

Plant polysaccharides adsorption onto cellulose - supervisor: Monika Szymańska-Chargot, PhD DSc /
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Both microfibrillar cellulose and cellulose nanocrystals have been gaining popularity due to their interesting physical and chemical properties. Cellulose is obtained from natural sources, total biodegradability and biocompatibility are its additional advantages. Plant polysaccharides have many biological functions, and can also be used as functional materials in food engineering, pharmacy, medicine, as components of packaging and construction materials. In vitro studies are required to identify the actual impact of pectin and hemicellulose to the structure of cellulose microfibrils or to determine the interactions that occur between the cell wall polysaccharides. Physicochemical study of cellulose as an adsorbent and pectin /hemicelluloses as adsorbates will be the task of PhD student.