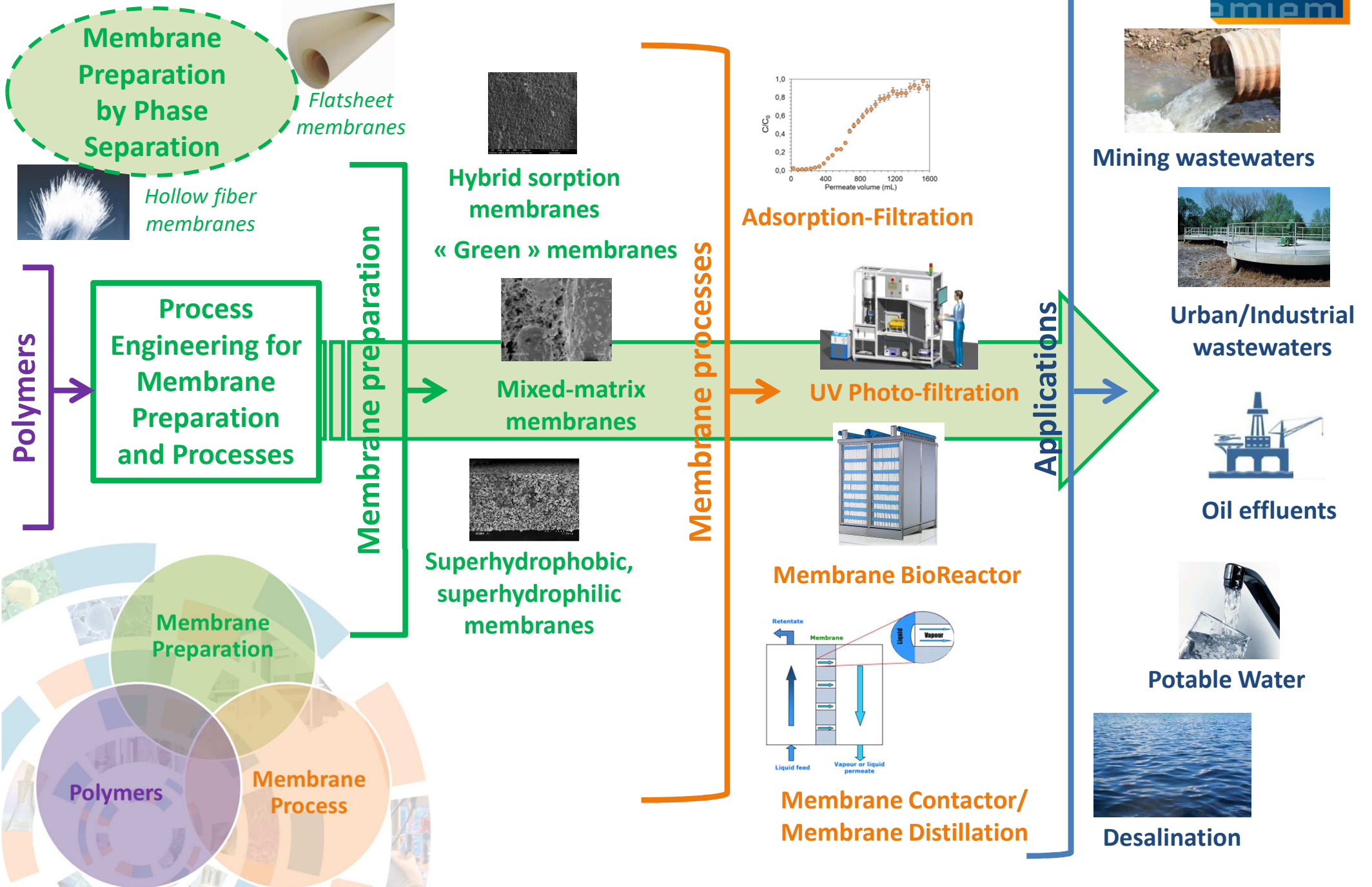


Polymeric Membranes for Water Treatment

From Membrane Preparation to Membrane Process



Mining wastewaters



Urban/Industrial wastewaters



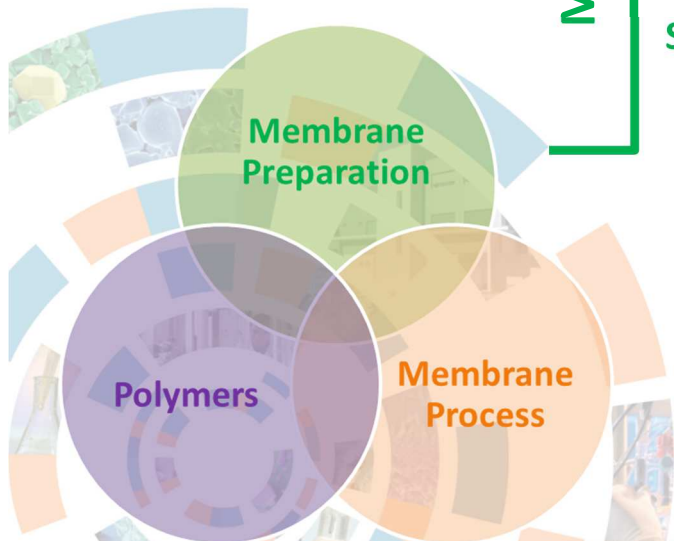
Oil effluents



Potable Water



Desalination



Polymers

Membrane preparation

Membrane processes

Applications

Membrane Preparation by Phase Separation

Process Engineering for Membrane Preparation and Processes

Hybrid sorption membranes « Green » membranes

Mixed-matrix membranes

Superhydrophobic, superhydrophilic membranes

Adsorption-Filtration

UV Photo-filtration

Membrane BioReactor

Membrane Contactor/ Membrane Distillation

Potable Water

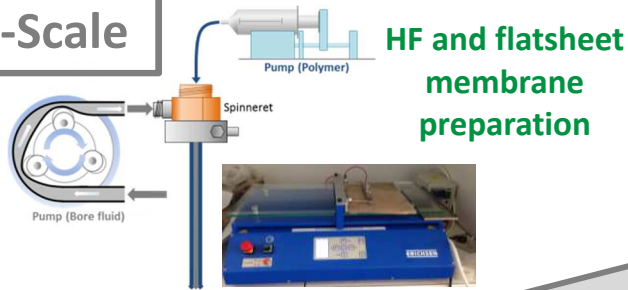
Desalination

Polymeric Membranes for Water Treatment

From Membrane Preparation to Membrane Process

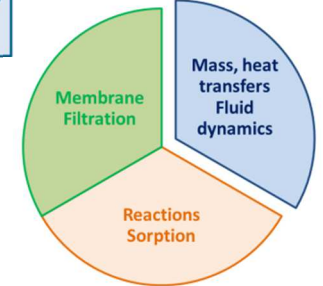
