

Education:

2002: Dr. rer. nat., Earth Sciences, University of Graz

Doctoral Thesis: “Integrated stratigraphical studies at the Cretaceous-Paleogene transition section at Gorgo a Cerbara (Italy)”

1998: Mag. rer. nat., Earth Sciences, University of Graz

Diploma Thesis: “Umweltgeologische Untersuchungen an ausgewählten Bergbaustandorten des Grazer Paläozoikums“ (Environmental geological investigations of selected mining deposits in the Graz Palaeozoic)

1992: Starting studying Earth Sciences at the University of Graz

Carreer history:

Since 2009: Senior Scientist, Graz University of Technology, Institute of Applied Geosciences

2003-2009: Teaching and Research Assistant, Graz University of Technology, Institute of Applied Geosciences

2001-2004: Research Assistant, University of Graz, Institute for Geology and Paleontology (FWF Project P 14366 Bio: Stable Isotopes and changing Miocene paleoenvironments in the East Alpine Region)

2000 - 2001: Research Assistant, University of Leoben, Institute for Geophysics (FWF Project P-13738 TEC: Paleomagnetic reconstruction of geodynamic events and climate changes in the Eastern Alpine Miocene)

1998 –2000: Research Assistant, University of Leoben, Institute for Geophysics and University of Graz, Institute for Geology and Paleontology (FWF Project 12643 Geo: Rhythmic deposition of interplanetary dust in marine sediments)

Research Interests

- mineralogical and geological characterisation/classification of rocks for engineering purposes
- improvement of testing methods for the abrasivity of rocks
- paleoenvironmental reconstructions by stable isotope analyses of biogenic carbonates

Fields of teaching activities cover mainly theory and practice in the application of laboratory methods for the characterisation of rocks (e.g. x-ray diffraction, spectroscopic methods) and the analysis of stable isotopes for paleoenvironmental research.

Publications:

Harzhauser, M.; Mandic, O.; Latal, C.; Kern, A.: Stable isotope composition of the Miocene Dinaride Lake. - in: *Hydrobiologia* (2012) In Press

Wilhartitz, I. C.; Kirschner, A. K.; Stadler, H.; Herndl, G. J.; Dietzel, M.; Latal, C.; Mach, R. L.; Farnleitner, A. H.:

Heterotrophic prokaryotic production in ultraoligotrophic alpine karst aquifers and ecological implications. - in: *FEMS microbiology ecology* 68 (2009) , S. 287 - 299

Lassnig, K., Latal, C., Klima, K. (2008): Impact of Grain Size on the Cerchar Abrasiveness Test. – *Geomechanik und Tunnelbau* 1, 71 - 76

Harzhauser, M., Latal, C., Piller, W. E. (2007): The stable isotope archive of Lake Pannon as a mirror of Late Miocene climate change. - in: *Palaeogeography, Palaeoclimatology, Palaeoecology* 249 (2007) , S. 335 - 350

Harzhauser, M., Piller, W. E., Latal, C. (2007): Geodynamic impact on the stable isotope signatures in a shallow epicontinental sea . - *Terra Nova* 19, 324 - 330

Latal, C., Piller, W.E., Harzhauser, M. (2006): Shifts in oxygen and carbon isotope signals in marine molluscs from the Central Paratethys around the Lower/Middle Miocene transition. - *Palaeogeography, Palaeoclimatology, Palaeoecology* 231, 347-360

Latal, C., Piller, W.E., Harzhauser, M. (2006): Small scaled environmental changes: indications from stable isotopes of gastropods (Early Miocene, Korneuburg Basin). – *International Journal of Earth Sciences* 95, 95-106.

Latal, C., Piller, W.E., Harzhauser, M. (2004): Paleoenvironmental Reconstructions by Stable Isotopes of Middle Miocene Gastropods of the Central Paratethys. – *Palaeogeography, Palaeoclimatology, Palaeoecology* 211, 157-169.

Latal, C. (2004): The Cretaceous-Paleogene boundary section of Gorgo a Cerbara: an integrated stratigraphical study. – *Annalen des Naturhistorischen Museum Wien* 106 A, 259-279.

Latal, C. & Piller, W.E. (2004): Stable isotope signatures at the Karpatian/Badenian boundary in the Styrian Basin. – in: Brzobohaty, R., Cicha, I., Kovac, M., Rögl, F. (eds.): *The Karpatian – A Lower Miocene Stage of the Central Paratethys*, 37-48, Masary University Brno.

