

Interspill 2012

London, 12-15 March



Understanding oil weathering: pilot scale experiments and sample representativeness

Julien GUYOMARCH– Cedre, Brest, France

715, rue Alain Colas - CS 41836 - 29218 BREST CEDEX 2 -
FRANCE

Tél. : +33 2 98 33 10 10 - Fax : +33 2 98 44 91 38

<http://www.cedre.fr>

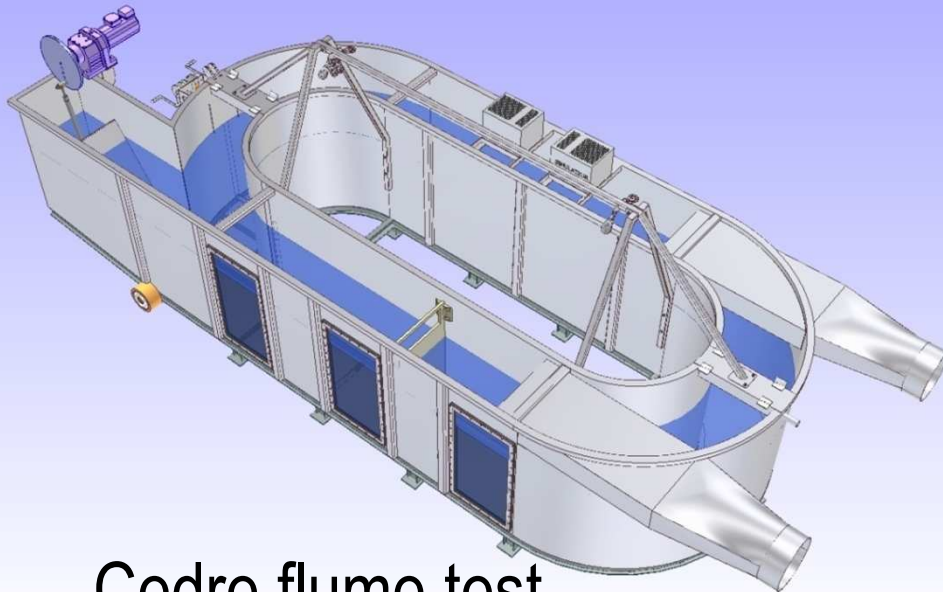
contact@cedre.fr

Need for pilot scale experiments

Simulation of the balance between the emulsification/natural dispersion processes:

- Laboratory: distillation then emulsification
- Pilot scale: all the processes simultaneously

