

Original contributions, review papers, book chapters, [books](#), [book reviews](#)

Accepted manuscripts and online publications:

[Electrospinning of cellulose benzyl carbamates for enantioselective membrane filtration](#)

S. Nono-Tagne, Th. Heinze, M. Gericke, I. Otsuka
Macromolecular Bioscience (2024) DOI: 10.1002/mabi.202400415

[Preparation of cellulose-based optical brightening agent by a two-step one-pot reaction and its application in fiber treatment](#)

H. Würfel, P. Fardim, W. Günther, Th. Heinze
Cellulose (2024) DOI: 10.1007/s10570-024-06284-y

Printed publications:

566. [Acidic dimethyl sulfoxide: A solvent system for the fast dissolution of pectin derivatives suitable for subsequent modification](#)

H. Würfel, Th. Heinze
Carbohydrate Polymers **348**, Part B (2025) 122872.

565. [Antithrombogenic polysaccharide coatings to improve hemocompatibility, protein-repellence, and endothelial cell response](#)

M. Bračič, B. M. Nagy, O. Plohl, F. Lackner, T. Steindorfer, R. C. Fischer, Th. Heinze, A. Olschewski, K. Stana Kleinschek, C. Nagaraj, T. Mohan
iScience **27** (2024) 110692.

564. [Photoluminescence enhancement after thermal treatment of cellulose from different sources](#)

E. U. Pulido-Barragán, E. Rodríguez-González, A. B. López-Oyama, A. B. Morales-Cepeda, C. F. Castro-Guerrero, Th. Heinze, A. Koschella
Cellulose **31** (2024) 6611-6623.

563. [Layer-by-layer assembling and capsule formation of polysaccharide-based polyelectrolytes studied by whispering gallery mode experiments and confocal laser scanning microscopy](#)

S. Wagner, M. Olszyna, A. Domac, Th. Heinze, M. Gericke, L. Dähne
Polysaccharides **5** (2024) 422-434.

562. [Regioselective hexyldimethylsilylation of \(1 →3\)-glucans – Does the linkage type matter](#)

A. Koschella, Th. Heinze, E. Severac, C Moulis
Carbohydrate Polymers **343** (2024) 122439.

561. [Functional agarose hydrogels obtained by employing homogeneous synthesis strategies](#)

M. Gericke, M. Witzler, A. Enkelmann, G. Schneider, M. Schulze, Th. Heinze
Polysaccharides **5** (2024) 184-197.

560. [Sulfo ethyl cellulose/Nafion composite for high-temperature proton exchange membrane](#)

K. Charradi, Z. Landolsi, Th. Heinze, A. Brahmia, R. Chtourou, S. M. A. S. Keshk
Journal of Applied Polymer Science **141** (2024) e55665.

559. [Efficient heterogeneous synthesis of nucleophilic carboxymethyl hydrazides of polysaccharides](#)

H. Würfel, A. Pfeifer, Th. Heinze
Biopolymers **115** (2024) e23574.

558. [Synthesis and characterization of polysaccharide carbamates and mixed carbamates with tunable water solubility](#)

M. Gericke, Z. Atmani, L. H. Skodda, Th. Heinze
Carbohydrate Polymer Technologies and Applications **7** (2024) 100479.

557. [Direct functionalization of polysaccharide-based xylan phenyl carbonate nanoparticles with tumor cell specific antibodies](#)

V. Bilemjian, Y. Lin, W. Wan, G. Egri, G. Huls, Th. Heinze, E. Bremer, M. Gericke, L. Dähne
ChemBioChem **25** (2024) e202300828.

556. [Synthesis and characterization of nucleophilic polysaccharide carbazates](#)

K. Geitel, H. Würfel, W. Günther, Th. Heinze
Carbohydrate Polymers **329** (2024) 121727.

555. [The European Polysaccharide Network of Excellence \(EPNOE\) research roadmap 2040: Advanced strategies for exploiting the vast potential of polysaccharides as renewable bioresources](#)

M. Gericke, A. J. R. Amaral, T. Budtova, P. De Wever, Th. Groth, Th. Heinze, H. Höfte, A. Huber, O. Ikkala, J. Kapuśniak, R. Kargl, J. F. Mano, M. Másson, P. Matricardi, B. Medronho, M. Norgren, T. Nypelö, L. Nyström, A. Roig, M. Sauer, H. Schols, J. van der Linden, T. Wrodnigg, C. Xu, G. Yakubov, K. Stana Kleinschek, P. Fardim
Carbohydrate Polymers **326** (2024) 121633.

554. [Dually modified cellulose as a non-viral vector for the delivery and uptake of HDAC3 siRNA](#)

J. Hülsmann, H. Lindemann, J. Wegener, M. Kühne, M. Godmann, A. Koschella, S. M. Coldewey, Th. Heinze, T. Heinzl
Pharmaceutics **15** (2023) 2659.

553. [Incorporating of sulfo ethyl cellulose to augment the performance of sulfonated poly \(ether ether ketone\) composite for proton exchange membrane fuel cells](#)

K. Charradi, Z. Landolsi, L. Gabriel, W. Mabrouk, A. Koschella, Z. Ahmed, A. Elnaggar, Th. Heinze, S. M. A. S. Keshk
Journal of Solid State Electrochemistry **27** (2023) 3415-3423.

