

Research equipment available at R/V “Professor Molchanov”

Equipment for oceanographic research (onboard):

SBE 32 equipped with 12 bathometers with a capacity of 5 liters, and CTD Probe SBE 19 plus V2 for measuring temperature, pressure and salinity of the sea water, для измерения температуры, as well as dissolved oxygen level, CTD-Probe YSI CastAway CTD

Bottom sampler

Electrical salinity meter ГМ 2007, titration system АТН 02, ph-meter Expert-001

Equipment for meteorological research (onboard):

Vessel automatic weather station AWS-2700 produced by AANDERAA. It provides basic meteorological characteristics (air temperature, water temperature, pressure, humidity, wave height, etc.) during the expedition.

Equipment for glaciological research (available upon request):

georadar SIR - 3000 (GSSI, USA). It is equipped with georadar low-frequency screen scanners Subecho-40 (40 MHz), Subecho-70 (70 MHz) (Geoscanners, Sweden), and high-frequency scanner 5103 (400 MHz) (GSSI, USA). They function properly up to the depths of 35, 25, 4 m

Equipment for radiological research (available upon request):

Gamma-ray spectrometer “Progress” based on a scintillational detector block NaI

Alpha-ray spectrometer “Progress” with a built-in vacuum unit Nr. № 9964-Ac. Manufactured by Research and Production Enterprise “Doza”, Russia

“SL-300” radiometer is used for measurement of alpha- and beta-emitting radionuclide activity level in the samples. It is used in the sphere of radioecological monitoring, radioactive waste monitoring and scientific research. It is used for measurement of ambient dose equivalent and power of photon emission ambient dose equivalent; specific surface area of beta- and alpha-emitting radionuclides; radiological monitoring of the environment and at enterprises manufacturing or using ionizing radiation sources.

Radon radiometer “PPA-01M-03” with “ПЮУ-04” adapter

Portable system of radiation monitoring “RS-700”.

Laser particle analyzer “Horiba LB-550” manufactures by “HoribaJobinYvon”, France

Spectrophotometer “UV-1800” manufactured by “Shimadzu”, Japan. It is aimed at acquiring of spectrum solution in UV- and visible range. It is used for the environmental objects analysis, in oil-refining, chemical, food and pharmaceutical industries.

Portable system of radiation monitoring “RS-700” manufactured in Canada.

There is no refrigerator for up to 20 below zero.