



Guest editorial

This special issue of polymer contains papers presented by most of the speakers of the symposium devoted to Stimuli responsive polymers chaired by M. Rinaudo and Y. Osada during the IUPAC Macro 2004 meeting, held in Paris in July 2004.

The topic is now recognized as a very important one and opens new developments for polymers; this topic involves water soluble polymers as well as membranes or solid materials which have to be synthesized using a controlled and well defined route. Association of chemical structure with supramolecular organization leads to new systems able to respond to different stimuli thus creating new materials (often also called 'smart materials') with adapted properties for specific applications (biological, pharmaceutical, cosmetics or food).

This topic requires a direct cooperation between chemists, biologists, physicists and physicians for the

creation of new systems for specific applications; some of the results are covered in the papers in the present special issue.

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