552. [Structural and chemical insights into the prebiotic property of hemicellulosic polysaccharide from *Santalum album* L.](#)
M. Patra, D. Das, S. Dey, A. Koschella, Th. Heinze
Carbohydrate Polymers **321** (2023) 121291.
551. [Structure design of polysaccharides: Old hat or topical?](#)
A. Koschella, Th. Heinze
BioResources **18** (2023) 6650-6679.
550. [Investigation of cellulose dissolution in morpholinium-based solvents: Impact of solvent structural features on cellulose dissolution](#)
S. Naserifar, A. Koschella, Th. Heinze, D. Bernin, M. Hasani
RSC Advances **13** (2023) 18639-18650.
549. [Dextran thioparaconate – Evaluation of the multifunctional thiolactone linker for easily adaptable polysaccharide modification](#)
A. Kemmer, Th. Heinze
Carbohydrate Polymers **315** (2023) 120946.
548. [Preparation of bacterial cellulose using enzymatic hydrolysate of olive pomace as carbon source](#)
C. Sagdic-Oztan, A. Koschella, Th. Heinze, N. G. Karaguler, M. Tuter
BioResources **18** (2023) 4168-4181.
547. *From current research to chemistry education: Preparation of polysaccharide-based Nanoparticles by dialysis*
A. Fruntke, B. Blümbott, A. Koschella, Th. Heinze, T. Wilke
New Perspectives in Science Education 2023 – Conference Proceedings,
CHEM5869.
546. [Efficient heterogeneous synthesis of polygalacturonic hydroxamic acid: A versatile chelator for metal ion binding](#)
H. Würfel, W. Dang, Th. Heinze
Cellulose Chemistry and Technology **57** (2023) 93-96.
545. [Reactive xylan derivatives for azid-/alkyne-click-chemistry approaches - From modular synthesis to gel-formation](#)
M. Gericke, L. H. Skodda, Th. Heinze
Carbohydrate Polymers **300** (2023) 120251.
544. [Glucose scavenging with pectin hydrazide: A step toward designing innovative, functional, all-sugar-based polymers](#)
H. Würfel, K. Geitel, W. Günther, I. Anufriev, U. S. Schubert, I. Nischang, Th. Heinze
Macromolecular Chemistry and Physics **223** (2022) 2200241.
543. [HDACi delivery systems based on cellulose valproate nanoparticles](#)
H. Lindemann, M. Kühne, A. Koschella, M. Godmann, T. Heinzel, Th. Heinze
in: "HDAC/HAT Function Assessment and Inhibitor Development - Methods and Protocols", O. H. Krämer (Ed.), 2022, Springer Nature, vol. 2589, pp. 195-205.

542. [Analysis of HDACi-coupled nanoparticles: Opportunities and challenges](#)
M. Kühne, S. Hofmann, H. Lindemann, Z. Cseresnyés, A. Dzierza, D. Schröder, M. Godmann, A. Koschella, C. Eggeling, D. Fischer, M. T. Figge, Th. Heinze, T. Heinzel
in: "HDAC/HAT Function Assessment and Inhibitor Development - Methods and Protocols", O. H. Krämer (Ed.), 2022, Springer Nature, vol. 2589, pp. 129-144.
541. [Clickable polymers accessible through nucleophilic substitution on polysaccharides: A sophisticated route to functional polymers](#)
A. Kemmer, H. Qi, Th. Heinze
BioResources **17** (2022) 7267-7284.
540. [Side reactions during the homogeneous esterification of starch with unsaturated cinnamic acid derivatives in molten imidazole](#)
S. Schmidt, M. Gericke, Th. Heinze
Lenzinger Berichte **97** (2022) 62-67.
539. [Synthesis of novel polygalacturonic acid hydrazones and their rheological and emulsifying properties](#)
H. Würfel, G. Pelloth, Th. Heinze
Lenzinger Berichte **97** (2022) 56-61.
538. [6-Deoxy-6-hydrogenocellulose: Synthesis and characterization of cellulose with reduced functionality](#)
A. Koschella, Th. Heinze
Lenzinger Berichte **97** (2022) 50-55.
537. [Efficient synthesis of S-protected thiolated polysaccharide xylan](#)
A. Kemmer, Th. Heinze
Reactive and Functional Polymers **181** (2022) 105418.
536. [Debenzylation of benzyl-protected methylcellulose](#)
P. Hashemi, S. Wenderoth, A. Koschella, Th. Heinze, P. Mischnick
Polysaccharides **3** (2022) 458-479.
535. [Cellulose allylcarbamate with high content of reactive double bonds for thiol-ene reaction](#)
H. Lindemann, Th. Heinze
Reactive and Functional Polymers **176** (2022) 105306.
534. [Composite nanoparticles derived by self-assembling of hydrophobic polysaccharide derivatives and lignin](#)
M. Gericke, J. Bergrath, M. Schulze, Th. Heinze
Cellulose **29** (2022) 3613-1620.
533. [Renewable thermoplastics – Starch fatty acid esters as alternatives to synthetics](#)
P. Hermann, Th. Heinze
BioResources **17** (2022) 3871-3874.
532. [Spatial distribution of functional groups in cellulose ethers by DNP-enhanced solid-state NMR spectroscopy](#)
P. Berruyer, P. Moutzouri, M. Gericke, D. Jakobi, M. Bardet, Th. Heinze, L. Karlson,

