

20th IAHR International Symposium on Ice 2010

June 14 ó 17th, 2010, Lahti, Finland

The 20th IAHR International Symposium on Ice was held at the Sibeliustalo Hall Conference Centre on the shore of Lake Vesijärvi in Lahti, Finland, June 14 ó 17th, 2010. Altogether 128 papers were presented in poster and oral sessions. The number of poster presentations was 29. The orals were divided into three parallel series 1) Ice engineering, 2) Sea ice and lake ice science, and 3) River ice, with nearly equal numbers of in each series. Each day started with invited talks for all participants, and thereafter the three parallel sessions were started.

Programme

The symposium was completed in four days. Oral presentations were given in 3½ days, and half-day was for boat excursion into the nearby lakes. Posters were shown all time in coffee break lounge, and one late afternoon was reserved for poster authors to be present at their posters. The social programme included icebreaker on the 14th and banquet on the 16th of June, in addition to the boat trip.

The official opening was given by Ms. Hannele Pokka, Permanent Secretary of the Ministry of Environment of Finland. Ice engineering sessions included Ice ridges, Experimental research, Ships, and special sessions on Numerical modelling of ice-structure interaction and Scaling. River ice sessions were held in Ice-hydraulic structures/River ice hydraulics, Modelling, Field observation techniques, Climate change, and in a special session on Ice jams. Sea ice and lake ice science sessions were Small scale processes, Icebergs, Sea ice thickness, Seasonal sea ice zone, Snow and ice structure, Ecology and environment, and a special session on Lake ice.

The number of participants was 158 representing 16 countries. There were 34 participants from the host country, more than five participants from Canada, China, Japan, New Zealand, Norway, Russia, and USA, and less than that from Estonia, Germany, Kazakhstan, Lithuania, Netherlands, Poland, South Korea, and U.K. There were nine accompanying persons and six sponsors were present with their exhibitions.

Invited presentations

Invited presentations was given in the opening session by Dr. Hanna Johansson (University of Helsinki, Art History Division, Finland) titled "Snow and ice in arts", which provided another viewpoint to look into ice and snow. Professor Mauri Määttänen (Technical University of Finland) gave a host's talk "Ice research and engineering in Finland", and Dr. Spyros Beltaos (National Water Research Institute, Burlington, Ontario) talked of "Assessing ice-jam flood risk: methodology and limitations". Professor Vernon Squire (University of Otago, New Zealand) lectured on "Contemporary perspectives on ocean wave / sea ice interaction", Dr. Tuomo Kärrä (Norwegian University of Science and Technology, Trondheim) lectured on "Simulation of multi-modal vibrations due to ice actions", and Professor Knut Høyland (Norwegian University of Science and Technology, Trondheim) lectured on "Thermal aspects of model basin ridges". Dr. Jia Wang (NOAA Great Lakes Research Laboratory, Ann Arbor, Michigan) gave the presentation "Great Lakes Ice Research: Climate diagnosis and modeling" and the presentation of Dr. Vladimir Melentiev (Nansen International Environmental and Remote Sensing Centre, St. Petersburg, Russia) titled "Ecologically Significant and Hazardous Ice Phenomena in The Gulf of Finland and Adjoined Water Bodies: Results of Study Based on Satellite SAR/ASAR Survey".

Awards

The Ice Research and Engineering Award 2010 was granted to Professor Torkild Carstens, retired from SINTEF and the Norwegian University of Science and Technology (NTNU), Trondheim. He was born on March 14, 1931 in Vadsø, Norway. He graduated from the Norwegian Institute of Technology in Trondheim, and obtained his PhD in the University of California, Berkeley in 1964 on stratified flows. From 1973 he was a professor in hydraulics and head of the River and Harbour Laboratory in Trondheim until his retirement in 2001. Professor Carstens was IAHR president in 1990-1995, and during his time a novel system with differentiated fee structure was structured for IAHR, allowing a reduction for Third World Countries. He devoted much of his time also to IAHR Ice Committee and was instrumental in the arranging of the 1994 IAHR Ice Symposium in Trondheim. Professor Carstens is well known for his achievements in river ice and coastal ice investigations. By means of his international network he became a door opener and mentor for international collaboration among MSc and PhD students. Professor Carstens is recognised as the creator of the now famous Trondheim ice research and engineering team.

The Best Student Paper Prize was granted to Nicolas Serré, whose presentation titled "Loads from ice ridge keels - experimental vs. numerical vs. analytical". He is a student in Norwegian University of Science and Technology, Trondheim, and was the single author of the awarded paper. This award was established in 1994 and in total eleven students have been awarded including the one for 2010 Symposium.

Proceedings

This was the first time the Symposium Proceedings was published on CD-ROM only. CD with the papers completed before the symposium (almost all were so) was distributed at the symposium registration desk (ISBN 978-952-10-5979-7). Post-symposium papers will

be added in September 2010, and the final proceedings will be available free in IAHR web site later. In 2008 both CD-ROM and paper version were produced for the proceedings.

Next Symposium

It was announced that 21st IAHR International Symposium on Ice will be held in Dalian, China, in June 11-15, 2012 (<http://slcoe.dlut.edu.cn/ice/iahr2012.html>). Invitation to Dalian was given by Professor Li Zhijun.

Matti Leppäranta, Chairman of the Local Organizing Committee
Department of Physics, University of Helsinki
Box 48, FI-00014 Helsinki, Finland
Email matti.lepparanta@helsinki.fi