

Cellulose is not only the most important renewable resource but also a fascinating biopolymer that combines molecular and supramolecular structures with outstanding properties. The physical and chemical modification of cellulose are considered to be the most promising paths to design novel materials and products in the context of sustainability. It seems to be possible to use ecologically friendly routes for cellulose modification.

Recent topics in the field of cellulose research and development were discussed during the annual meeting of the “Verein der Zellstoff- und Papierchemiker und -ingenieure” (Zellcheming) held in Wiesbaden, Germany, in June 2007. The general theme of the “Cellulose Symposium” organized in the frame of Zellcheming meeting was focused on “Structure and Properties of Cellulose”. The contributions of this interesting and fruitful meeting are collected in this issue of *Macromolecular Symposia*. It reflects actual trends in the field of:

- Swelling and dissolution of cellulose
- Innovative concepts for the modification and shaping of cellulose
- Preparation of novel cellulose derivatives and cellulose-based materials.

The editor's intention was to collect contributions that highlight the actual state of the art in this promising research field that is increasingly studied worldwide. The European Polysaccharide Network of Excellence (EPNOE, www.epnoe.eu) intends to foster research and development in the field of polysaccharides in academia and in close connection with companies active in the field. Authors of the papers included in the special issue are active as member of EPNOE.

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