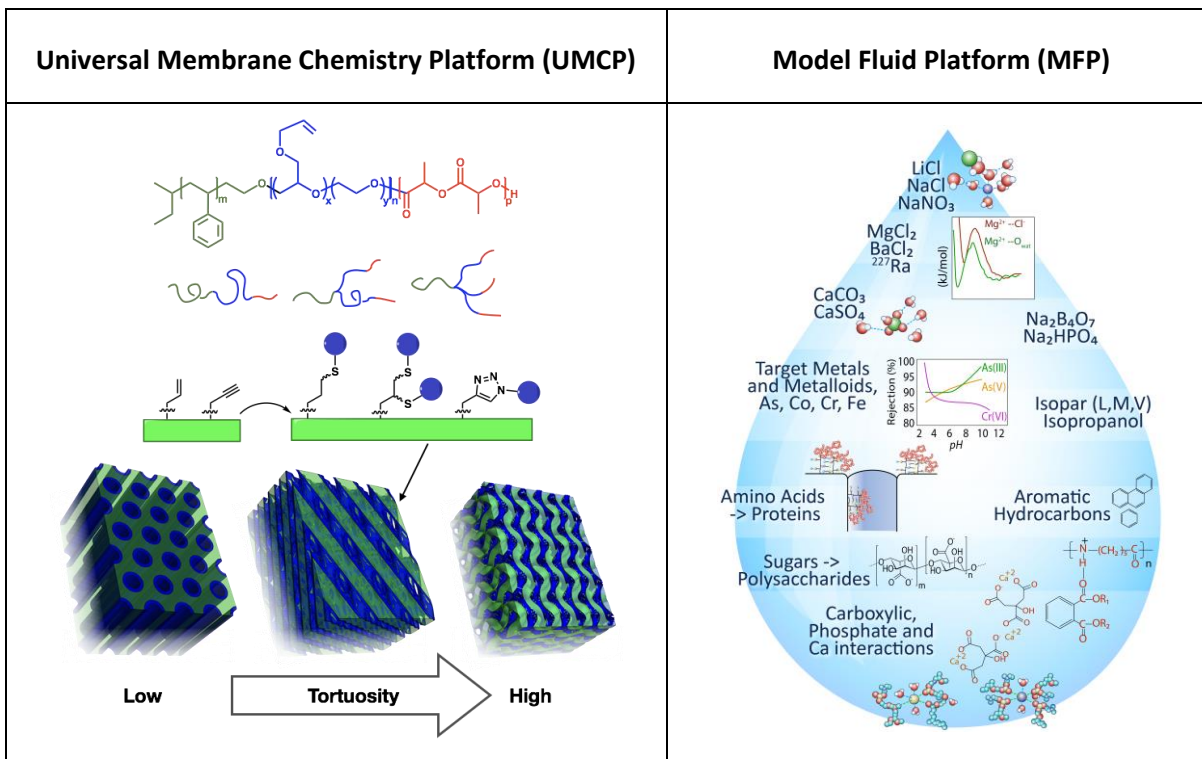




A single, modular model materials platform, the Universal Membrane Chemistry Platform (UMCP), is used and functionalized in GAPS 1–3, so breakthroughs are seamlessly transferred among GAPS and across length scales. The GAPS also share a Model Fluid Platform (MFP) to provide continuity, coherence, and relevance among research projects. The MFP comprises a hierarchy of increasingly complex fluids for use across all GAPS, beginning with water, water + simple salts, water + organics (e.g., dissolved organics or emulsified oil or both), water + salt + organics, and ultimately, model produced water containing organic and inorganic components.



M-WET's Universal Membrane Chemistry Platform and Model Fluid Platform.

| <b>Materials for Water and Energy Systems (M-WET)</b> |   |
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