Conference

Across the End Permian "Great Extinction": From Field Studies to Scientific Results

30 August - 2 September 2023 University of Lausanne, Switzerland UNIL | Université de Lausanne





Scientific Program of the Conference in Synathlon building of University of Lausanne

Wednesday 30 August

09h00 - 09h30 Opening ceremony of the conference including welcome remarks by Professor Nilas Linde, Dean of the Faculty of Geosciences and Environment and by Professore Allison Daley, Head of the Institute of Earth Sciences.

09h30 - 10h15 Plenary session during the morning to highlighting new results from the Permian-Triassic scientific program in Switzerland with Professor Torsten Vennemann, and introduction to 5 posters resuming 50 years of Permian-Triassic research in Lausanne by Aymon Baud.

10h15 – 10h45 Coffee break and Poster session on 50 years of Permian-Triassic research in Lausanne.

10h45 –11h30 Keynote talk by Sara Pruss: A new Lower Triassic fossil record in the western United States tiny fossils hiding in plain sight.

11h30 – 12h00 William Foster: Quantifying the cause(s) of the end-Permian mass extinction in shallow marine ecosystems.

12h00 - 12h30 Xaiokang Liu: Morphological evolution of marine animals during the Permian-Triassic mass extinction.

12h30 - 14h00 Lunch

14 00 – 18h00 Session 1: Biotic responses to extreme climatic and environmental crises.

14 00 - 14h45 keynote talk by Elke Schneebeli on "Mass extinction survival guide - plants in the Arctic".

14h45 - 15h15 Charline Ragon: Steady states and bifurcation diagram for the Permian-Triassic climate.

15h15 – 15h45 Monica Gomez-Correra: Ostracod body size and community evolution across the Permian/Triassic boundary at the Seis/Siusi section: Italy

15h45 - 16h15 Jood Al Aswad: Taxonomic homogenization of marine ecosystems after the end-Permian mass extinction was physiologically controlled.

16h15 - 16h45 Coffee break and Poster continuation.

16h45 – 17h30 Keynote talk by Amalia Spina on" The palynological response to the middle and late Permian extinction events across the equatorial and tropical belts".

17h30 - 18h00 Sylvie Bourquin: Late Permian - Early Triassic non-marine record in western Tethys: climatic implications.

18h00 - 18h30 Benoit Beauchamp: Rapid environmental improvement following latest Permian mass extinction in mid-latitude Sverdrup basin (arctic Canada).

Thursday 31 August

08 30 - 12h30 Session 2: Paleogeographic views.

08 30 – 9h00 Dimitri Papanikolaou on "The Permo-Triassic formations of the Hellenides developed at the base of carbonate platforms or oceanic basins".

9h00 – 9h30 Karmen Fio: Late Permian/Early Triassic Stress Events and Permian–Triassic Boundary in Croatia.

9h30 – 10h00 Christian Vérard: *Tracking back Permian – Triassic sections from Oman over the Permian to Cenozoic Geodynamic and palæogeographic implications.*

10h00 – 10h30 Charles Henderson: *Update on Permian conodonts in Western and Arctic Canada.*

10h30 – 11h00 Coffee break and Poster session: Bilal Wadood poster on: Connecting the Dots: Tracing the Impact of Permian Paleoclimate on Environmental Changes of Southern Gondwana's Tethys Margin (Pakistan).

11h00 – 11h30 Keynote talk by Lillit Sahakian: Geohazards specialized Geopark of Armenia: the Chanakhchi Geosite with unique Permian-Triassic succession.

11h30 – 12h00 Benoit Beauchamp: *Permian low-latitude glendonites (Oman: New Mexico: south China) linked to enhanced upwelling in aragonite seas.*

12h00 – 12h30 Sylvain Richoz: *Microbialites and sponges, unusual facies in the EPME aftermath around the Neotethys.*

12h30 – 14h00 Lunch

14h00 - 18h00 Session 3, New geochemical tools and modelling.

14h00 – 14h45 keynote talk by Jonathan Payne on "Interpreting the end-Permian uranium isotope excursion."

14h45 – 15h15 Torsten Vennemann: Oxygen isotope compositions and temperatures of Early Triassic seawater a clumped isotope.

15h15 – 15h45 Stella Buchwald: *Insights and perspectives from lipid biomarkers from the Permian/Triassic boundary in Svalbard.*

15h45 – 16h15 Franziska Blattmann: *Examining Carbon Cycle Perturbations during the Smithian-Spathian in Central Spitsbergen.*

16h15 – 16h45 Coffee break and Poster session continuation.

16h45 – 17h15 Moghadam Mahdi Maaleki: Reconstructing Local Marine Redox Conditions of Tethys Area during End Permian Mass Extinction Using I/Ca.

17h15 – 17h45 Oluwasser Edward: *Marine sulphur isotope records and environmental changes during the Smithian-Spathian transition insights from nearshore and offshore Tethyan successions.*

17h45-18h15 Thierry Adatte: Coupling Timing and Tempo of Volcanism with the Mass Extinctions through Mercury and Tellurium Anomalies.

19h15 Conference dinner at le Perchoir, in Le Vortex

Friday 1 September

9h00 – 12h30 Session 4: Biochronology, and new time calibrations of the Permian to Triassic transition

9h00 – 9h45 Keynote talk by David Ware: *Griesbachian to Smithian ammonoids from Northern Indian Margin, with a review on the current state of knowledge of Early Triassic ammonoid biostratigraphy, evolution and biodiversity dynamics through this interval.*

9h45 – 10h15 Thomas Brühwiler: *New lower Triassic ammonoid fauna from Oman.* **10h15 – 10h45** Coffee break and Poster session continuation.

10h45 - 11h15 Marc Leu: Guryul Ravine and its treasures beyond the PTB.

11 30 – 12h00 Charles Henderson: *Update on Permian conodonts in Oman: Rustaq, Wadi Wasit and Batain.*

12h00 –12h30 Ali Murat Kiliç: *Genetic memory of Triassic conodonts.* **12 30 – 14 00** Lunch-

14 00 – 18h00 Session 5: Specific facies - Fossil-Lagerstatten and Coquina limestones

14 00 – 14h45 keynote talk Arnaud Brayard on "Exceptional and unexpected Early Triassic marine assemblages from the western USA basin and South China."

14h45 – 15h15 Aymon Baud: Six main facies in the post-extinction basal Triassic (Griesbachian) of Oman, from deep to shallow and from euxinic to well oxygenated.

15h15 - 15h45

15h45 – 16h15 Sakineh Arefifard: Redox conditions in Upper Permian and across Permian-Triassic boundary deposits of the Ali Bashi and Zal sections in NW Iran.

16h15 - 16h45 Coffee break and Poster session.

16h45 – 17h30 Session 6: Introduction to the fieldtrip

16h45 – 17h30 Aymon Baud: The field trip guidebook