

## PALAEOSOLS AS ANCIENT "CRITICAL ZONE" FOR PAST AND FUTURE PREDICTIONS:

the "quarrel" between depositional and pedogenic processes in ancient continental deposits

**Seminar (January 8, 2024 - 15:00)** 

# DO YOU KNOW PALAEOSOLS? PALAEOSOLS EXIST, BUT MAYBE YOU HAVE NEVER PAYED ATTENTION TO THEM

**Short-course on palaeopedology (January 9-10, 2024)** 





Corso di Laurea in Scienze Geologiche e Interclasse in Scienze e Tecnologie Geologiche e Scienze Geofisiche



#### **SEMINAR January 8, Monday, 14:00**

#### **ABSTRACT**

PALAEOSOLS AS ANCIENT "CRITICAL ZONE" FOR PAST AND FUTURE PREDICTIONS: the "quarrel" between depositional and pedogenic processes in ancient continental deposits

Colourful, structureless and with diffused boundaries lithofacies in continental deposits may be palaeosols. Palaeosols can constitute more than 90% of the entire sedimentary succession. Time, climate, groundwater level, organisms, parent material and type and amount of sedimentation control the nature and development of the palaeosols. Consequently, palaeosols can be extremely useful for palaeoenvironmental reconstructions and realisation of geological models, from palaeoclimatic to palaeotectonic models. With this conference we would like fascinate you into the world of the palaeosols.

MINI-COURSE January 9-10, Tuesday-Wednesday, 9:00-12:00, 15:00-18:00

#### **ABSTRACT**

### DO YOU KNOW PALAEOSOLS? PALAEOSOLS EXIST, BUT MAYBE YOU HAVE NEVER PAYED ATTENTION TO THEM

The previous seminar tested your patience and endurance with palaeosols. If you resisted the seminar, you are quite prepared to endure a two-day mini-course on palaeosols.

The general Syllabus of the course follows:

**Tuesday 9th – 9-12.** Presentation – Sedimentologists vs. Palaeopedologists – Some concepts - Exercises

**Tuesday 9th – 15-18.** Biological and chemical criteria to recognise palaeosols - Exercises

**Wednesday 10th – 9-12.** Physical criteria to recognise palaeosols – Type of palaeosols - Exercises

**Wednesday 10th – 15-17.** Time, climate, biology, topography revealed from palaeosols – Stratigraphy and palaeosols - Final test with grade