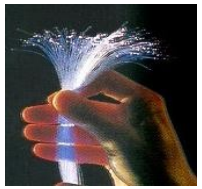
Properties and Applications of Fluoropolymers

Low Refractive Index → Optical Fibers & Coatings



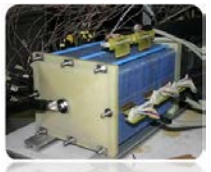
Low Surface Energy → Lubricity, Release

High Oil, Water & Soil Repellency → Protection of textiles, leather, paper, wood, glass, concrete, stone, metal

High Chemical, Thermal, Oxidative Stability → Protective coatings

Very Low Surface Tension → Surfactants & Fire Fighting Agents

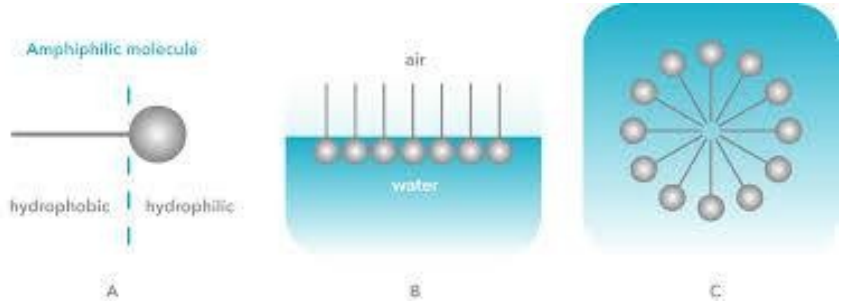
Electrochemical Stability → Li Ion Batteries & Proton Exchange Membranes

