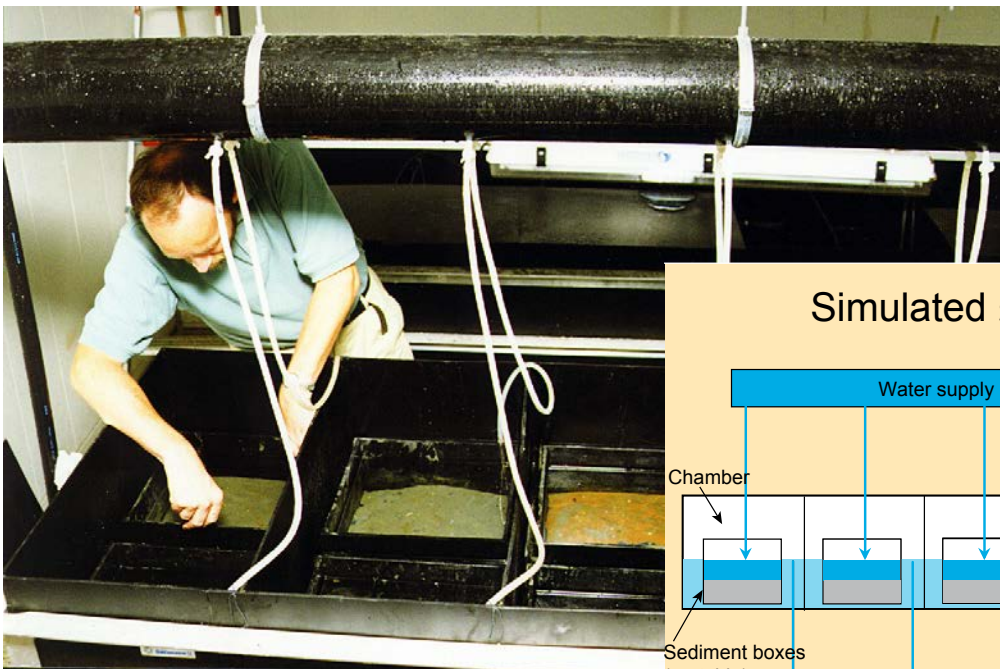
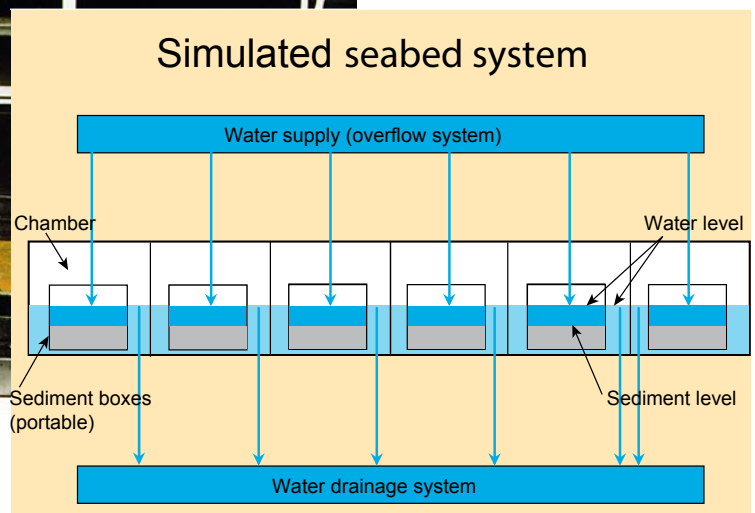


Simulated seabed systems for the environmental impact evaluations of discharges and cleanup-strategies



Ecotoxicological studies in marine sediments



Discharges of chemicals to the marine environment

- Relevant test systems for toxicity, biodegradation and bioaccumulation.
- Evaluations of contaminants in harbour and coastal seabeds
- Use for development of in situ cleaning technologies

Principles of simulated seabed systems

- Controlled exposure system with intact seabed sediments and indigenous seabed organisms
- Simulation and variation of biological, chemical and physical parameters, and their interactions
- Contamination source applied under realistic conditions
- Obtaining mutual influence of anaerobic sediment degradation and toxicity



Bioremediation studies in meso-cosm basin.

Operation of test systems

- Temperature control (0-30°C)
- Continuous supply and exchange of fresh seawater
- Intact or manipulated sediments
- Exposure systems;
 - Simulated seabed system; 35x35x43 cm; 36 units
 - Mesocosm basins; 4x2x1 m; 4 units
- Water flow rate and current control

Multidisciplinary use of simulated seabed systems

- Effect studies and degradation
- Establishment of clean-up technologies for contaminated sediments
- Studies of clean-up operation effects. Simulating seabed, drill cutting piles and harbour sediment systems
- Transport processes in marine sediments



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