

화학고 세미나

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A Proteomimetic Polymer Chemistry Approach to Expanding the Druggable Proteome

In this presentation, we describe Protein-Like Polymers (PLPs) as an approach to mimicking proteins. These proteomimetics are based on peptide-brush polymers composed from monomers each containing a peptide side-chain. Herein, we describe the development of this class of biomolecule polymer conjugate, discuss their physicochemical and structural properties and will expand on their utility in a range of settings, including as a new type of therapeutic modality. We will highlight some examples including their ability to engage critical intracellular protein-protein interactions especially among intrinsically disordered transcription factors responsible for driving neurodegenerative disease and cancer. These will include a novel approach to targeted protein degradation utilizing the polymer-based technology to rapidly converge on functional molecules.

Date : 2024년 7월 4일 (목) 오후 5시

Location : 과학관 B132호

Host : 연세대학교 화학과