

Uwe Brand (Dept. of Earth Sciences, Brock University, Kanada)

### Inclusion Gas Analysis: A game changer for the geosciences

A new way is presented of determining the oxygen level of Earth's past atmosphere by measuring the gas trapped in halite inclusions. These are the first oxygen measurements (10.9 %) from the 815 Ma old Browne Formation, southwest Australia. The measured  $pO_2$  level puts oxygenation of Earth's paleoatmosphere ~100-200 m.y. ahead of current studies, but in agreement with increase and diversification of Neoproterozoic marine life.

