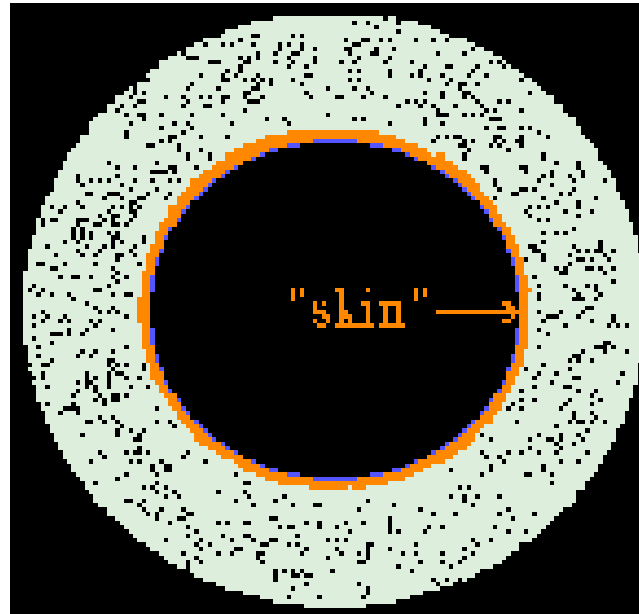


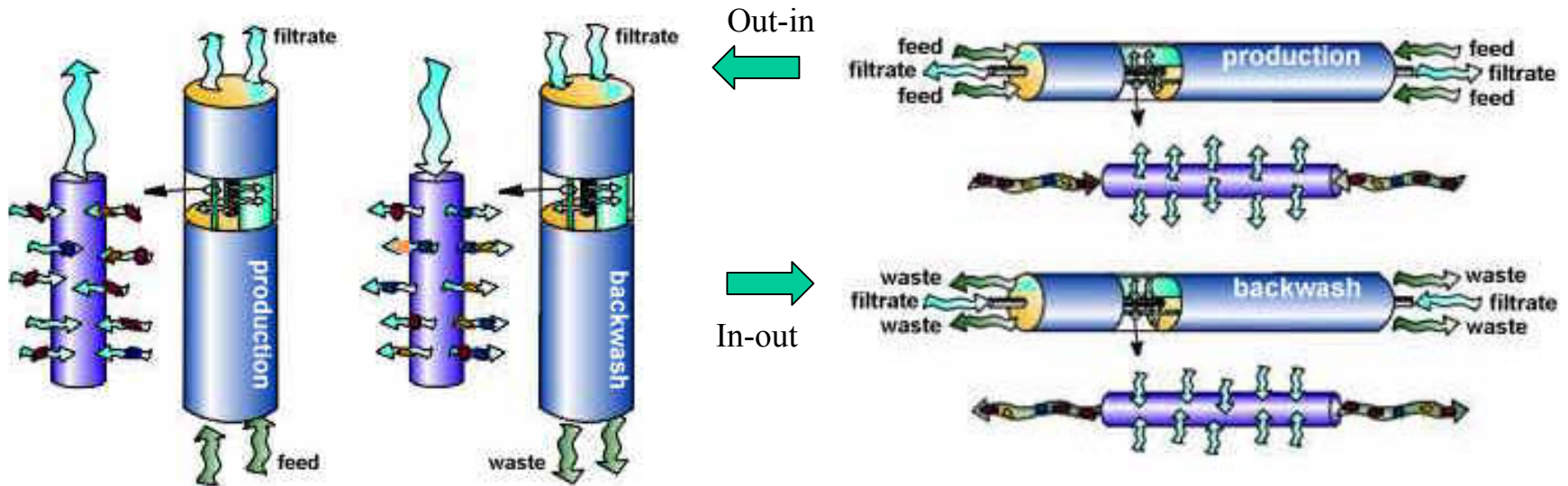
Membrane Separations

- Configuration:
 - Capillary (0.5-10 mm) and hollow fiber (<0.5 mm).
 - Active layer inside.
 - Hollow fiber: usually \varnothing_{in} from 40 to 120 μm and \varnothing_{out} from 85 to 250 μm .



