

COLD AND METHANE CAME FROM THE PAST

COLD AND METHANE RICH PALEOENVIRONMENT MINERALS IN THE SEA OF OKHOTSK AND JAPAN SEA (RV Akademik Oparin, Cruises 52 & 54, 2017)



A



GLENDONITE – IKAITE - METHANE - GOLD



A: Very beautiful Glendonite crystal found on east slope of Sakhalin Island. **B:** Its inside. **C:** Gold particle on its surface. (Pseudomorphs of ikaite, paleoclimate proxy of water near 0°C).

D: Ikaite (3 concretions) found on western continental slope of Japan Sea for the first time.

(Mineral of calcium carbonate, Source is oxidizing methane)

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過去からやってきた金とメタン

A: 美しいグレンドン石結晶, B: その内部, C: 金の粒子 (サハリン東沿岸)

(イカ石の仮晶、水が0度近いことを表す古気候の温度指標)

D: イカ石 (炭酸塩鉱物の一種、酸化メタンが原材料) (日本海で初発見)