

Interspill 2012 Science Workshops

Understanding Oil Weathering (SW1)

The workshop was chaired by William (Bill) Lehr from NOAA and two additional presentations were provided by Per Johan Brandvik from Sintef and Gilbert Le Lann from *Cedre*.

The biographies of the speakers and their presentations are provided in PDF version.

The workshop was held on Tuesday 13th March at 13:30. The participation was good with approximately 50 people attending.

During the debate with the attendance, several interesting issues were raised and in particular the following ones:

- Several different models exist today, and it would be interesting to seek some integration as end users do not always see which model performs better under which conditions. Coupling with drift models would also bring some added value;
- Where pollutant samples are available, carrying out some weathering experimentation in parallel to modeling would help in formulating recommendations to authorities in charge of response operations;
- The US have now running an Oil Spill Research and Development Plan established to filled gaps identified during Deepwater Horizon incident. This plan offers opportunities for funding R&D activities in relation to oil spill issues and it could be used as a support for weathering model development;
- The issue of modeling oil weathering in the case of underwater spill was raised. It was answered that some work, including experimentation, related to this question was done in the past. The specific R&D programs set up after the Deepwater Horizon incident both by industry and the administration include this subject;
- As this was already mentioned, several weathering models exist. Each model has its own set of input and output parameters to characterize the pollutant and its physical and chemical properties at the time of the spill and after some hours in the environment. An effort to harmonize the parameter sets and perhaps define a common set is necessary. This would enable a comparison of results obtained from different models and would ease model integration already evoked;

- The US intend to prepare a new version of their weathering model ADIOS identified as ADIOS 3. They offer this initiative for international collaboration to those who could provide either modeling algorithms or oil data.