S. Schantz, L. Emsley
Macromolecules **55** (2022) 2952-2958.

531. [Green fabrication of high strength, transparent cellulose-based films with durable fluorescence and UV-blocking performance](#)

F. Peng, H. Liu, D. Xiao, L. Guo, F. Yue, H. Würfel, Th. Heinze, H. Qi
Journal of Materials Chemistry A **10** (2022) 7811-7817.

530. [Greaseproof, hydrophobic, and biodegradable food packaging bioplastics from C6-fluorinated cellulose esters](#)

S. Guzman-Puyol, G. Tedeschi, L. Goldoni, J. J. Benítez, L. Ceseracciu, A. Koschella, Th. Heinze, A. Athanassiou, J. A. Heredia-Guerrero
Food Hydrocolloids **128** (2022) 107562.

529. [Lignocellulose nanofibrils/gelatin/MXene composite aerogel with fire-warning properties for enhanced electromagnetic interference shielding performance](#)

Y. Li, Y. Chen, X. He, Z. Xiang, Th. Heinze, H. Qi
Chemical Engineering Journal **431** (2022) 133907.

528. [Synthesis and structure characterization of novel polyampholytes based on cellulose](#)

A. Pfeifer, A. Kemmer, Th. Heinze
Advanced Industrial and Engineering Polymer Research **5** (2022) 26-32.

527. [Chemical modification of pectin and polygalacturonic acid: A critical review](#)

H. Würfel, K. Geitel, H. Qi, Th. Heinze
BioResources **16** (2021) 8457-8488.

526. [Evaluating release kinetics from alginate beads coated with polyelectrolyte layers for sustained drug delivery](#)

M. Witzler, S. Vermeeren, R. O. Kolevatov, R. Haddad, M. Gericke, Th. Heinze, M. Schulze
ACS Applied Bio Materials **4** (2021) 6719-6731.

525. [Starch formates: Synthesis and modification](#)

S. Blohm, Th. Heinze, H. Qi
Molecules **26** (2021) 4882.

524. [Structure, thermal stability and electrical properties of cellulose-6-phosphate: Development of a novel fast Na-ionic conductor](#)

R. Marzouki, A. Brahmia, Q. A. Alsulami, S. M.A.S. Keshk, A.-H. Emwas, M. Jaremko, M. F. Zid, Th. Heinze
Polymer International **70** (2021) 1290-1297.

523. [Recent progress on cellulose-based ionic compounds for biomaterials](#)

Y. Yang, Y.-T. Lu, K. Zeng, Th. Heinze, Th. Groth, K. Zhang
Advanced Materials **33** (2021) 2000717.

522. [Waterproof-breathable films from multi-branched fluorinated cellulose esters](#)

G. Tedeschi, S. Guzman-Puyol, L. Ceseracciu, J. J. Benitez, L. Goldoni, A. Koschella, Th. Heinze, G. Cavallo, V. Dichiarante, G. Terraneo, A. Athanassiou, P.

Metrangolo, J. A. Heredia-Guerrero
Carbohydrate Polymers **271** (2021) 118031.

521. [Reactive nanoparticles derived from polysaccharide phenyl carbonates](#)
M. Gericke, K. Geitel, C. Jörke, J. H. Clement, Th. Heinze
Molecules **26** (2021) 4026.

520. [Biocompatible valproic acid-coupled nanoparticles attenuate lipopolysaccharide-induced inflammation](#)
M. Kühne, C. Kretzer, H. Lindemann, M. Godmann, Th. Heinze, O. Werz. Th. Heinzel
International Journal of Pharmaceutics **601** (2021) 120567.

519. [Upgrading Euphorbia Antisyphilitica fiber compost: A waste material turned into nanocrystalline cellulose](#)
E. U. Pulido-Barragán, A. B. Morales-Cepeda, C. F. Castro-Guerrero, A. Koschella,
Th. Heinze
Industrial Crops and Products **160** (2021) 113111.

518. [Green fabrication of highly conductive paper electrodes via interface engineering with aminocellulose](#)
Y. Yang, Q. Huang, R. Sun, J. Ren, Th. Heinze, X. Wang
Macromolecular Rapid Communications **42** (2021) 2000499.

517. [Advanced characterization of regioselectively substituted methylcellulose model compounds by DNP enhanced solid-state NMR spectroscopy](#)
P. Berruyer, M. Gericke, P. Moutzouri, D. Jakobi, M. Bardeta, L. Karlson, S. Schantz,
Th. Heinze, L. Emsley
Carbohydrate Polymers **262** (2021) 117944.

