

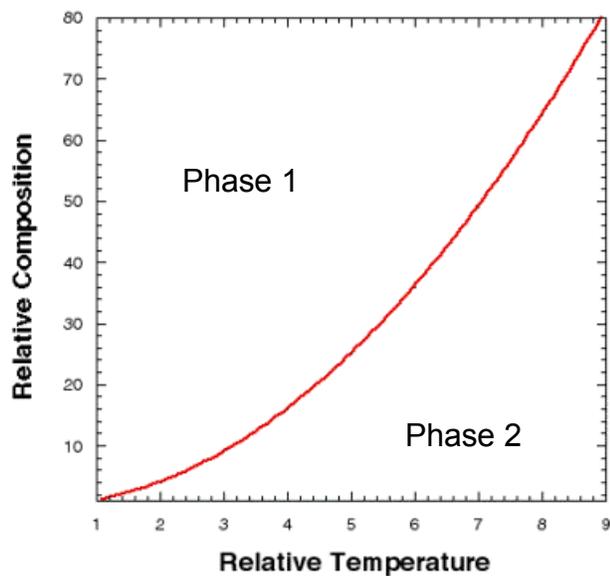
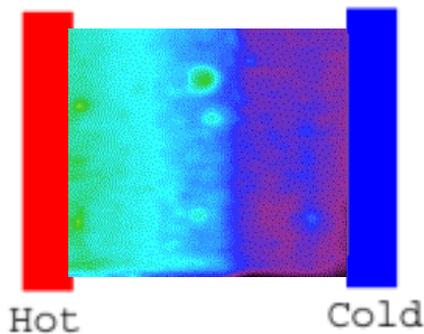
Thermal properties screening

- Critical Issues

- The challenge is to achieve desired function and properties such as mechanical, optical or thermal behavior in polymeric structures by manipulation of fillers, polymer blends, microstructure and processing conditions in manufacturing.

- Research Strategy

- The goal is to develop combinatorial methods for investigating filled and/or blended polymeric systems where a blend composition or the amount of filler must be processed within a thermal boundary in order to produce a phase with desirable properties. The phase envelope which yields these properties can be screened by viewing changes in thermal properties. An automated system is under development that uses a number of different heating methods and couples this with infrared microscopy which enables the viewing of heat flow, and therefore thermal properties, tailored to the application.



For more information ...