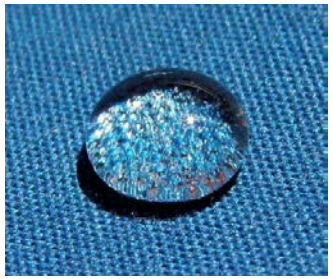


Insulation → Wire and Cable Industries

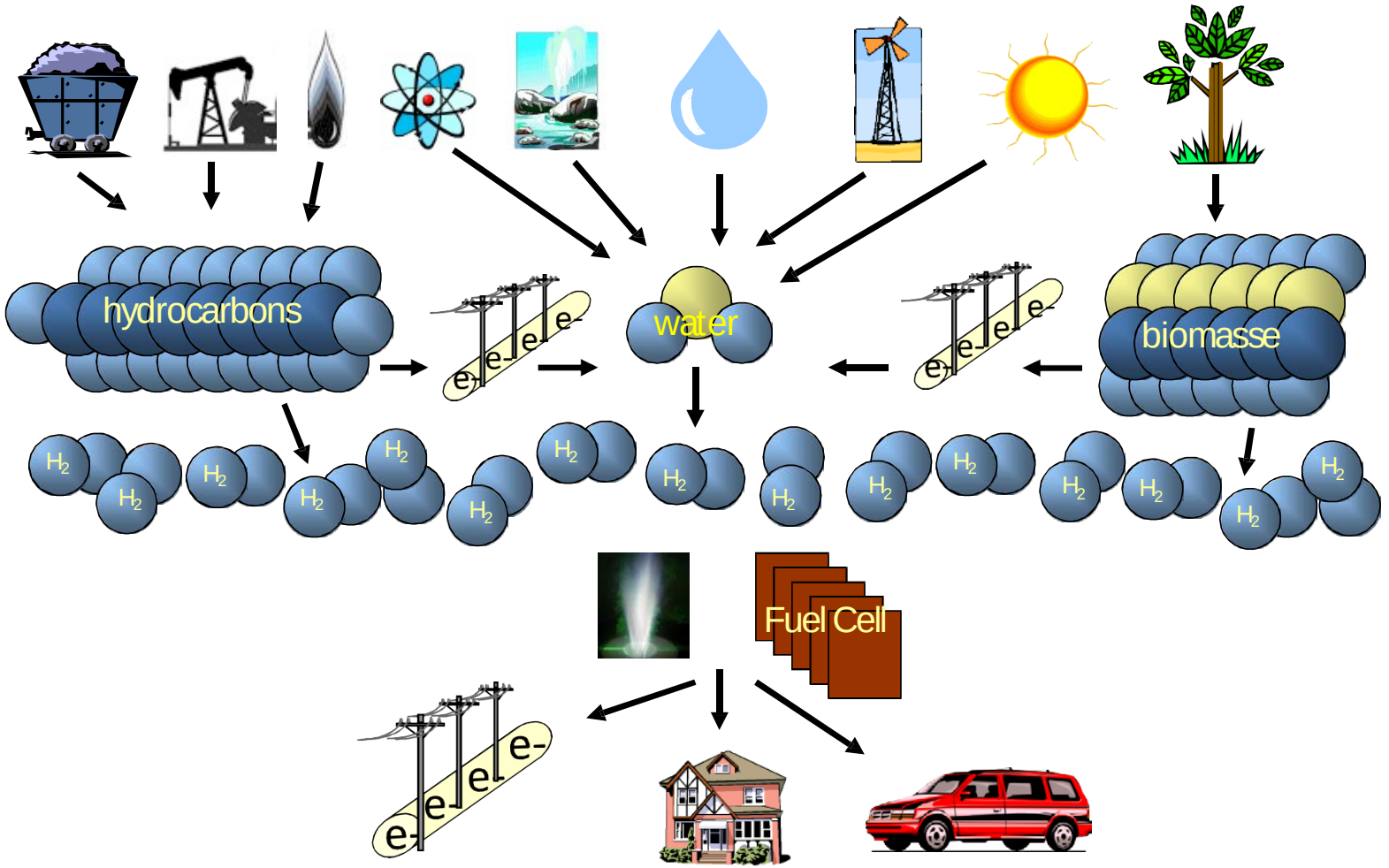
Why Fluorosurfactants

- Protection of surfaces (textile, paper, carpets, masonry, metal, leather)
- Stimulating fluids for oil recovery
- Fire-fighting foam, paints, and lubricants
- Electroplating and photographic emulsifiers

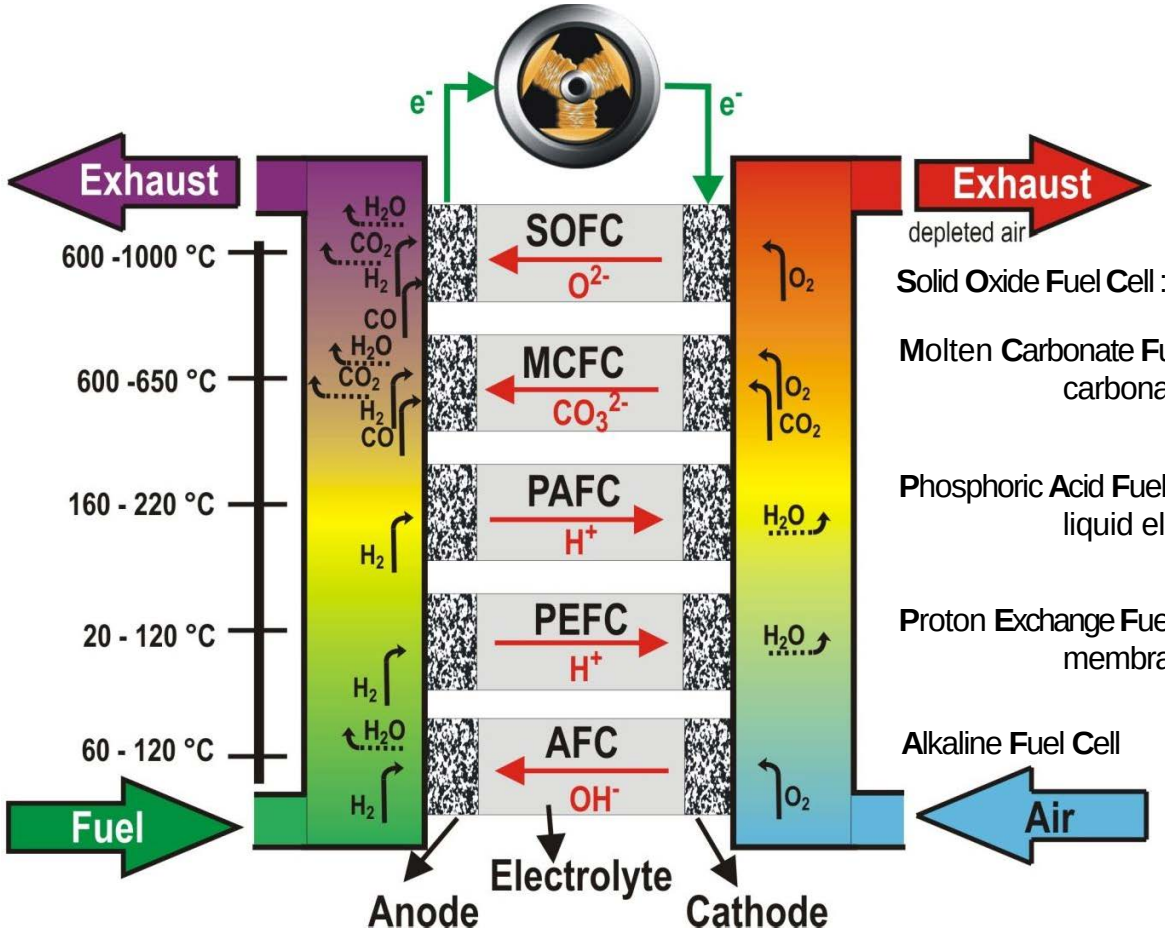




Different Sources of Energy: Routes to Hydrogen



Different types of FUEL CELLS



Solid **O**xide **F**uel **C**ell : ceramic

Molten **C**arbonate **F**uel **C**ell:
carbonate salt in ceramic

Phosphoric **A**cid **F**uel **C**ell :
liquid electrolyte

Proton **E**xchange **F**uel **C**ell:
membrane must conduct protons

Alkaline **F**uel **C**ell

DIFFERENTS TYPES of APPLICATIONS of FUEL CELL MEMBRANES