



## **Landslide processes on the South-West slope of the Kuril basin of Okhotsk Sea**

**A. I. Obzhirov**<sup>1</sup>

**B. V. Baranov**<sup>2</sup>

**R. B. Shakirov**<sup>1</sup>

**V. G. Prokudin**<sup>1</sup>

**E. V. Mal'tseva**<sup>1</sup>

<sup>1</sup>*V.I. Il'ichev Pacific Oceanological Institute, FEB RAS,  
Vladivostok, Russia*

<sup>2</sup>*P.P. Shirshov Oceanological Institute, RAS, Moscow, Russia*

### **Abstract**

Comprehensive geological-geophysical investigations were carried out in the period from 2007 to 2015 in the frame of international project Russian-Japan-Korea “SAKHALIN” in order to study gas distribution in the water and sediment of the Okhotsk Sea, and to search for gas hydrates and their relationships with gas fluxes, morfostructures, destruction of sediment, zone faults, small mountains, some pits, sharp slop, landslides, mud volcano.

This geological-geophysical research involved seismic, hydro-acoustic, gasgeochemistry, batimetry, lithology, hydrology (CTD) and other methods. It was found nearly 500 methane fluxes from sediment to water and some to atmosphere as a result of the investigations in the Okhotsk Sea. Methane gas migrates from fault zones and permeates in pore – fissured medium. Gas contributes to process of origination of different morfostructures, as well as to water-gas grease formation which allow landslides, earthquakes and tsunami to occur, especial in periods of seismicity activation.

### **Keywords**

Natural gas, Faults, Gas hydrate, Morfostructures, Landslides

### **References**



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