

세미나 초록

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발표 주제	Stimuli-responsive organic materials and their applications
발표 내용	<p>Stimuli-responsive materials, including mechanochromic, photochromic, piezoelectric, self-healing materials, have been widely researched based on their interesting functional properties. In this talk, 3D artificial skin devices based on stimuli-responsive smart polymeric materials will be presented, which enable exquisite touch sensing and self-healing of mechanical damage like human skin. The insight on material design for developing multifunctional hydrogels and the realization of target 3D structures based on 3D dispensing will be discussed. Also, extremely sensitive mechanochromic organic molecules for biomedical application will be presented. By designing chemical structure of fluorescent molecule and their intermolecular interaction, new class of mechanochromic molecules having million times higher sensitivity, compared to conventional mechanochromic organic crystals, have been realized for a new type of biomedical applications.</p>