Latal, C., Piller, W.E., Harzhauser, M., Mandic O. (2002): Stable Isotope Analyses on Miocene Molluscs from the East Alpine Region: A Proxy for Paleoenvironmental Reconstructions - in Bojar, A.-V., Leis, A., & Fritz, H. (Hrsg.): 4th Austrian Workshop on Stable Isotopes in Environmental and Earth Sciences. – *Ber. Inst. Geol. Paläont., K.-F.-Univ. Graz*, 6, 18-19.

Latal, C. & Piller, W.E. (eds.) (2001): *Environments and Ecosystem Dynamics of the Eurasian Neogene (EEDEN) – Stratigraphy and Palaeogeography*. Workshop Graz, 15.-18.3.2001. – *Berichte des Institutes für Geologie und Paläontologie der Karl-Franzens-Universität Graz*, 4, Graz.

Latal, C., Wolf, C. & Fenninger, A. (2000): Bergbauhalden-Gefährdung für die Umwelt? – Mitt. Naturwiss. Ver. Steiermark, 130, 5-18.

Latal, C., Scholger, R., Preisinger, A. (2000): Paleomagnetic Investigations Imply Rotations within the Cretaceous-Tertiary Transition Section at Cerbara (Italy). – Phys. Chem. Earth (A), 25, no. 5, 499-503.

Abstracts and presentations

Blümel, M.; Kieffer, D. S.; Latal, C. (2010): Determination of mechanical parameters for sheared and faulted rock masses. - in: 39. Geomechanik-Kolloquium (2010), S. 69 – 76, Geomechanik-Kolloquium ; 2010

Cubillas, P.; Bucca, M.; Anderson, M.; Latal, C.; Dietzel, M.; Köhler, S. J. (2010): Precipitation kinetics of cerussite and hydrocerussite in the presence of biogenic carbonates. - in: Goldschmidt Conference Abstracts 2010 (2010), S. A198 - A198, V. M. Goldschmidt Conference ; 2010

Lassnig, K., Latal, C., Klima, K. (2008): Einfluss von Stahlhärte und Korngrösse auf den Cerchar-Abrasivitäts – Indexwert. – Journal of Alpine Geology (Mitt. Ges. Geol. Bergbaustud.Österr.) 49, S.60, Pangeo 2008, Vienna.

Latal, C. (2008): Palaeoenvironmental reconstructions by stable isotopes from molluscs and ostracods of the Central Paratethys Sea and Lake Pannon. - in: Workshop Methods in Ostracodology 14.- 17.07.2008, Graz

Harzhauser, M., Latal, C., Mandic, O. (2008): The water chemistry of the Miocene Dinarid Lake system revealed by stable isotopes of mollusc aragonite. - Geophysical Research Abstracts (2008), S. 07404 – 07404, European Geosciences Union General Assembly, Vienna.

Piller, W. E., Harzhauser, M., Latal, C. (2006): The Central Paratethys – an example for the isotopic evolution of an epicontinental sea. - The pursuit of science, 345 – 346, Geological Society of America Annual Meeting & Exposition, Philadelphia.

Harzhauser, M., Latal, C., Piller, W. E. (2006): The stable isotope archive of Lake Pannon as a mirror of Late Miocene climate change. - Pangeo Austria 2006, Innsbruck.

Harzhauser, M., Piller, W. E., Latal, C., Mandic, O. (2005) : Enigmatic patterns in Late Miocene molluscs triggered by advanced seasonal precipitation. – Annual Meeting 2005 of Neogene Climate Evolution in Eurasia (NECLIME), 1.4. -10.4.2005, Sofia.

Latal, C., Piller, W.E. , Harzhauser, M. (2004): Rekonstruktion von Paläoumweltbedingungen: Sauerstoff- und Kohlenstoffisotope in miozänen Molluskenschalen. – in: Hubmann, B., Piller, W.E., (eds): Pangeo Austria 2004 – Abstracts - Ber. Inst. Erdwiss., K.-F.-Univ. Graz, 9, Graz.

Latal, C., Piller, W.E., Harzhauser, M. (2003): Stable isotope analyses on Miocene gastropods from the Central Paratethys. – 5th Austrian Workshop Stable Isotopes in Ecological and Earth Sciences, 7.-8.11.2003, Innsbruck.