516. [Efficient heterogeneous synthesis of reactive polygalacturonic acid hydrazides](#)
H. Würfel, K. Geitel, Th. Heinze
Carbohydrate Polymers **261** (2021) 117838.

515. [Biocompatible sulfated valproic acid-coupled polysaccharide-based nanocarriers with HDAC inhibitory activity](#)
M. Kühne, H. Lindemann, C. Grune, D. Schröder, Z. Cseresnyés, M. Godmann, A.
Koschella, M. T. Figge, C. Eggeling, D. Fischer, Th. Heinze, Th. Heinzel
Journal of Controlled Release **329** (2021) 717-730.

514. [Polymer nanoparticles for drug delivery – synthetic vs. biopolymers?](#)
M. Gericke, Th. Heinze
BioResources **16** (2021) 2181-2183.

513. [The role of formamidine groups in dextran based non-viral vectors for gene delivery on their physicochemical and biological characteristics](#)
D. Fischer, N. Dusek, K. Hotzel, Th. Heinze
Macromolecular Bioscience **21** (2021) 2000220.

512. [Protein repellent anti-coagulative mixed-charged cellulose derivative coatings](#)
M. Bračič, T. Mohan, R. Kargl, Th. Grießer, Th. Heinze, K. Stana Kleinschek
Carbohydrate Polymers **254** (2021) 117437.

511. [Studies about the design of magnetic bionanocomposite](#)
R. Müller, J. Kuchinka, Th. Heinze
Physical Sciences Reviews (2020) DOI: 10.1515/psr-2019-0122.
510. [Carboxymethylation of polysaccharides – A comparative study](#)
L. Gabriel, A. Tied, Th. Heinze
Cellulose Chemistry and Technology **54** (2020) 835-844.
509. [Mechanistic considerations of efficient esterification of starch with propionic anhydride/lauric acid in the green solvent imidazole](#)
S. Blohm, Th. Heinze
Macromolecular Chemistry and Physics **221** (2020) 2000264.
508. [Aminoethyl substitution enhances the self-assembly properties of an aminocellulose as a potential archaeological wood consolidant](#)
J. M. K. Wakefield, R. Hampe, R. B. Gillis, A. Sitterli, G. G. Adams, H. Kutzke, Th. Heinze, S. E. Harding
European Biophysics Journal **49** (2020) 791-798.
507. [Perspectives of polysaccharide nanoparticles in advanced biomedical applications: A commentary on emerging technologies in polysaccharide research](#)
M. Gericke, Th. Heinze
International Journal of Biological and Chemical Research **1** (2020) 8-12.
506. [Comparative studies on regioselectivity of \$\alpha\$ - and \$\beta\$ -linked glucan tosylation](#)
A. Koschella, Th. Heinze, A. Tied, K. Geitel, C.-Y. Chien, T. Iwata
Molecules **25** (2020) 5382.
505. [Polysaccharide – Basis für nachhaltige Materialien](#)
M. Gericke, Th. Heinze
<https://faszinationchemie.de/makromolekulare-chemie/news/polysaccharide-basis-fuer-nachhaltige-materialien/> (abgerufen am 16.10.2020)
504. [Structure design of polysaccharides - chemoselective sulfoethylation of chitosan](#)
L. Gabriel, Th. Heinze
European Polymer Journal **140** (2020) 109978.
503. [Meltable fatty acid esters of \$\alpha\$ -1,3-glucan as potential thermoplastics](#)
K. Geitel, A. Koschella, Ch. Lenges, Th. Heinze
Advanced Industrial and Engineering Polymer Research **3** (2020) 111-119.
502. [Influence of pulp characteristics on the properties of alkali cellulose](#)
C. Fechter, S. Fischer, F. Reimann, H. Brelid, Th. Heinze
Cellulose **27** (2020) 7227-7241.
501. [Polysaccharide valproates: Structure - property relationships in solution](#)
M. Grube, V. Dinu, H. Lindemann, F. Pielenz, G. Festag, U. S. Schubert, Th. Heinze, S. Harding, I. Nischang
Carbohydrate Polymers **246** (2020) 116652.

