

In cooperation with: BME Faculty of Civil Engineering Department of Construction Materials and Technologies Department of Structural Engineering Department of Structural Mechanics

and Hungarian Chamber of Engineers, Dept. Structures (MMK TT)

Tárgy: Meghívó Ankétra

Az ülés helye (PLACE):

Az ülés kezdete (DATE):

BME Building K. 1st Floor Room 741111 Budapest, Műegyetem rkp. 3.29 (Friday) March 2019, from 14.15 to 15.45

INVITATION - **MEGHÍVÓ**

DESIGN of marine concrete structures

Tengerben álló vasbeton szerkezetek TERVEZÉSE

Kedves Kolléga!

Tisztelettel meghívom a *fib* Magyar Tagozatának következő ülésére, amelynek programja lesz:

Unlike Hungary Norway has a long coastline towards the sea, some 100 000 km if including islands. More than 2/3 of Norway's export income comes from the sea; predominantly oil&gas, seafood, shipping and power.

The future will see an increased use of the sea, for food, infrastructure, energy, recreation, dwellings and industrial development, to mention some. Demography shows an exponential population growth in cities, where land is scarce and expensive. Many of the cities of the world lies close to the sea, and many of them at low altitude. The rise of the sea level is regarded a threat.

Fortunately, well-designed and well-built concrete structures behave nicely in seawater, and fortunately, we know how to design these structures.

The presentation will highlight marine concrete structures of various types: oil&gas platforms, infrastructures, fish farming, renewable energy structures, recreation and dwellings.

Some of the marine concrete structures float permanently, some only during construction. For structures that float, weight is very important. Hence, design is important. You learnt last year from Prof. Hugo Corres, that conceptual design is important, so it is for marine concrete structures.

Designing for 30 m waves and 300 m water depth calls for unusual structures, very unlike laboratory test specimens. Consequently, empirical design rules may not be adequate. Design is described in some detail, including loading.

fib recognizes the importance of marine concrete structures, and publish state-of-the-art bulletins. *Presentation is given in English.*

Presented by - Előadó:



Tor Ole Olsen President of *fib*

Civil Engineer, B.A.Sc and M.A.Sc from University of Toronto. 45 years of structural design at Dr.techn.Olav Olsen, a Norwegian structural engineering consultancy. Olav Olsen is the father of Tor Ole Olsen, and founded the company in 1962. Main area of work is design of marine concrete structures, conceptual and detail design, some 3 million m³ of concrete, and also other types of structures. Past chairperson of the Norwegian Concrete Association, honorary member of same. President of *fib* (International federation of concrete). Participated in a number of research projects, national and international. Author of several papers and books.

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