www.cedre.fr
contact@cedre.fr

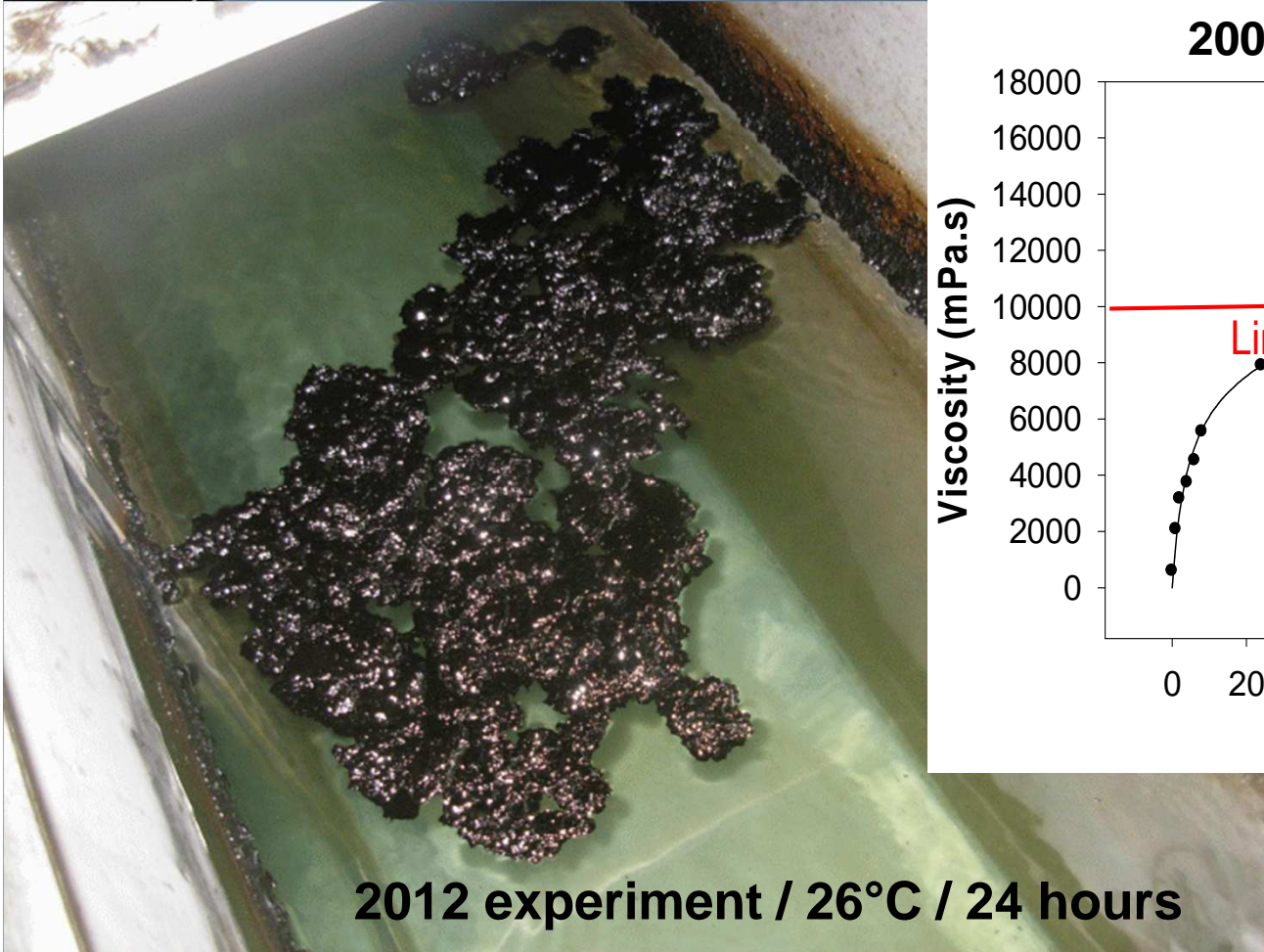


Cedre flume test

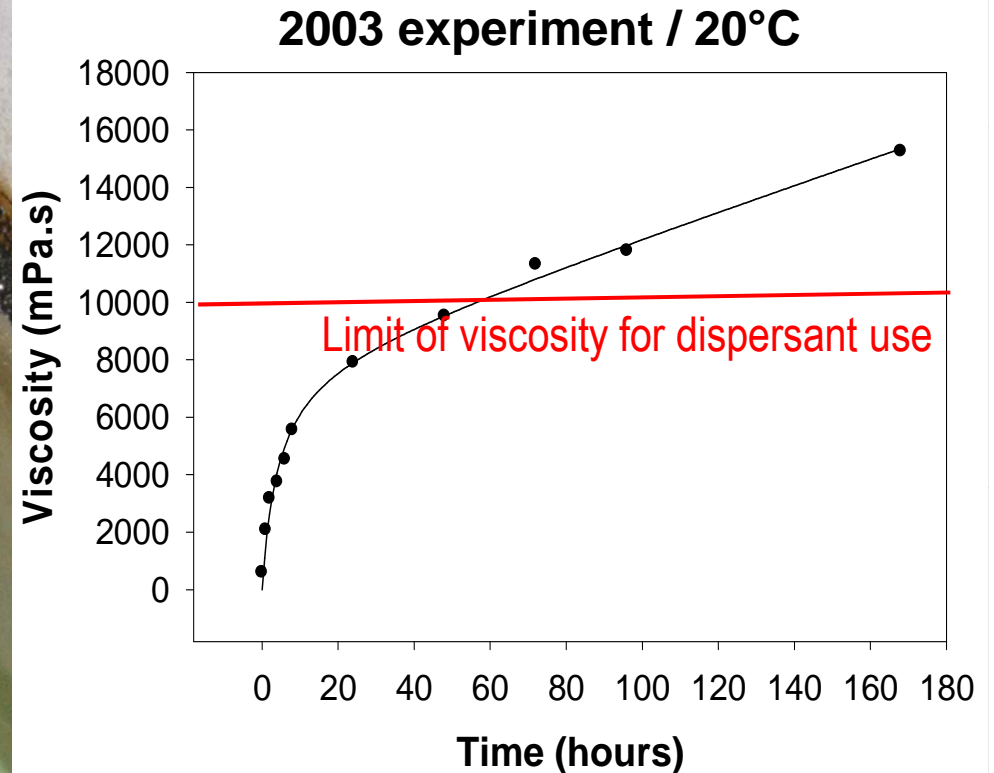


SINTEF flume test

Sample representativeness

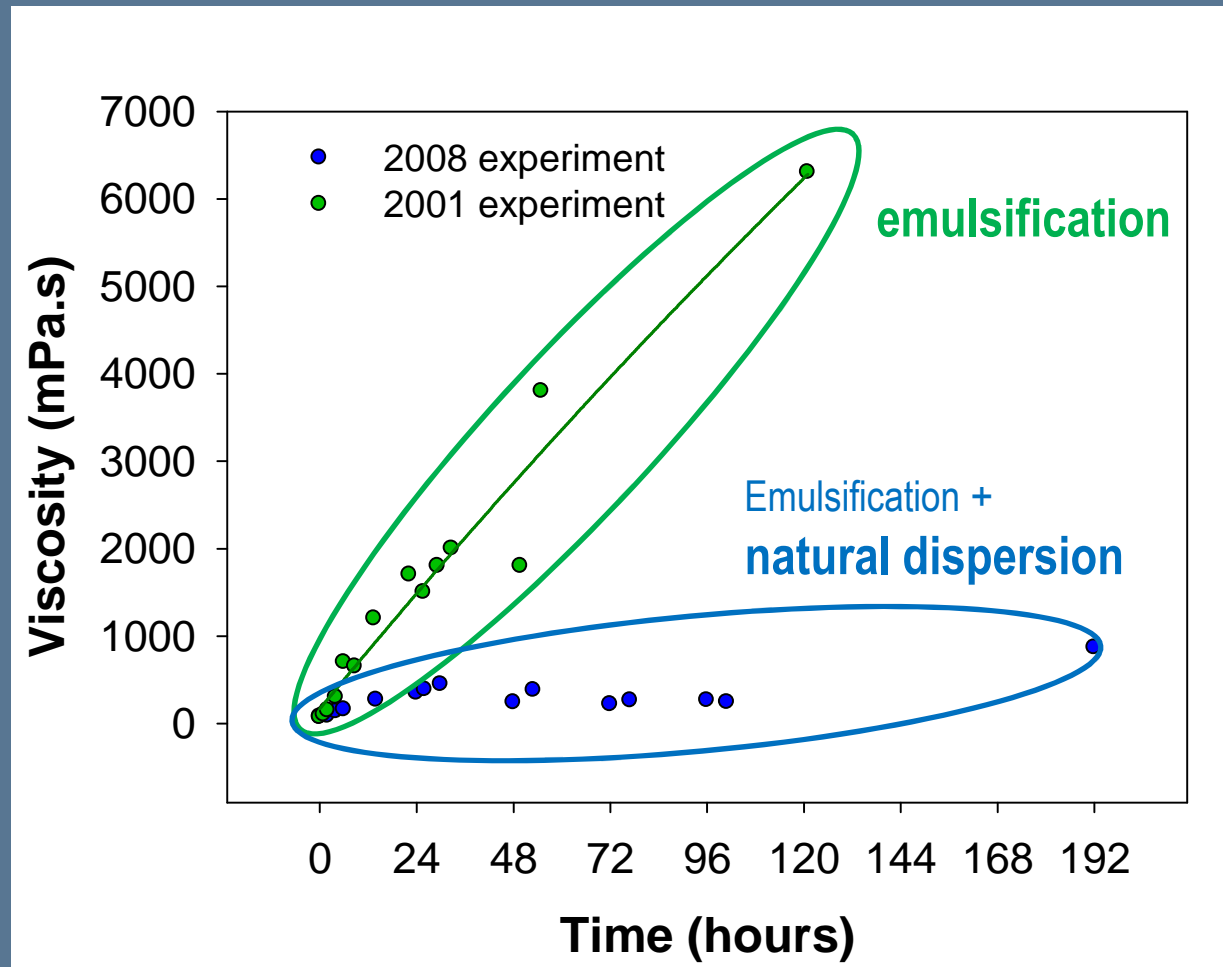


