratigraphic approach exemplified for loess-paleosol sequences from the Island of Susak, Croatia. *Quaternary International* 494: 34-51. doi: [10.1016/j.quaint.2018.05.006](https://doi.org/10.1016/j.quaint.2018.05.006)

**Profe, J.**, Neumann, L., Novothny, Á., Barta, G., Rolf, C., Frechen, M., Ohlendorf, C., Zolitschka, B., 2018. Paleoenvironmental conditions and sedimentation dynamics in Central Europe inferred from geochemical data of the loess-paleosol sequence at Süttő (Hungary). *Quaternary Science Reviews* 196: 21-37. doi: [10.1016/j.quascirev.2018.07.034](https://doi.org/10.1016/j.quascirev.2018.07.034)

Drews, T., Miernik, G., Anders, K., Höfle, B., **Profe, J.**, Emmerich, A., Bechstädt, T., 2018. Validation of fracture data recognition in rock masses by automated plane detection in 3D point clouds. *International Journal of Rock Mechanics and Mining Sciences* 109: 19-31. doi: [10.1016/j.ijrmms.2018.06.023](https://doi.org/10.1016/j.ijrmms.2018.06.023)

**Profe, J.**, Höfle, B., Hämmeler, M., Steinbacher, F., Yang, M.-S., Schröder-Ritzrau, A., Frank, N., 2016. Characterizing tufa barrages in relation to channel bed morphology in a small karstic river by airborne LiDAR topo-bathymetry. *Proceedings of the Geologists' Association* 127: 664-675. doi: [10.1016/j.pgeola.2016.10.004](https://doi.org/10.1016/j.pgeola.2016.10.004)

**Profe, J.**, Zolitschka, B., Schirmer, W., Frechen, M., Ohlendorf, C., 2016. Geochemistry unravels MIS 3/2 paleoenvironmental dynamics at the loess-paleosol sequence Schwalbenberg II, Germany. *Palaeogeography, Palaeoclimatology, Palaeoecology* 459: 537-551. doi: [10.1016/j.palaeo.2016.07.022](https://doi.org/10.1016/j.palaeo.2016.07.022)

Marx, S., Phalkey, R., Aranda, C., **Profe, J.**, Sauerborn, R., Höfle, B., 2014. Geographic information analysis and web-based geoportals to explore malnutrition in Sub-Saharan Africa: a systematic review of approaches. *BMC Public Health* 14: 1189. doi: [10.1186/1471-2458-14-1189](https://doi.org/10.1186/1471-2458-14-1189)

Müller, R.-J., Schrader, H., **Profe, J.**, Dresler, K., Deckwer, W.-D., 2005. Enzymatic degradation of Poly(ethylene terephthalate): Rapid hydrolyse using a hydrolase from *T. fusca*. *Macromolecular Rapid Communications* 26: 1400-1405. doi: [10.1002/marc.200500410](https://doi.org/10.1002/marc.200500410)

## FURTHER PUBLICATIONS

Schmidt, C., Laag, C., Profe, J., Richter, T., Tchouankoue, J. P., 2019. The morphometry of scoria cones as an indicator of their relative age – Results from the Cameroon Volcanic Line. Geophysical Research Abstracts 21: EGU2019-4272.

Profe J. & Steup, R., 2019. The issue of reproducibility in multi-temporal geomorphological SfM-workflows – Examples from a laboratory experiment. Geophysical Research Abstracts 21: EGU2019-6848.

Profe, J., 2017. X-ray fluorescence scanning of discrete samples – a new tool for the geochemical characterization of loess-paleosol sequences. PhD-thesis. University of Bremen.

Profe, J. & Höfle, B., 2017. Detectability and geomorphometry of tufa barrages in a small forested karstic river using airborne LiDAR topo-bathymetry. Geophysical Research Abstracts 19: EGU2017-9130.

Profe, J., Neumann, L., Zolitschka, B., Frechen, M., Rolf, C., Barta, G., Novothny, Á., Ohlendorf, C., 2017. Geochemical record of the loess-paleosol sequence Süttö (Hungary) derived from X-ray fluorescence scanning of discrete samples. Geophysical Research Abstracts 19: EGU2017-9085-1.

Profe, J. & Ohlendorf, C., 2017. Data precision of X-ray fluorescence (XRF) scanning of discrete samples with the ITRAX XRF core-scanner exemplified on loess-paleosol samples. Geophysical Research Abstracts 19: EGU2017-8980.