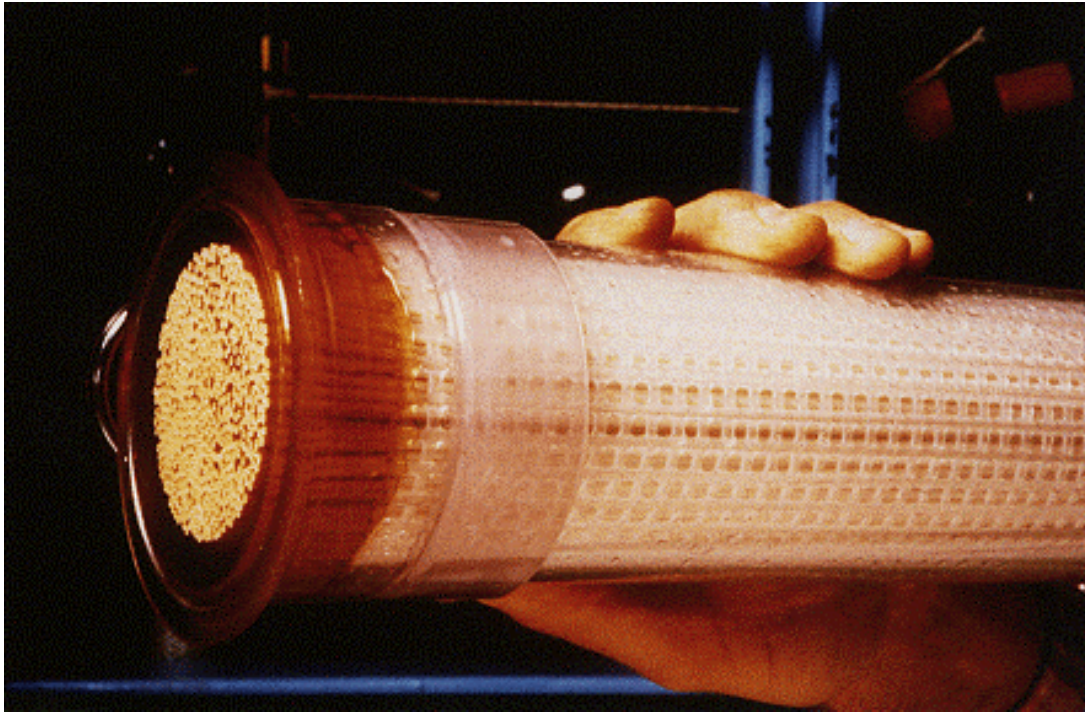
Membrane Separations

- Capillary, hollow fiber.
 - Usually, the permeate goes from outside to inside, but the flux also can be reversed.