500. [Sulfoethylation of polysaccharides—A comparative study](#)
L. Gabriel, A. Koschella, A. Tied, A. Pfeifer, Th. Heinze
Carbohydrate Polymers **246** (2020) 116533.
499. [Layer-by-layer coating of aminocellulose and quorum quenching acylase on silver nanoparticles synergistically eradicate bacteria and their biofilms](#)
A. Ivanova, K. Ivanova, A. Tied, Th. Heinze, T. Tzanov
Advanced Functional Materials **30** (2020) 2001284.
498. [Polysaccharide nanoparticles bearing HDAC inhibitor as non-toxic nanocarrier for drug delivery](#)
H. Lindemann, M. Kühne, Ch. Grune, P. Warncke, S. Hofmann, A. Koschella, M. Godmann, D. Fischer, Th. Heinzel, Th. Heinze
Macromolecular Bioscience **20** (2020) 2000039.
497. [Synthesis and characterization of novel water-soluble 6-deoxy-6-\(2-amino-2-\(hydroxymethyl\)propane-1,3-diol\)cellulose derivatives](#)
A. Pfeifer, M. Gericke, Th. Heinze
Advanced Industrial and Engineering Polymer Research **3** (2020) 77-82.
496. [\$\alpha\$ -1,3-Glucan benzoate – A novel polysaccharide derivative](#)
M. Gericke, A. Tied, C. Lenges, Th. Heinze
Advanced Industrial and Engineering Polymer Research **3** (2020) 71-76.
495. [Nanoparticles based on hydrophobic polysaccharide derivatives - Formation principles, characterization techniques, and biomedical applications](#)
M. Gericke, P. Schulze, Th. Heinze
Macromolecular Bioscience **20** (2020) 1900415.
494. [Stable nanocellulose gels prepared by crosslinking of surface charged cellulose nanofibrils with di- and triiodoalkanes](#)
J. Levanič, M. Gericke, Th. Heinze, I. Poljanšek, P. Oven
Cellulose **27** (2020) 2053-2068.
493. [Synthesis and characterization of dicarboxymethyl cellulose](#)
R. Chagas, M. Gericke, R. B. Ferreira, Th. Heinze, L. M. Ferreira
Cellulose **27** (2020) 1965-1974.
492. [Synthesis, characterization and ampyrone drug release behavior of magnetite nanoparticle/2,3-dialdehyde cellulose-6-phosphate composite](#)
S. M. A. S. Keshk, A. A. El-Zahhar, Q. A. Alsulami, M. Jaremko, S Bondock, Th. Heinze
Cellulose **27** (2020) 1603-1618.
491. [Effect of sulfation route and subsequent oxidation on derivatization degree and biocompatibility of cellulose sulfates](#)
J. Strätz, A. Liedmann, Th. Heinze, St. Fischer, Th. Groth
Macromolecular Bioscience **20** (2020) 1900403.
490. [All sugar based cellulose derivatives synthesized by azide-alkyne click chemistry](#)

A. Koschella, C.-Y. Chien, T. Iwata, M. S. Thonhofer, T. M. Wrodnigg, Th. Heinze
Macromolecular Chemistry and Physics **221** (2020) 1900343.

489. [Determination of the binding situation of pyridine in xylan sulfates by means of detailed NMR studies](#)

L. Gabriel, W. Günther, F. Pielenz, Th. Heinze
Macromolecular Chemistry and Physics **221** (2020) 1900327.

488. [Revisiting very disperse macromolecule populations in hydrodynamic and light scattering studies of sodium carboxymethyl celluloses](#)

M. Grube, I. Perevyazko, Th. Heinze, U. S. Schubert, I. Nischang
Carbohydrate Polymers **229** (2019) 115452

487. [Studies on the controlled release of drugs from magnetic nanobiocomposites](#)

Th. Heinze, R. Müller, M. Zhou, M. Rabel, P. Warncke, D. Fischer
Indonesian Journal of Fundamental and Applied Chemistry **4** (2019) 1-8.

486. [Synthesis and properties of thermoplastic starch laurates](#)

S. Blohm, Th. Heinze
Carbohydrate Research **486** (2019) 107833

485. [Amino acid substituted dextran based non-viral vectors for gene delivery](#)

M. Zink, K. Hotzel, U. S. Schubert, Th. Heinze, D. Fischer
Macromolecular Bioscience **19** (2019) 1900085.

484. [Studies about the acylation of starch in dipolar aprotic solvents](#)

S. Blohm, Th. Heinze
Starch **71** (2019) 1900053.

483. [Engineered polysaccharides: \$\alpha\$ -1,3-Glucan acetates showing upper critical solution temperature in organic solvents](#)

Th. Heinze, A. Pfeifer, A. Koschella, D. Adelman, L. Howe, N. Behabtu, C. Lenges
Macromolecular Chemistry and Physics **220** (2019) 1900112.

482. [Neutral polysaccharide from the leaves of *Pseuderanthemum carruthersii*: Presence of 3-O-methyl galactose and anti-inflammatory activity in LPS-stimulated RAW264.7 cells](#)

V. H. Bac, B. S. Paulsen, L. V. Truong, A. Koschella, T. C. Trinh, Ch. W. Wold, S. Yogarajah, Th. Heinze
Polymers **11** (2019) 1219.

481. [Non-cytotoxic agarose/hydroxyapatite composite scaffolds for drug release](#)

M. Witzler, P. F. Ottensmeyer, M. Gericke, Th. Heinze, E. Tobiasch, M. Schulze
International Journal of Molecular Sciences **20** (2019) 3565.

