

**Wednesday, 12 June**

<b>Parallel session 3</b>			
Room Session Chairs	Senaatszaal Ice mechanics IV/V <i>A. Polojärvi</i> <i>V. Bonath</i>	Van Hasseltzaal Ship resistance in ice II/III <i>K.J. Eik</i> <i>M. Elo</i>	Commissiekamer 3 Ice and structures in ice <i>A. Kinnunen</i> <i>T.S. Nord</i>
13:30 - 13:50	Experiments on the micromechanics of ice using scanning electron microscopy <i>M.W. Shortt, P.R. Sammonds</i>	Study on ship resistance characteristics in pack ice fields <i>S.Y. Jeong, H.S. Kim</i>	Rubble height prediction based on a rubble mass conservation model <i>Y. Wang, L.H. Poh, K. Croasdale</i>
13:50 - 14:10	Experimental tests on the consolidation of broken and brash ice <i>R. Bridges, K. Riska, A. Haase</i>	A ship in compressive ice: an overview and preliminary analysis <i>F. Li, P. Kujala, J. Montewka</i>	Ice actions for hydraulic structures of primary flood defense Afsluitdijk - "Applying ISO 19906 at home" <i>F. Besseling, A. Lengkeek, H. de Waard, K. Nieuwenhuis</i>
14:10 - 14:30	Acoustic emissions as a measure of damage in ice <i>B. Lishman, A. Marchenko, M. Shortt, P.R. Sammonds</i>	The effect of ship bow shape on ridge resistance in a narrow ridge <i>H. Gong, A. Polojärvi, J. Tuhkuri</i>	Ice loads on an axi-symmetric vessel due to managed first-year ridges <i>K. Croasdale</i>
14:30 - 14:50	Adhesion of ice to concrete: Bonds and their influence on abrasion mechanisms <i>A. Barker, S. Bruneau, B. Colbourne</i>	Analysis of Oden icebreaker performance in level ice using Simulator for Arctic Marine Structures (SAMS) <i>N. Raza, M. van den Berg, W. Lu, R. Lubbad</i>	Level ice crushing pressures for estimating mooring loads <i>J. Thijssen, M. Fuglem, F. Ralph</i>
14:50 - 15:10	Mechanism of shear collapse in sea ice <i>A. Sakharov, E. Karulin, A. Marchenko, M. Karulina, P. Chistyakov</i>	Experimental-analytical study of the platform "North Pole" stability under the conditions of intensive ice pressures <i>L.A. Svistunov, P.V. Maksimova, V.A. Likhomanov, A.V. Chernov, N.A. Krupina</i>	Ice load signatures for ridge actions on wind turbines with conical collars <i>K. Croasdale, J. Thijssen, N. Allyn</i>
15:10 - 15:40	<b>Coffee break</b>		<b>Foyer</b>
<b>Parallel session 4</b>			
Room Session Chairs	Senaatszaal Ice mechanics V/V <i>A. Polojärvi</i> <i>V. Bonath</i>	Van Hasseltzaal Ship resistance in ice III/III <i>K.J. Eik</i> <i>M. Elo</i>	
15:40 - 16:00	Peridynamic modelling of polycrystalline ice <i>W. Lu, M. Li, B. Vazic, S. Oterkus, E. Oterkus</i>	Study on the calculation method of ice load of icebreaker in straight line state <i>L. Li, W. Wang, H. Ma, X. Meng, G. Han</i>	
16:00 - 16:20	Investigation of mixed mode fracture of L-shaped sea ice beams <i>I.I. Gribanov, A.V. Marchenko, A. Murdza, R.S. Taylor, R. Sarracino</i>	Estimation of the fatigue damage for an ice class vessel under broken ice condition using a simplified method <i>J.H. Kim, Y. Kim</i>	
16:20 - 16:40	Soil mechanics measurement methods applied in model brash ice <i>R. Matala, T. Skogström</i>	Modification of ship routing algorithms for the case of navigation in ice <i>A. Topaj, O. Tarovik, A.A. Bakharev</i>	
16:40 - 17:00	Characterization of high pressure zone (hpz) failure and linkages with structural response during medium-scale indentation tests <i>R.B. Hossain, R.S. Taylor</i>	An optimal route of a vessel with presence of drifting ice feature <i>A. Voitkunskaia, T. Zvyagina, P. Zvyagin</i>	
19:00 - 23:00	<b>Conference Dinner</b> <i>2019 POAC Founders lifetime achievement award</i>		<b>Prinsenhof Museum</b>