

RUSSIAN OFFSHORE AREAS; GEOLOGICAL FEATURES AND PROBLEM OF MINERAL RESOURCES

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The wide offshore areas of the Russian continental margin is the subject of significant exploration as an important problem for geological studies and source for mineral and energy resources. The Working Group Shelf under the Scientific Council on the World Ocean Problems of the Russian Academy of Sciences is engaged for the compilation of the Atlas Geology and Mineral Resources of the Russian Shelves. This scientific publication will contain about 100 colour sheets on 8 shelf regions of Russia. Some principal geological problems, relate to the regularities of formation of mineral resources are considered in the special monograph which includes the description and black and white geological profiles, sections and sketch maps. There are 5 divisions in the atlas content: 1. Hard mineral resources (map of placer - containing (gold, cassiterite, diamond, chromite, platinum, titanium minerals, zirconium, iron and amber) rock associations with varying degrees of production associated with temporal sections and paleogeographic environments). 2. Hydrocarbons (structural and tectonic maps, maps of organic carbon and hydrocarbon gas content in bottom sediments of the Russian Arctic Seas, maps of oil and gas heart formations and petroleum prospects). 3. Gas hydrates (maps for gas hydrate environments and potential gas hydrate bearing water areas, forecast map for permafrost zone of the Arctic Seas). 4. Geology (map of main geodynamic elements for Russian Arctic Seas, Quaternary tectonic map, maps of sedimentary cover thickness for some basins and bottom sediment maps) 5. Geoecology. Some maps of this Atlas have been published. They will be demonstrated: 1. Map of oil and gas prospects for the Barents and Kara Seas; 2. Map of oil and gas prospects for the Laptev, East Siberian and Chukchi Seas; 3. Structural map on the base of sedimentary cover for the Chukchi Sea; 4. Structural map on the base of Neogene deposits for the Chukchi Sea; 5. Map of neotectonic structures and active faults of the Russian Arctic shelf area.