480. [Homogenous synthesis of sodium cellulose sulfates with regulable low and high degree of substitutions with \$\text{SO}_3/\text{Py}\$ in *N,N*-dimethylacetamide/LiCl](#)

B. Muhitdinov, Th. Heinze, A. Turaev, A. Koschella, N. Normakhamatov
European Polymer Journal **119** (2019) 181-188.

479. [*Mercerization effect on structure and electrical properties of cellulose: development of a novel fast Na-ionic conductor*](#)
R. Marzouki, A. Brahmia, S. Bondock, S. M. A. S. Keshk, M. F. Zid, A. G. Al-Sehemi, A. Koschella, Th. Heinze
Carbohydrate Polymers **221** (2019) 29-36.
478. [*Protonation behavior of dextran amino acid esters*](#)
K. Hotzel, L. Fras Zemljič, M. Bračič, Th. Heinze
Turkish Journal of Chemistry **43** (2019) 869-880.
477. [*The influence of wood pulp quality on the structure of carboxymethyl cellulose*](#)
C. Fechter, Th. Heinze
Journal of Applied Polymer Science **136** (2019) 47862.
476. [*Isolation of cellulose nanocrystals from Typha domingensis named Southern Cattail using a batch reactor*](#)
E. U. Pulido Barragán, C. F. Castro Guerrero, A. M. Zamudio, A. B. Morales Cepeda, Th. Heinze, A. Koschella
Fibers and Polymers **20** (2019) 1136-1144.
475. [*Functional dextran amino acid ester particles derived from N-protected S-Trityl-L-cysteine*](#)
A. Bratuša, Th. Elschner, Th. Heinze, E. Fröhlich, S. Hribernik, M. Božič, E. Zagar, K. Stana Kleinschek, M. Thonhofer, R. Kargl
Colloids and Surfaces B: Biointerfaces **181** (2019) 561-566.
474. [*Trimethylsilylation of polygalacturonic acid*](#)
H. Würfel, M. Kayser, Th. Heinze
Macromolecular Chemistry and Physics **220** (2019) 1900002.
473. [*Reactive nanoparticles with activated ester moieties from cellulose acetate phthalate derivatives*](#)
P. Schulze, M. Gericke, Th. Heinze
Cellulose **26** (2019) 475-490.
472. [*Twenty-five years of cellulose chemistry: Innovations in the dissolution of the biopolymer and its transformation into esters and ethers*](#)
M. Kostag, M. Gericke, Th. Heinze, O. A. El Seoud
Cellulose **26** (2019) 139-184.
471. [*Structural elucidation of a heteropolysaccharide from the wild mushroom Marasmiellus palmivorus and its immune-assisted anticancer activity*](#)
H. K. Datta, D. Das, A. Koschella, T. Das, Th. Heinze, S. Biswas, S. Chaudhuri
Carbohydrate Polymers **211** (2019) 272-280.
470. [*Studies about reactive ene-functionalized dextran derivatives for Thiol-ene click reactions*](#)
A. Sitterli, Th. Heinze
Reactive and Functional Polymers **136** (2019) 66-74.

469. [Non-aqueous solvent for efficient dissolution of polygalacturonic acid](#)
H. Würfel, M. Kayser, Th. Heinze
Carbohydrate Polymers **207** (2019) 791-795.
468. [Modular synthesis of non-charged and ionic xylan carbamate derivatives from xylan carbonates](#)
L. Gabriel, M. Gericke, Th. Heinze
Carbohydrate Polymers **207** (2019) 782-790.
467. [Synthesis of pyridine-free xylan sulfates](#)
A. Pfeifer, Th. Heinze
Carbohydrate Polymers **206** (2019) 65-69.
466. [Aminocelluloses – Polymers with fascinating properties and application potential](#)
Th. Heinze, Th. Elschner, K. Ganske
in Cellulose Science and Technology – Chemistry, Analysis, and Applications, Th. Rosenau, A. Potthast, J. Hell (Eds.), John Wiley & Sons, 2018, pp. 1-18, ISBN 9781119217589.
465. *Improvement of dyeing performance of cellulose fibers by pre-treatment with amino cellulose*
Th. Heinze, Th. Wellhöfer, K. Jedvert, A. Koschella, H. Würfel
Lenzinger Berichte **94** (2018) 115-122.
464. *Cellulose carboxylate/tosylate mixed esters: Dependence of their physicochemical properties on the degree of carboxylate substitution*
D. C. Ferreira, G. S. Bastos, A. Pfeiffer, D. F. S. Petri, Th. Heinze, O. A. El Seoud
Lenzinger Berichte **94** (2018) 43-55.
463. [Furfuryl- and maleimido polysaccharides: Synthetic strategies toward functional Biomaterials](#)
Th. Elschner, F. Obst, Th. Heinze
Macromolecular Bioscience **18** (2018) 1800258.
462. [Bottom up layer-by layer assembling of antibacterial freestanding nanobiocomposite films](#)
A. Francesko, K. Ivanova, J. Hoyo, S. Pérez-Rafael, P. Petkova, M. Macedo Fernandes, Th. Heinze, E. Mendoza, T. Tzanov
Biomacromolecules **19** (2018) 3628-3636.
461. [Genes on sugar - Developing bio-based carrier systems for gene transfer / Gene auf Zucker - Entwicklung biobasierter Trägersysteme für den Gentransfer](#)
D. Fischer, Th. Heinze
q&more, 2018
460. [Synthesis of biopolymer-based precursors for the formation of organic–inorganic hybrid materials](#)
Ch. Achtel, S. M Härling, W. Hering, M. Westerhausen, Th. Heinze
Macromolecular Rapid Communications **39** (2018) 1800199.

