

This is the 38<sup>th</sup> [newsletter](#) of the *Knowledge Centre Manoeuvring in Shallow and Confined Water*, which aims to consolidate, extend and disseminate knowledge on the behaviour of ships in shallow and confined water. In this newsletter, we discuss some of the posters that were presented at FEARS 2019 and we reflect for a moment on the career of Prof. Marc Vantorre, who retired last month.

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Several researchers of the Maritime Technology Department at Ghent University who are also associated with the Knowledge Centre, participated in the Faculty of Engineering and Architecture Research Symposium ([FEARS](#)) on the 19th February 2019 at the iGent Tower. Tianlong Mei showed a poster entitled "[Numerical study of ship wave interaction based on potential flow theory](#)". This research is concerned with developing an original code, based on potential flow theory, in order to assess ship wave interaction problems. With this code wave-induced motions can be studied. These motions not only lead to added resistance, but also to wave induced drift forces that can affect manoeuvrability, hence leading to potential safety issues. In his poster entitled "[Waves in ship manoeuvring simulators](#)", Luca Donatini outlined a way to process conventional directional wave spectra to obtain wave amplitude phasors which can be used to efficiently calculate the free surface elevation on a square horizontal grid by means of a twodimensional inverse fast fourier transform. The same concept can be applied for the calculation of wave induced pressure at discrete depths, obtaining a 3D matrix of pressures which can be used for fast calculations of forces on a hull. Marc Mansuy showed a poster entitled "[Optimization of a ship turning basin using manoeuvring simulators](#)". The poster deals with a study where the final dimensions and equipment of an inland ship turning basin were derived from real time simulations. Last but not least, Thibaut Van Zwijnsvoorde won the competition for the best pitch presentation of his research on "Moored ship safety".



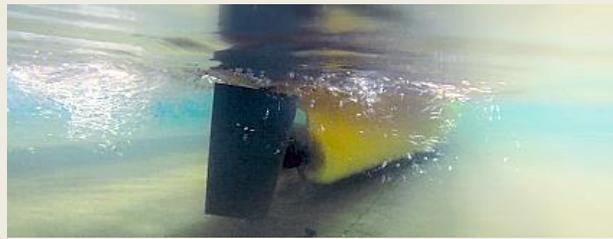
On 28 February, an academic session was organized at Flanders Hydraulics Research on the occasion of the retirement of Prof. Marc Vantorre. Marc was professor at the Division of Maritime Technology at Ghent University for 25 years and has numerous publications to his name, not only in the field of ship manoeuvring in shallow and confined water, but also in the field of wave energy, winning several scientific awards in the process. He was a member of several

PIANC Working Groups and was member of the Manoeuvrability Committee of the 21st and 22nd International Towing Tank Conference (1993-1999) and secretary of the Manoeuvring Committee of the 23rd International Towing Tank Conference (1999-2002). He has been a member of the Marine Advisory Board for the Panama Canal Authorities since 2005 and has been on the editorial board of several scientific journals.

The audience was welcomed by Prof. Frank Mostaert, Department Head of Flanders Hydraulics Research, and by Prof. Evert Lataire, who succeeds Marc as Head of the Division of Maritime Technology at Ghent University. Prof. Patrick De Baets, Dean of the Faculty of Engineering and Architecture at Ghent University, Dr. Katrien Eloot, senior nautical expert at Flanders Hydraulics Research and Mr. Niko Fierens, COO at MULTI, preceded Marc with speeches, which were given in the [Towing Tank for Manoeuvres in Confined Water](#). A fitting venue for the occasion, as Marc contributed tremendously to its recognition as one of the top facilities in the world for ship manoeuvring research in shallow and confined water and he was representative of the facilities at the ITTC since 1995.



About 50 papers are expected to be presented at the [5th MASHCON conference](#), which will be held in Ostend, Belgium, on 19 – 23 May 2019. The conference will pay special attention to manoeuvring in waves, wind and current, but all topics related to ship manoeuvring in shallow and confined water will be discussed.



On Tuesday 21 May, there will be a Special Symposium in honour of Prof. Marc Vantorre with keynote speeches from Prof. Cura-Hochbaum and Dr. Stratigaki. A preliminary program and more information can be found on the [conference website](#).

The registration fees can also be consulted on the [conference website](#), which links to a secure online registration system. Early bird rates apply until 1 April 2019.



*Knowledge Centre  
Manoeuvring in Shallow and  
Confined Water*

Berchemlei 115  
2140 Antwerp  
Belgium

T +32 (0) 3 224 60 35  
E [info@shallowwater.be](mailto:info@shallowwater.be)

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