



## **Open Science: a first step towards Science Communication**

Ivo Grigorov and Peter Tuddenham

Danish Technical University, DTU Aqua, Research Secretariat, Charlottenlund, Denmark (ivgr@aqua.dtu.dk)

As Earth Science communicators gear up to adopt the new tools and captivating approaches to engage citizen scientists, budding entrepreneurs, policy makers and the public in general, researchers have the responsibility, and opportunity, to fully adopt Open Science principles and capitalize on its full societal impact and engagement.

Open Science is about removing all barriers to basic research, whatever its formats, so that it can be freely used, re-used and re-hashed, thus fueling discourse and accelerating generation of innovative ideas. The concept is central to EU's Responsible Research and Innovation philosophy, and removing barriers to basic research measurably contributes to engaging citizen scientists into the research process, it sets the scene for co-creation of solutions to societal challenges, and raises the general science literacy level of the public. Despite this potential, only 50% of today's basic research is freely available.

Open Science can be the first passive step of communicating marine research outside academia. Full and unrestricted access to our knowledge including data, software code and scientific publications is not just an ethical obligation, but also gives solid credibility to a more sophisticated communication strategy on engaging society.

The presentation will demonstrate how Open Science perfectly compliments a coherent communication strategy for placing Marine Research in societal context, and how it underpin an effective integration of Ocean & Earth Literacy principles in standard educational, as well mobilizing citizen marine scientists, thus making marine science Open Science.