459. [Efficient and catalyst-free synthesis of cellulose acetoacetates](#)
H. Würfel, M. Kayser, Th. Heinze
Cellulose **25** (2018) 4919-4928.
458. [Evaluation of the synthesis of soluble aromatic cellulose carbonates of low degree of substitution](#)
K. Ganske, Th. Heinze
Macromolecular Chemistry and Physics **219** (2018) 1800152.
457. [Diversity of polysaccharide structures designed by aqueous Ugi-multi-compound reaction](#)
L. Gabriel, Th. Heinze
Cellulose **25** (2018) 2849-2859.
456. [Surprising insensitivity of homogeneous acetylation of cellulose dissolved in triethyl\(n-octyl\)ammonium chloride/molecular solvent on the solvent polarity](#)
Ch. Ahtel, K. Jedvert, M. Kostag, O. A. El Seoud, Th. Heinze
Macromolecular Materials and Engineering **303** (2018) 1800032.
455. [Synthesis of xylan carbonates - An approach towards reactive polysaccharide derivatives showing self-assembling into nanoparticles](#)
M. Gericke, L. Gabriel, K. Geitel, S. Benndorf, P. Trivedi, P. Fardim, Th. Heinze
Carbohydrate Polymers **193** (2018) 45-53.
454. [Chitosan-cellulose multifunctional hydrogel beads: Design, characterization and evaluation of biocompatibility with breast adenocarcinoma and osteoblast cells](#)
P. Trivedi, T. Saloranta-Simell, U. Maver, L. Gradišnik, N. Prabhakar, J.-H. Smatt, T. Mohan, M. Gericke, Th. Heinze, P. Fardim
Bioengineering **5** (2018) DOI:10.3390/bioengineering5010003
453. [Recent advances in solvents for the dissolution, shaping and derivatization of cellulose: Quaternary ammonium electrolytes and their solutions in water and molecular solvents](#)
M. Kostag, K. Jedvert, Ch. Ahtel, Th. Heinze, O. A. El Seoud
Molecules **23** (2018) 511, DOI 10.3390/molecules23030511.
452. [Cellulose derivatives: Synthesis, structure, and properties](#)
Th. Heinze, O. A. El Seoud, A. Koschella
Springer International Publishing AG, 2018, ISBN 978-3-319-73168-1 (e-Book), ISBN 978-3-319-73167-4 (Hardcover)
451. [Layer-by-layer decorated nanoparticles with tunable antibacterial and antibiofilm properties against both Gram-positive and Gram-negative bacteria](#)
A. Ivanova, K. Ivanova, J. Hoyo, Th. Heinze, S. Sanchez-Gomez, T. Tzanov
ACS Applied Materials and Interfaces **10** (2018) 3314-3323.
450. [Synthesis and antimicrobial effects of highly dispersed, cellulose-stabilized silver/cellulose nanocomposites](#)
N. S. Alahmadi, J. W. Betts, Th. Heinze, S. M. Kelly, A. Koschella, J. D. Wadhawan
RSC Advances **8** (2018) 3646-3656.

449. [*Biocompatibility and antibacterial effects of 6-deoxy-6-aminoethyleneamino cellulose*](#)
S. Finger, M. Zieger, C. Wiegand, T. Liebert, Th. Heinze, P. Elsner, U.-C. Hipler
Journal of Biosciences and Medicines **6** (2018) 51-62.
448. [*Xylans: Biopolymers for the design of highly engineered polysaccharide derivatives with promising properties*](#)
L. Gabriel, Th. Heinze
In: (M. Koller ed.) Current Advances in Biopolymer Processing and Characterization. Chapter 3, ISBN 978-1-53612-710-2, Nova Science Publishers Inc., 2017, pp. 49-75.
447. [*Polyelectrolyte complex beads by two-step process for improved performance of viable whole-cell Baeyer-Villiger monooxygenase by immobilization*](#)
T. Krajčovič, M. Bučko, A. Vikartovská, I. Lacík, L. Uhelská, D. Chorvát Jr, V. Neděla, E. Tihlaříková, M. Gericke, Th. Heinze, P. Gemeiner
Catalysts **7** (2017) 353.
446. [*Cellulose modification and shaping – a review*](#)
K. Jedvert, Th. Heinze
Journal of Polymer Engineering **37** (2017) 845-860.
445. [*Dissolution capacity of novel cellulose solvents based on triethyl\(n-octyl\)ammonium chloride*](#)
Ch. Achtel, K. Jedvert, B. Kosan, O. A. El Seoud, Th. Heinze
Macromolecular Chemistry and Physics **218** (2017) 1700208.
444. [*Synthesis and characterization of novel water-soluble and bactericidic cationic starch esters*](#)
A. Pfeifer, R. Hampe, Th. Heinze
Starch/Stärke **69** (2017) 1700029.
443. [*Reactive maleimido dextran thin films for cysteine-containing surfaces adsorbing BSA*](#)
Th. Elschner, F. Obst, Th. Heinze, R. Kargl, K. Stana-Kleinschek
Macromolecular Chemistry and Physics **218** (2017) 1600535.
442. [*Adsorption studies of amino cellulose on cellulosics*](#)
K. Jedvert, Th. Elschner, Th. Heinze
Macromolecular Materials and Engineering **302** (2017) 1700022.
441. [*Studies on the regiochemistry of acetylation of xylan*](#)
A. Pfeifer, A. Koschella, Th. Heinze
Lenzinger Berichte **93** (2017) 17-23.
440. [*Preparation of sodium cellulose sulfate oligomers by free-radical depolymerization*](#)
B. Muhitdinov, Th. Heinze, N. Normakhamatov, A. Turaev
Carbohydrate Polymers **173** (2017) 631-637.
439. [*Cellulose-polyhydroxylated fatty acid ester-based bioplastics with tuning properties: Acylation via a mixed anhydride system*](#)

