

Biological

- 1) Phase Behavior and Selectivity of DNA-Linked Nanoparticle Assemblies
- 2) Globular proteins
- 3) Formation of swarms (e.g., of flies, bees, bacteria, molds)
- 4) Gel to liquid transitions in membranes
- 5) Ice formation in plants and animals

Physical

- 6) Long-range magnetic order
- 7) Superconductivity.
- 8) Order- disorder phase transition
- 9) Nematic-to-isotropic liquid crystal transition

Chemical

- 10) Sublimation of carbon dioxide, including critical opalescence
- 11) Lambda transition of helium-4

New!!

*** Charge and spin density waves: See "Scientific American," April, 1994, p. 50, "Charge and Spin Density Waves," by Stuart Brown and George Gruner.

*** Ferroelectrics and their electron emission: See G. Rosenman et.al, Journal of Applied Physics 88 (2000) 6109.

*** Intelligent gels: See Scientific American, May, 1993, p. 82, Yoshihito Osada and Simon Ross-Murphy, "Intelligent Gels."

*** Synchrony: See "Scientific American," December, 1993, p. 102, Steven Strogatz and Ian Stewart, "Coupled oscillators and biological synchronization."