Chem 654, Spring 2003 Handout

#2, 01/22/03

The third credit procedure:

- a. Topic choice should be made by February 3 after consultation with the instructor.
- b. The initial draft of outline, including relevant list of the literature, should be submitted to the instructor by February 17.
- c. The revised outline will be settled by February 24, in consultation with the instructor.
- d. The final report should be submitted by May 9.

Topics for the third credit report:

- 1. Atom transfer free radical polymerization and applications.
- 2. Polymers made by metallocene catalysts.
- 3. NLO applications of polymers.
- 4. Polymeric surfactants and their applications.
- 5. Polyelectrolytes in multi-layered structures and their applications.
- 6. Block copolymers and their applications in photonic materials.
- 7. Polymeric light emitting diodes and their future prospect.
- 8. Liquid crystalline polymers and their electro-optical applications.
- 9. Polymers for microlithography
- 10. Biocompatible polymer surfaces and implant applications.
- 11. Hydrogels in drug delivery.
- 12. Combinatorial screening of polymer properties.
- 13. Biodegradable polymers and their impact on environment.
- 14. Applications potential for dendrimers and hyperbranched polymers.