Latal, C., Piller, W.E., Harzhauser, M. (2003): Oxygen and carbon isotope signatures of Miocene molluscs in the Central Paratethys.- Shallow Tethys 6 Symposium, 25.-29.8.2003, Budapest.

Latal, C., Piller, W.E., Harzhauser, M., Mandic, O. (2003): Mittelmiozäne Paläoenvironment Rekonstruktionen mit stabilen Isotopensignaturen von Mollusken (Gastropoden/Bivalven) in Grund (Molassezone, Österreich). – Sediment 2003, 10.-14.6.2003, Wilhelmshafen.

Latal, C., Piller, W.E., Harzhauser, M. (2003): Stable isotope data of selected gastropod genera as proxies for seawater chemistry of the Central Paratethys. – EGS-AGU-EUG Joint Assembly, 6.-11.4.2003, Nizza.

Piller, W.E., Latal, C., Harzhauser, M. (2002): Reconstructing intertidal environments by stable isotopes of gastropod shells (Sarmatian-Middle Miocene, Paratethys). – Geological Society of America, Annual Meeting, 27.-30.10.2002, Denver.

Latal, C., Piller, W.E., Harzhauser, M. (2002): Stabile Isotopensignaturen von miozänen Gastropodenschalen. – 9. Jahrestagung der Österreichischen Paläontologischen Gesellschaft, Ber. Inst. Erdwiss., K.-F.-Univ. Graz, 5, Graz.

Latal, C., Piller, W.E., Harzhauser, M. (2002): Stabile Isotope in Gastropodengehäusen als Zugang zur Paläo-Umwelt. – Pangeo, 28.6.-30.6.2002, Salzburg.

Latal, C., Kroh, A., Piller, W.E. (2002): Environmental interpretation by stable isotope data in the Miocene Styrian Basin (Austria). – Sediment 2002, 29.5.-31.5.2002, Darmstadt.

Latal, C., Kroh, A., Piller, W.E. (2002): Stable isotope signatures at the Karpatian-Badenian boundary in the Styrian Neogene Basin. – Abstracts, Molasse-Treffen, Wien 2002.

Latal, C., Harzhauser, M., Piller, W.E. (2001): Sarmatische Gastropoden und ihre Isotopensignatur. – Abstracts, 7. Jahrestagung Österreichische Paläontologische Gesellschaft, Mannersdorf 2001.

Latal, C., Harzhauser, M., Piller, W.E. (2001): Stabile Isotopenuntersuchungen an sarmatischen Gastropoden in St. Margarethen/Zollhaus (Burgenland). – Abstracts, 6. Österreichisches Sedimentologen-Treffen, Seewalchen am Attersee 2001.

Latal, C., Scholger, R., Mauritsch, H.J., Preisinger, A., Aslanian, S. (2000): Precise dating across the Cretaceous/Paleogene boundary by magnetostratigraphy. – XXV General Assembly EGS, Nice 2000.

Latal, C., Scholger, R., Mauritsch, H.J., Preisinger, A., Aslanian, S. (2000): Precise dating across the Cretaceous/Paleogene boundary by magnetostratigraphy. – Catastrophic events & mass extinctions: impacts and beyond, Vienna 2000.

Latal, C. (2000): Stabile Isotope (C, O) – Stratigraphische Methode und weitere Anwendungen in Piller, W.E. (ed.): AUSTROSTRAT 2000. Abstracts and excursion guide. – Ber. Inst. Erdwiss., K.-F.-Univ. Graz, 2, Graz.

Latal, C., Piller, W.E., Preisinger, A., Scholger, R. (1999): Stratigraphische Untersuchungen am Kreide-Tertiär Profil in Cerbara (Nordumbrien, Italien). -Abstracts, 4. Österreichisches Sedimentologen-Treffen, Seewalchen am Attersee 1999.

Latal, C., Scholger, R., Preisinger, A. (1998): Palaeomagnetic investigations imply rotations within the Cretaceous-Tertiary Transition section at Cerbara (Italy). – Abstracts, XXIV General Assembly EGS, The Hague 1999.

Latal, C. (1998): Das Kreide-Tertiär Profil in Cerbara (Nordumbrien, Italien). - Abstracts, 3. Österreichisches Sedimentologen-Treffen, Seewalchen am Attersee 1998.

Memberships

Austrian Geological Society

Austrian Association for Research on Road – Rail Transport (ÖFSV)