



An ice model test showed in practice an escort operation where an icebreaker was escorting a large cargo ship with nearly twice the beam of the icebreaker.

Aker Arctic's annual customer event, the Arctic Passion Seminar, was held for the 15th time in March 2020. About 80 Arctic specialists and other professionals from around the world gathered in Helsinki just before the global corona pandemic began closing borders.

The opening speech was given by Kimmo Tiilikainen, the State Secretary of the Ministry of Economic Affairs, followed by Managing Director Reko-Antti Suojanen, who gave an update on Aker Arctic's latest projects. He emphasized the importance of long-term partnerships beginning with the initial design idea, continuing to the delivery of an icebreaking vessel and to verifying its performance in full-scale tests.

### Future transport needs

Mikhail Grigoryev from Gecon gave an overview of mineral resource developments in the Arctic and what transport schemes will be needed in the future.

Emanuele Putori from North Caspian Operating Company N.V. talked about the Kashagan oil fields and the challenges of shallow waters. The Caspian tug series of five Mangystau vessels have successfully supported the field for ten years. With fluctuating water levels, a new ultra-shallow marine fleet would be desired.

### Assisting wide-beam vessels

Head of ship design Mika Hovilainen from Aker Arctic discussed the benefits and disadvantages of increasing vessel sizes and how to assist wide-beam vessels with a narrow icebreaker.

Nina Krupina from the Arctic and Antarctic Research Institute (AARI) showed results from the Aker Arctic-designed icebreaker *Aleksandr Sannikov's* ice trials. The vessel's main purpose is to support loading operations at the Arctic Gates Terminal, keep the ice channel in operative condition, and escort tankers to and from the terminal. All characteristics were confirmed at the trials held in Ob Bay in 2019.

### Arctic LNG shipments

Yuta Orito from Mitsui O.S.K. Lines Ltd. presented their experiences of LNG shipping in the Arctic with the Arc7 icebreaking LNG carriers *Vladimir Rusanov*, *Vladimir Vize* and *Nikolay Urvantse*. Orito highlighted that the vessels have contributed to safe voyages in the Arctic and speeded up transportation substantially.

Renato Bolognese from Gaztransport & Technigaz (GTT) told about proven membrane tank use in Arctic LNG vessels. The cruise icebreaker under construction for Ponant has saved deck space using this technology.

Other guest speakers included Sergey Nikulshin from FSUE Atomflot, Viacheslav Konoplev from PJSC Norilsk Nickel, Jari Haapala from the Finnish Meteorological Institute and Ville Valtonen from Aker Arctic. ■

## ANNOUNCEMENTS



**Sabina Idrissova** has joined Aker Arctic as a project engineer in the Consultancy & Technology team. She graduated in 2019 with a Master's degree in Naval Architecture and Marine Engineering from the Saint Petersburg Marine Technical University. During her studies, Sabina also attended Arctic courses at the University Centre in Svalbard and she graduated with a Master's thesis on the prediction of ice loading on ships.



**Juuso Lindroos** has joined Aker Arctic as a project engineer in the Equipment Business and Special Projects team. Juuso graduated from LUT University (Finland) with a Master's degree in mechanical engineering. He finished his Master's thesis about the use of high strength steels in an ice strengthened container ship and its effects on fatigue life at Aker Arctic in May 2020. ■