McGill Chemical Society

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Molecular-Based Design Rules for Reversible Thermochromic Mixtures

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Otto Maass room 10

Many materials are thermochromic, i.e., they change colour with temperature. Their applications can range from sensors to thermal printing. The most common thermochromic materials are microencapsulated mixtures of a leuco dye (which can change colour depending on its environment), a developer (usually a proton donor) and a solvent (which melts and initiates a change in interactions between the dye and developer). Although used extensively in commercial applications, there are significant gaps in our understanding of the mechanism of thermochromism in these mixtures, which can hinder development of new mixtures for particular applications, such as thermally erasable printing. In this talk, our contributions to molecular-based understanding of thermochromic mixtures will be presented, with an emphasis on self-assembled structures.

Everyone is welcome