Professor Piotr KASZYNSKI

(Organic Materials Research Group, Center of Molecular and Macromolecular Studies, Polish Academy of Sciences and Middle Tennessee State University)

Introduction to Molecular Materials

Part 1. Stable radicals: structure, properties and applications - 8h00 - salle IPREM S108

The lecture will briefly discuss the classification and general properties of organic radicals, such as alkyl, aryl and allyl. Subsequently, the focus will be on radicals that are stable in the presence of air and moisture (highly persistent). Structures of stable radicals and the origin of their stability will be discussed, followed by a brief review of their chemistry and applications.

Part 2. Liquid crystals: structure, properties and applications - 9h40 - salle IPREM S108

Liquid crystals are indispensable part of many contemporary technologies, among which display technology is the most apparent. This lecture will bring the concept of liquid crystallinity, and the structure – fundamental properties relationships and some applications of these organic materials will be discussed.