## ФЛЮИДНЫЕ СИСТЕМЫ СРЕДИЗЕМНОМОРЬЯ

## FLUID SYSTEMS OF THE MEDITERRANEAN

## A.A. Petrova, M.S. Petrishchev

Saint-Petersburg Branch of Pushkov Institute of Terrestrial Magnetism, Ionosphere and Radio Waves Propagation of Russian Academy of Sciences, St.-Petersburg, 191023

The article presents an investigation of heterogeneities of the internal structure of the earth's crust in the Mediterranean region. The study is based on the data analysis from hydromagnetic survey, magnetic anomalies of WDMAM 2007 and CHAPM satellite. A depth of the earthquakes focuses and seismic boundaries have been associated with position of marking horizons on the geomagnetic sections. Using the data from near-surface and satellite magnetic measurements we constructed the distribution of low-magnetic areas of fluid systems for the depths 5 and 20 km. Comparison of these areas' location and the tectonic mode has underlined the basic features of the Mediterranean structure that influence natural resources distribution in the region. Based on the known deposits studying of Levant and Tyrrhenian seas the role of fluid systems in feed of oil-and-gas and geothermal deposits is shown. Results from studies were used for completing the regional criteria of small-scale forecast for organization of geological prospecting for oil, gas and geothermal deposits in the Mediterranean region

Keywords: geomagnetic field, fluid systems, oil, gas, geothermal deposit