# Press Release

19/2018

## Gas hydrate research: Advanced knowledge and new technologies
### After ten years, the SUGAR project concludes with a conference in Potsdam

***23 March 2018 / Kiel, Potsdam.*** **Gas hydrates are ice-like compounds of water molecules with gases such as methane. They occur in large quantities in the continental slopes of ocean margins. Due to the enclosed methane, they are considered a potential source of energy. Funded by the Federal Ministry of Economics and the Federal Ministry of Research, and coordinated at the GEOMAR Helmholtz Centre**

Another example of technology developed within SUGAR is the reservoir simulator LARS (LArge Reservoir Simulator) at the GFZ. It is a 425-liter steel tank equipped with numerous sensors. In this tank, gas hydrates can be formed in sediments under nature-like conditions. "With LARS we can test various methods for the extraction of methane from natural gas hydrate deposits on a technical scale," says Dr. Judith Schicks, head of the working group ógas hydrate researchôat the GFZ.

Basic research also benefits from such experimental facilities. Even after the end of the SUGAR project, gas hydrates are still interesting for scientists in Germany and worldwide. ñAmong other things, we want to find out whether they can cause landslides and tsunamis if they are destabilized as a result of ocean warming,òexplains Dr. Haeckel.

In addressing these issues, basic science has benefited from the insights and developments of the SUGAR project. ñBetter modelling of the seafloor or high-pressure test units for investigating gas hydrate dynamics in sediments will give new insights into the risk of landslides. Mobile drilling technology, developed within SUGAR, allows for cost-efficient recovery of necessary natural gas hydrate samples while retaining ambient pressure,òexplains Dr. Haeckel.

**Note:**
The joint SUGAR project was funded by the Federal Ministry of Economics and Technology and the Federal Ministry of Education and Research, with a total of 31 million euros in three phases (2008-2011, 2011-2014, 2014-2018).

**Links:**
www.sugar-projekt.de SUGAR project
www.geomar.de GEOMAR Helmholtz Centre for Ocean Research Kiel
www.gfz-potsdam.de Helmholtz Centre Potsdam - German Research Center for Geosciences

**Images:**
At www.geomar.de/n5809-e images are available for download.

**Kontakt:**
Jan Steffen (GEOMAR, Communication and Media), Tel.:+49 0431 600-2811, presse@geomar.de
Ralf Nestler (GFZ, Media and Communication), Tel.: +49 331 288-1049, presse@gfz-potsdam.de