

Light for medicine - Photodynamic Therapy

Photodynamic Therapy (PDT) is a technique clinically used in pathologies such as skin or oesophagus cancer, where tumors are destroyed by intense light- induced tissue oxidation. The method relies on the administration of a photosensitizer molecule that is suitable to induce the formation of active species which are powerful oxidizing agent, able to cause necrosis or apoptosis in cancer cells. The fundamental mechanisms by which the oxidation of biomolecules occurs are complex and imply chemical, physical and biological phenomena. This lecture will be an introduction to this complex world.

Classification de thématique: Interactions between light and matter