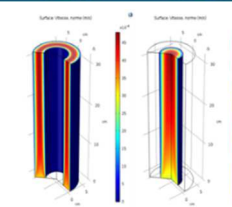
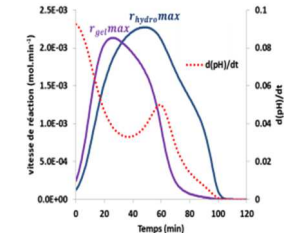
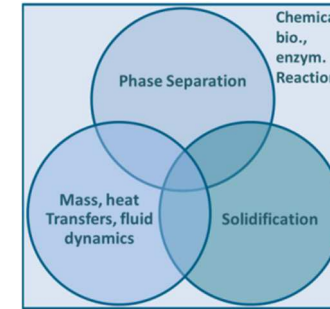


Multi-Scale



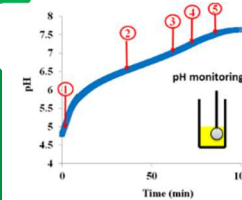
Pilot-scale

Experiments/Modelling

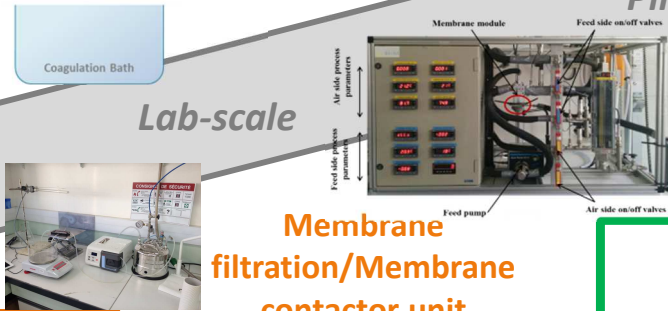


Simulations of transfers during membrane preparation and membrane processes

Membrane preparation in controlled operating conditions



Lab-scale

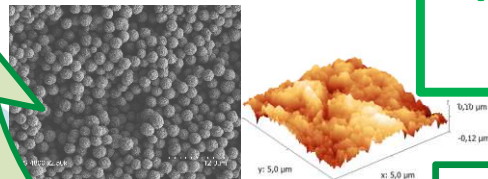


Membrane filtration/Membrane contactor unit

Process Engineering for Membrane Preparation and Processes

Membrane Characterization

Filtration and retention performances



Morphology

Mechanical resistance

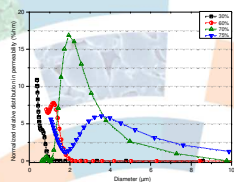


In-situ monitoring

Rheology



Membrane Process Performances



Porosimetry/Porometry



Surface properties measurements

System-scale

