Taiwan, Germany seek methane hydrate—potentially vast new energy source

March 31 2013

Attendant of Japan's Gas Pavilion introduces an experiment of the "burning ice," methane hydrate, as a potential future source of energy in Nagakute, Aichi prefecture, on March 19, 2005. A research vessel carrying German and Taiwanese scientists set sail for waters off the island's southwestern coast on Sunday in search of this potentially vast new energy source.

A research vessel carrying German and Taiwanese scientists set sail for waters off the island's southwestern coast on Sunday in search of methane hydrate, a potentially vast new energy source.

The substance, a fossil fuel that consists of very densely-packed methane trapped in ice, is found beneath the seafloor on continental shelves and in the Arctic's permafrost.

Earlier this month, Japan announced it had successfully extracted the hydrate, known as "fire ice", from its seabed, a move it called a world first and a major breakthrough for the energy-starved nation.

The 4700-tonne German ship, called the "Sonne" will undertake a 50-day expedition at a cost of around $3.98 million, three-quarters of which will be funded by Germany and the remainder by Taiwan.

"This will be the first time we may be able to physically explore for the substance," Wayne Wang of Taiwan's National Science Council told AFP. Past studies have indicated reserves in the area could supply the island for up to 50 years.

Nuclear energy currently accounts for around 20 percent of the island's energy mix but has become increasingly controversial in recent years following Japan's atomic crisis.

Taiwan is heavily dependent on costly oil imports mainly from the Middle East and Africa.