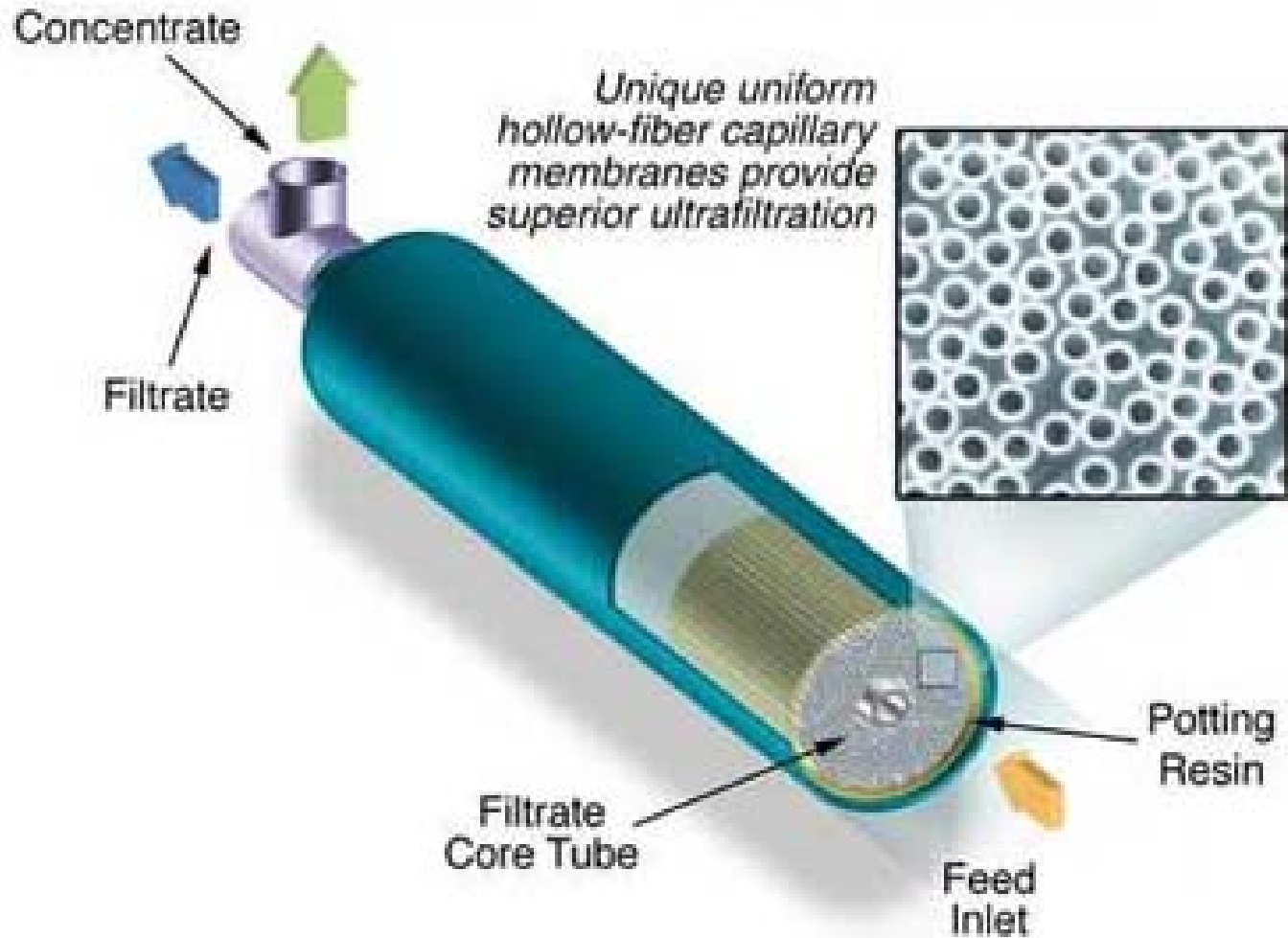
- Very high surface area/volume ratio.

Membrane Separations



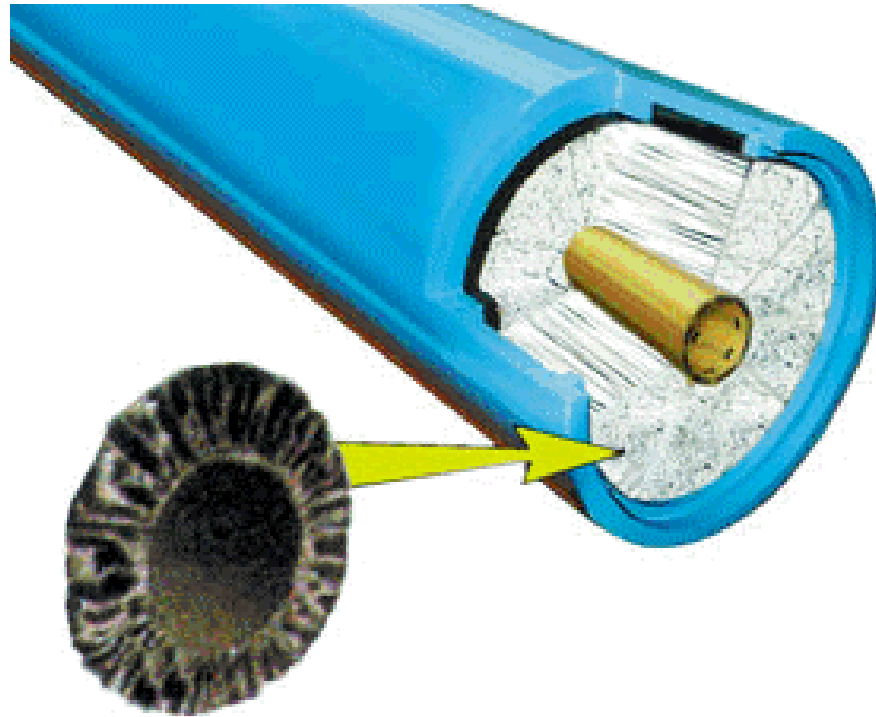
Capillary membrane
modules.

Membrane Separations



Hollow fiber module.

Membrane Separations



Hollow fiber module.

