

Thoughts on Future Directions – M. Davis, Caltech

- Design of self-assembling processes leading to homogeneity
 - Precursor synthesis – intelligent materials
 - Control over assembly pathways – kinetics of nucleation in condensed phases
- Positioning of multiple active sites in 3-D
 - Allow for cooperativity
 - Allow for mutually incompatible chemistries in solution via spatial segregation
 - Pre-organization steps
- Systems that respond to their environment
 - Swelling gels – on/off
 - Polymer-enzyme conjugates – block active site via conformational changes with temperature
 - Molecular gates to active sites