

....HYPOX partner institutions

Partner 9:

ITU-EMCOL (Istanbul, Turkey)



....HYPOX partner institutions: ITU-EMCOL



Istanbul Technical University
Eastern Mediterranean Centre for
Oceanography and Limnology
<http://www.emcol.itu.edu.tr>

Research Areas

- Climate and environmental reconstructions
 - Palaeoceanography
 - Palaeoclimatology
 - Sea-level and coastline changes
- Geohazards:
 - Submarine earthquake studies
 - Submarine landslides studies
 - Tsunami studies





ITU-EMCOL Research Facilities

Core Analysis Lab

ITRAX XRF Core Scanner
MSCL (physical properties)

Sedimentology Lab

Lazer particle-size analyzer
Mechanical sifter
Binocular ve optical microsc.

Geochemistry Lab

TOC/TIC analyzer
Spectrophotometer
Freeze-dryer
Centrifuge



Wet-core lab

Core cutting-splitting
Core photography
Core sampling
Geomechanical analysis

Field Equipment Facility

Subbottom profiler
Platform, tripod, vinç, engine
and generator
Various corer
CTD probe
6 m boat ve engine

Core Storage Facility

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Duties of ITU-EMCOL in Hypox

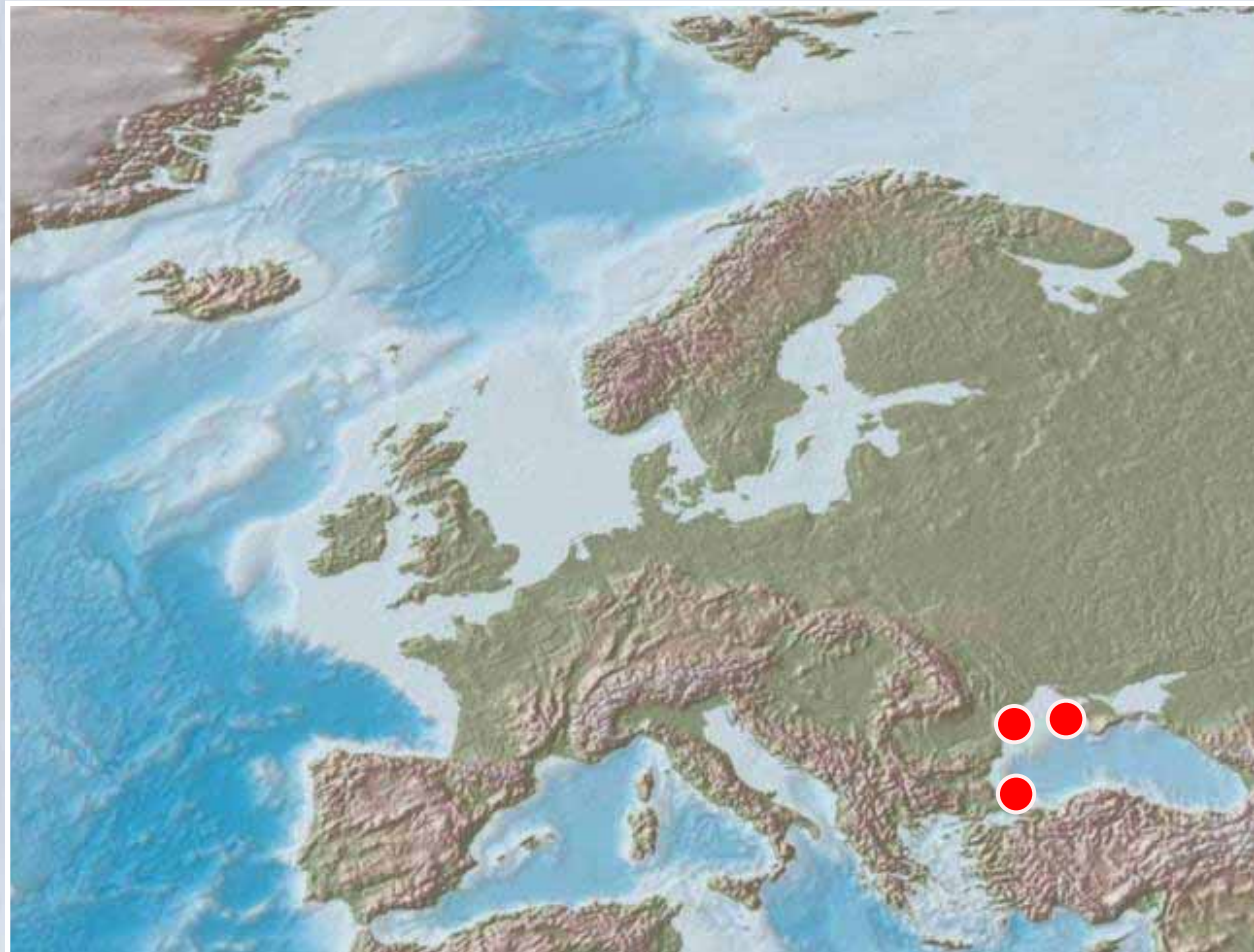
Main study sites: Bosphorus, Crimea and Romania areas of Black Sea.

