

International Lectures, Publications and Patents about Tsunami-Flooding-Barriers (TFB)

2014 International Conference on Coastal & Ocean Engineering Dubai April 4 - 5, 2014

Tidal Energy and Large-Scale Fish Farming, Benefits of Novel Tsunami and Flooding Barriers: Hans J. Scheel

6th International Tsunami Symposium Nicoya, Costa Rica September 2 – 5, 2014

Novel Tsunami Barriers and their Applications for Hydroelectric Energy Storage, Fish Farming, and for Land Reclamation: Hans J. Scheel

Seminar at Leichtweiss-Institute for Hydraulic Engineering & Water Resources, Dept. of Hydromechanics & Coastal Engineering, Technical University Braunschweig

December 4, 2014: *Novel Tsunami and Flooding Protection Barrier:* Hans J. Scheel

7th International Tsunami Symposium ISPRA, Italy September 12 – 15, 2016

Novel Tsunami and Flooding Barrier, Possible Solution for the Fukushima Water and Waste Problems: Hans J. Scheel

9th International PIANC COPEDEC Conference Rio de Janeiro October 16 – 21, 2016

Submerged Vertical Cylinder Barriers to Prevent Flooding and Erosion: Hans J. Scheel

Publications

-*Novel Approach to Tsunami, Flooding Barriers:* Hans J. Scheel, **Sea Technology** 12.2013, 81.

-*New Type of tsunami barrier:* Hans J. Scheel, **Natural Hazards, J. International Society for the Prevention and Mitigation of Natural Hazards** 70 (2014)951-956.

-*Novel Tsunami Barriers and their Applications for Hydroelectric Energy Storage, Fish Farming, and for Land Reclamation:* Hans J. Scheel, **Science of Tsunami Hazards, J. of Tsunami Society International** 33 (No.3) (2014)170 – 192.

-*Hydrodynamic Efficiency and Loading of a Tsunami-Flooding Barrier (TFB):* Hisham Elsafti, Hocine Oumeraci, Hans J. Scheel, **Coastal Engineering 2016 (ICCE) V.35**, 1-12.

-*Experiences from the Fukushima Disaster:* Hans J. Scheel, book chapter in “**Environmental Risks**”, **InTech** (online and hardcopy), **October 2018**.

Granted Patents about Tsunami-Flooding-Barriers and their Construction

-Republic of Singapore No. 2014009559 granted 18. August 2016

SUBMARINE CONSTRUCTION FOR TSUNAMI AND FLOODING PROTECTION, FOR TIDAL ENERGY AND ENERGY STORAGE, AND FOR FISH FARMING

-New Zealand No. 620978 granted 1. December 2015

SUBMARINE CONSTRUCTION FOR TSUNAMI AND FLOODING PROTECTION, FOR TIDAL ENERGY AND ENERGY STORAGE, AND FOR FISH FARMING

-Europe No. 3060722 granted February 21, 2018

SUBMARINE CONSTRUCTION FOR TSUNAMI AND FLOODING PROTECTION, FOR TIDAL ENERGY AND ENERGY STORAGE, AND FOR FISH FARMING

Validated in **Belgium** (17.5.2018), **Denmark** (18.5.2018), **Germany** (No. 60 2013 033 469.2, .5.2018), **Great Britain** (.5.2018), **Netherlands** (18.5.2018)

-Japan No. 2013-023131 granted March 30, 2018

SUBMARINE CONSTRUCTION FOR TSUNAMI AND FLOODING PROTECTION, FOR FISH FARMING, AND FOR PROTECTION OF BUILDINGS IN THE SEA

-China No. 2014100468539 granted May 18, 2018

SUBMARINE CONSTRUCTION FOR TSUNAMI AND FLOODING PROTECTION, FOR TIDAL ENERGY AND ENERGY STORAGE, AND FOR FISH FARMING

-Australia No. 2014 200 674 granted August 23, 2018

SUBMARINE CONSTRUCTION FOR TSUNAMI AND FLOODING PROTECTION, FOR TIDAL ENERGY AND ENERGY STORAGE, AND FOR FISH FARMING.

A patent application in UAE is pending.