

ablauf auszugehen mit (a) einer mitteltriadischen Vorläufervererzung im Sr-isotopischen Gleichgewicht mit Meerwasser und (b) einer obertriadischen Vererzung geprägt durch erhöhte $^{87}\text{Sr}/^{86}\text{Sr}$ -Werte in Sphalerit und bereichsweise auch in karbonatischer Gangart, Fluorit und Baryt.

- (6) Aus früheren Bleisotopendaten an Erz- und Nebengesteinsblei wurde ein Mineralisationsalter von 180 ± 40 Ma abgeleitet. Eine weitere Alterseinstufung von 210 ± 30 Ma wurde aufgrund von Rb-Sr-Modellberechnungen an Gesteinsproben aus dem Randbereich der vererzten Schwellenfazies vorgenommen (SCHROLL et al. 2006). Diese Alterseinschätzungen sind zumindest konsistent mit dem im Rahmen dieser Studie vorgestellten, präzisen Rb-Sr-Alter, das erstmals direkt an einer erzbildenden Mineralphase an Bleiberger Material ermittelt wurde.

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Upper Triassic oxygen isotope trends and marine microfossils in the Northern Calcareous Alps

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The global mass extinction event at the Triassic/Jurassic boundary has been attributed to various environmental perturbations such as rapid sea level fall, intensive volcanism and strong increase in atmospheric CO_2 concentration, release of methane from marine methane hydrate deposits, marine carbonate dissolution. Significant increase of atmospheric CO_2 concentration has actually been proved by a decline of fossil leaf stomata (Mc ELWAIN et al. 1999). There are however few geochemical data indicating significant climatic warming across the T/J boundary. It is therefore interesting that the Zlambach Beds near Salzburg show cyclic changes of $\delta^{18}\text{O}$ (KUERSCHNER et al. 2008) prior to the T/J event. The latter author suggested these cyclic changes to be effected by variations of the oceanic circulation (KUERSCHNER, pers. comm.).

The intention of the present study is to analyse these isotopic trends in the Rhaetian in more detail by means of brachiopods and marine microfossils. For this purpose brachiopods and well preserved ostracods from the Kössener Formation at Steinbruch Eiberg are geochemically analysed ($\delta^{18}\text{O}$ and Ca/Mg analysis). Micropalaeontological studies at the Eiberg section yielded several well preserved ostracod associations which can be used for the oxygen isotope and Ca/Mg analysis. Previous studies (KORTE et al. 2005) suggest that the Upper Triassic intraplatform basin of the Northern Calcareous Alps was effectively separated from the oceanic circulation and water temperatures were therefore primarily controlled by regional climatic conditions.

The ostracods at Eiberg section can also be used for stratigraphic correlation with other well-studied sections of the Kössen Formation (URLICHS 1991, GOLEBIOWSKI 1989, 1991). The upper Hochalm Member (unit 2 sensu GOLEBIOWSKI 1989, 1991) is characterized by abundant *Timiriaseevia ofentalensis* and *Lutkevichinella keupera*. In the upper part of unit 2 appears *Ogmoconchella martini*. The „Korallenkalk Bereich“ (unit 3 sensu GOLEBIOWSKI 1989, 1991) can be correlated by the occurrence of *Kerocythere hartmanni*, *Judahella andrusovi* and *Leviella circumscripta*. The basal Eiberg Member is characterized by the first occurrence of *Triceratina fortенodosa* and *Ogmoconcha koessenensis*. The taxonomical composition of the ostracod associations is however also strongly controlled by local environmental conditions, particularly water depth, turbulence and oxygen availability. A diversity decrease and occurrence of monospecific associations of Healdiidae in combination with *Zoophycos* horizons in the middle Eiberg Member points to oxygen poor conditions. More diverse ostracod faunas which are associated with *Chondrites* horizons in the lower and upper Eiberg Member indicate higher oxygen content at the sediment surface.

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Environmental effects on gravity at Conrad Observatory, Austria

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Since November 2007 the superconducting gravimeter (SG) GWR-C025 has been operating at the new Conrad Observatory located in a mountainous area (Northern Calcareous Alps) about 60 km Southwest of Vienna (Austria). The paper reports on the presently available geodynamical and environmental instrumentation. First results of the two years' time series are presented and