Tasks under WP4: Study high resolution sedimentary records of redox conditions; paleoclimate and its relation to oxygen depletion

Methods:

In the Bosphorus-
Black Sea area:

- a) High resolution seismic profiling
- a) Coring along depth transects
- b) Sediment core analysis using mainly inorganic geochemical proxies



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EMCOL Core Analysis Laboratory

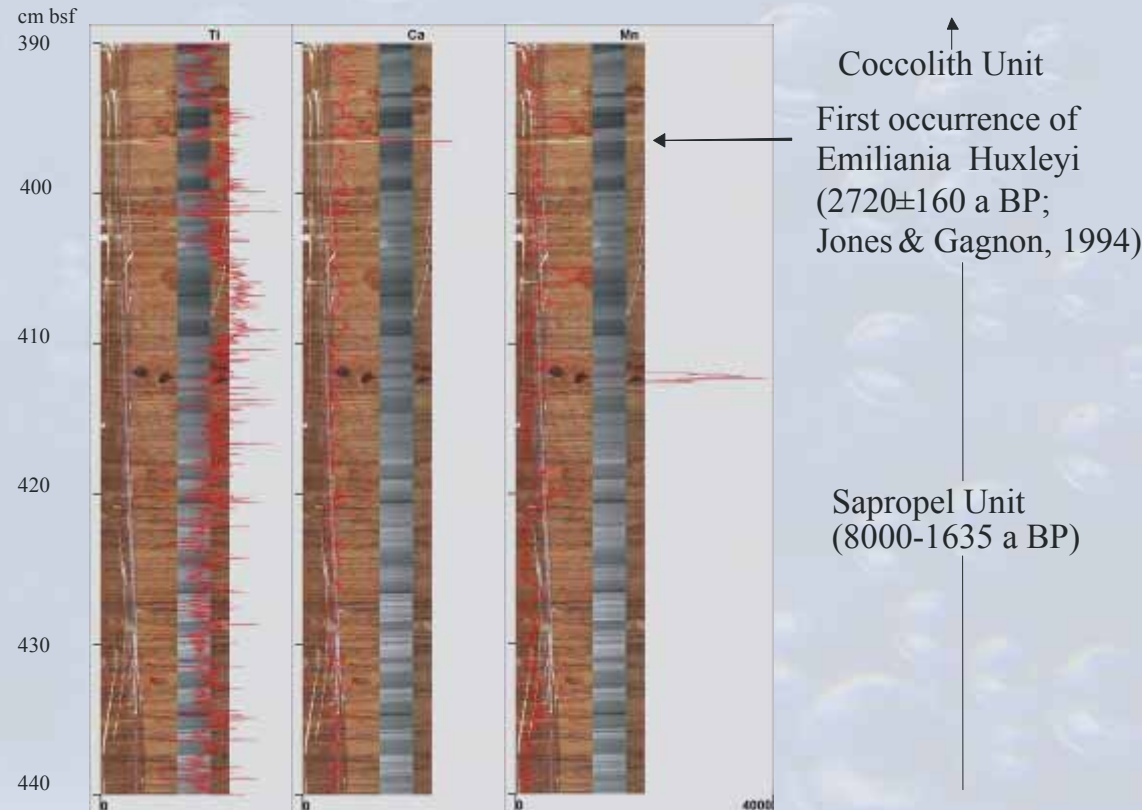
Itrax XRF Core Scanner

- XRF Micro-analysis (200 μm) for multi-element
- geochemical analysis
- X-ray radiography (20 μm)
- Digital colour imaging



PALEOCLIMATE RECORDS IN SEDIMENT CORES

Black Sea Core SL12, Section 5



Climate oscillations & edox changes