Profe, J., Wacha, L., Frechen, M., Rolf, C., Brlek, M., Ohlendorf, C., Zolitschka, B., 2016. X-ray fluorescence (XRF) scanning of discrete samples: Examples from the loess-paleosol sequence on the Island of Susak, Croatia. Geophysical Research Abstracts 18: EGU2016-9497.

Profe, J., Neumann, L., Ohlendorf, C., Zolitschka, B., Frechen, M., Barta, G., 2015. Effects of different peak fitting strategies for XRF-spectra and their implications for paleoenvironmental studies: an example from powdered loess-paleosol samples. Geophysical Research Abstracts 17: EGU2015-8898.

Miernik, G., Kissner, T., Profe, J., Höfle, B., Bechstädt, T., Zühlke, R., 2013. LiDAR-basierte Aufschlussanalogmodellierung und Datenextraktion für Reservoirmodelle. In: Proceedings of DGMK/ÖGEW-Frühjahrstagung - Fachbereich Aufsuchung und Gewinnung. Celle, Germany: 1-6.

Miernik, G., Profe, J., Höfle, B., Kissner, T., Emmerich, A., Bechstädt, T., Zühlke, R., 2013. Modelling fractured reservoirs from LiDAR derived digital outcrop models (DOMs). In: Proceedings of the 30th IAS Meeting of Sedimentology. Manchester, UK: 1-2.

Profe, J., Forbriger, M., Höfle, B., 2013. Terrestrisches Laserscanning für geoarchäologische Fragestellungen in Koumasa/Kreta. Report Nr. 022013, Institut für Geographie, Universität Heidelberg, 18 S.

## **CONFERENCES, SUMMER SCHOOLS and WORKSHOPS**

04/2019: Posterpresentation at the European Geoscience Union (cf. Geophysical Research Abstracts 21: EGU2019-6848), Vienna, Austria

05/2018: Talk "Detection of freshwater tufas from airborne LiDAR bathymetry". 12<sup>th</sup> International Young Geomorphologists' Meeting, Stadtoldendorf, Germany

05/2017: Talk "Chemostratigraphy of the loess-paleosol sequence Süttő (Hungary) based on unsupervised clustering of X-ray fluorescence data". 11<sup>th</sup> international Meeting of the 'Young Geomorphologists', Wartaweil am Ammersee, Germany

05/2017: Talk "Chemostratigraphy of the loess-paleosol sequence Süttő (Hungary) based on X-ray fluorescence scanning of discrete samples". GFZ Postdam - Section 5.2: Climate Dynamics and Landscape Evolution, Potsdam, Germany

04/2017: Two PICO-presentations at the European Geoscience Union (cf. Geophysical Research Abstracts 19: EGU2017-9085-1, EGU2017-9130), Vienna, Austria

04/2017: Posterpresentation at the European Geoscience Union (cf. Geophysical Research Abstracts 19: EGU2017-8980), Vienna, Austria

09/2016: Talk "Geochemistry of the loess-paleosol sequence Schwalbenberg II". DEUQUA 2016, Dresden, Germany

07/2016: Urbino Summer School in Paleoclimatology, Urbino, Italy

07/2016: Posterpresentation "Using climate model results to validate geochemical climofunctions applied to the loess-paleosol sequence Süttő". Urbino Summer School in Paleoclimatology, Urbino, Italy

05/2016: Talk "Insights into paleoclimate and sedimentation dynamics: Element log ratios derived from X-ray fluorescence scanning of discrete samples from the loess-paleosol sequence Schwalbenberg II, Germany". 10<sup>th</sup> international Young Geomorphologists' workshop, Werbellinsee, Germany

04/2016: Talk at the European Geoscience Union in the session "Aeolian dust: Initiator, Player, and Recorder of Environmental Change" (cf. Geophysical Research Abstracts 18: EGU2016-9497), Vienna, Austria

10/2015: Talk "XRF-scanning of powdered samples from the lower part of the 'Bok' loess-paleosol sequence (Island of Susak, Croatia): Initial results". Interdisciplinary Quaternary Investigations Workshop, Zagreb University, Croatia

07/2015: Innsbruck Summer School of Alpine Research - Close Range Sensing Techniques in Alpine Terrain, Obergurgl, Austria

04/2015: Posterpresentation at the European Geoscience Union (cf. Geophysical Research Abstracts 17: EGU2015-8898), Vienna, Austria

10/2014: Attendance at the Kickoff Meeting of the DFG-SPP Program 1803: Earth Shape: Earth Surface Shaping by Biota, GFZ Potsdam, Germany