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Polysaccharide (Nano)Composites (*Invited*)

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The last decades, polysaccharides are more and more investigated either as biodegradable and biocompatible matrices for drug delivery and for tissue engineering systems [1,2] or as renewable substitutes of synthetic polymers (tributary of exhaustible fossil resources), usually combined with different inorganic compounds able to tailor specific properties and high-tech uses [3,4].

The presentation deals with clean chemical and physical methods for the preparation of chitosan hydrogels for cutaneous repairing, of magnetic or high k cellulose-based composites and of polysaccharide-based polyelectrolyte composite membranes for fuel cell applications. Their specific properties in correlation with their structures are also discussed.

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