

....HYPOX partner institutions

Partner 15:

GeoEcoMar (Constanta, Romania)



....HYPOX partner institutions: GeoEcoMar

# National Institute for Marine Geology and Geoecology [www.geoecomar.ro](http://www.geoecomar.ro)



Bucharest Headquarters



Constanta Branch



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# GeoEcoMar scientific activity & objectives

■ Geological, geophysical, sedimentological, biogeochemical and ecological studies of marine, fluvial and deltaic environments:

■ Geological-geophysical and ecological mapping of the Romanian shelf and other marine areas.

■ Investigation of geological structure and evolution of the marine, fluvial and deltaic environments and their mineral resources.

■ Assessment of the macro-geosystem Danube River-Danube Delta-Black Sea.



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# Institute & main study site location



GeoEcoMar

Black Sea:  
North-Western  
Shelf



# Facilities Relevant for the Project

- Research Vessel "*Mare Nigrum*", 3000 t displacement, 81.94 m length, 13.60 m width, 5.20 m draught;
- Fluvial and shallow marine Research Vessel "*Istros*", 176.5 t displacement, 31.81 m length, 6.8 m width, 0.8 m medium draught;
- Multibeam hydrographic system - Sea Beam 1050D – ELAC Nautik GmbH
- CTD Sea Bird SBE 25 with 12 five liters bottles  
Rosette SBE 32  

Sensors: Conductivity, pressure, temperature, oxygen,  
pH-Eh, chlorophyll *a*, *beam attenuation*
- Multicorer Mark II – 400
- ROV Vector M5

# R/V "Mare Nigrum"



- Total area ~ 200 m<sup>2</sup>
- Computer network
- Air conditioning
- Sea and freshwater
- 380 V, 220 V &
- 24 V electric power

# Fluvial R/V "Istros"



House boat laboratory  
"Halmyris"



hypox<sub>2</sub>

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## GeoEcoMar tasks in HYPOX

- WP 3 – GeoEcoMar will identify and analyze the main drivers of oxygen depletion, investigate the influence of oxygen depletion on the benthic and pelagic biota and analyze related regime shifts of ecosystems
- WP 4 – GeoEcoMar will provide historical data from its databases and from the Romanian literature
- WP 6 – GeoEcoMar will provide offshore observations by ship, CTD measurements and bottom sampling for the assessment of the ecological state in the oxic/anoxic interface of the northwestern Black Sea shelf study
- WP 7 – GeoEcoMar will periodically assess the ecological state of benthic communities in shallow areas affected by red tides and hypoxia

