



China to Industrialize Sea Ice Desalination

On January 14, a research team from Beijing Normal University signed a sea ice desalination technology transfer agreement worth RMB 7.5 million with Beijing Huahai-deyuan Technology Co., Ltd.

“Unlike sea water desalination, our unique work is to extract fresh water from sea ice,” said Professor Gu Wei, head of the research team. The Circum-Bohai Sea Region is dense in population but less so in precipitation, therefore, fresh water resources there are in critical supply. The Bohai Sea, a gulf on the coast of northeastern China that freezes during winter, is located at the lowest latitude of its kind in the world. Launched in 1995, the research team has uncovered the basic principles and technology of sea ice desalination and developed the necessary equipment for the process, including an ice-breaking platform and an ice-gatherer.

“The cost of desalinated water has dropped from RMB 6 to RMB 5 per ton, and for mass production the price is expected to be less than RMB 4 per ton,” said Gu. “Moreover, the technology produces zero emissions during the entire process, solving the problem of bittern release.”

According to Gu, sea ice has been regarded as a natural disaster, threatening fixed drilling platforms and shipping traffic. The technology will turn this danger into a valuable resource.