2012 experiment / 26°C / 24 hours



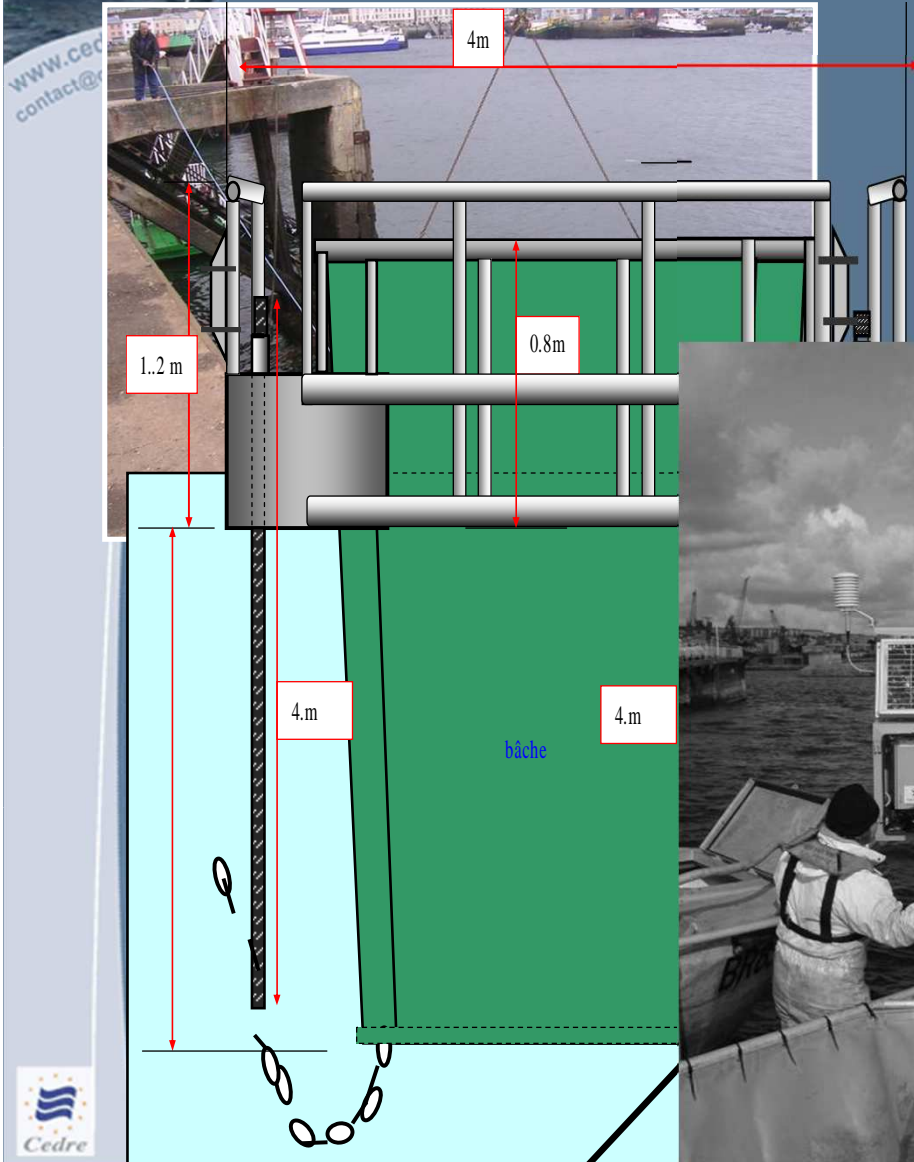
Differences of wax content: evolution of the extracted crude oil?
For how long dispersants can be used?

Sample representativeness



Evolution of additives added to the processed oil?
Is it necessary to apply dispersants?

Need for validations in “real conditions”: An alternative with small field scale experiments



Effect of environmental parameters

Weather station (Wind, sunshine, air temperature...)