J. A. Heredia-Guerrero, L. Goldoni, J. J. Benítez, A. Davis, L. Ceseracciu, R. Cingolani, I. S. Bayer, Th. Heinze, A. Koschella, A. Heredia, A. Athanassiou
Carbohydrate Polymers **173** (2017) 312-320.

438. [Sulfoethylated nanofibrillated cellulose: production and properties](#)
A. Naderi, A. Koschella, Th. Heinze, K.-C. Shih, M.-P. Nieh, A. Pfeifer, C.-C. Chang,
J. Erlandsson
Carbohydrate Polymers **169** (2017) 515-523.

437. [Meltable magnetic biocomposites for controlled release](#)
R. Müller, M. Zhou, A. Dellith, T. Liebert, T. Heinze
Journal of Magnetism and Magnetic Materials **431** (2017) 289-293.

436. [Mobility investigations of magnetic nanoparticles in biocomposites](#)
R. Müller, M. Zhou, T. Liebert, J. Landers, S. Salamon, S. Webers, A. Dellith, D.
Borin, Th. Heinze, H. Wende
Materials Chemistry and Physics **193** (2017) 364-370.

435. [Fluorescent multifunctional polysaccharides for sustainable supramolecular functionalization of fibers in water](#)
O. Grigoray, H. Wondraczek, A. Pfeifer, P. Fardim, Th. Heinze
ACS Sustainable Chemistry and Engineering **5** (2017) 1794-1803.

434. [Synthesis and film formation of furfuryl- and maleimido carbonic acid derivatives of dextran](#)
Th. Elschner, F. Obst, K. Stana-Kleinschek, R. Kargl, Th. Heinze
Carbohydrate Polymers **161** (2017) 1-9.

433. [Solvent-free synthesis of 6-deoxy-6-\(\$\omega\$ -aminoalkyl\)amino cellulose](#)
Th. Heinze, A. Pfeifer, A. Koschella, J. Schaller, F. Meister
Journal of Applied Polymer Science (2016) DOI: 10.1002/APP.43987

432. [Water-soluble cellulose derivatives are sustainable additives for biomimetic calcium phosphate mineralization](#)
A. Taubert, C. Balischewski, D. Hentrich, Th. Elschner, S. Eidner, K. Behrens, C.
Guenther, Th. Heinze
Inorganics **4** (2016) DOI: 10.3390/inorganics4040033

431. [Development and validation of a capillary electrophoresis method for the characterization of sulfoethyl cellulose](#)
H. Harnisch, J. Hühner, C. Neusüß, A. Koschella, Th. Heinze, G. K. E. Scriba
Journal of Separation Science **39** (2016) 4645-4652.

430. [Advanced cellulose fibers for efficient immobilization of enzymes](#)
I. B. Vega Erramuspe, E. Fazeli, T. Näreoja, J. Trygg, P. E. Hänninen, Th. Heinze, P.
Fardim
Biomacromolecules **17** (2016) 3188-3197.

429. [Incorporation of hydrophobic dyes within cellulose acetate and acetate phthalate based nanoparticles](#)

P. Schulze, M. Gericke, F. Scholz, H. Wondraczek, P. Mieth, Th. Heinze
Macromolecular Chemistry and Physics **217** (2016) 1823-1833.

428. [Novel dextran derivatives with unconventional structure formed in an efficient one-pot reaction](#)

K. Hotzel, Th. Heinze
Carbohydrate Research **434** (2016) 77-82.

427. [Homogeneous acetylation of cellulose in the new solvent triethyloctylammonium chloride in combination with organic liquids](#)

Ch. Achtel, Th. Heinze
Macromolecular Chemistry and Physics **217** (2016) 2041-2048.

426. [Cellulose carboxylate/tosylate mixed esters: Synthesis, properties and shaping into microspheres](#)

D. C. Ferreira, G. S. Bastos, A. Pfeifer, Th. Heinze, O. A. El Seoud
Carbohydrate Polymers **152** (2016) 79-86.

425. [Reactive cellulose-based thin films - a concept for multifunctional polysaccharide surfaces](#)

Th. Elschner, D. Reishofer, R. Kargl, Th. Grießer, Th. Heinze, K. Stana Kleinschek
RSC Advances **6** (2016) 72378-72385.

424. [Determination of percent crystallinity of side-chain crystallized alkylated-dextran derivatives with Raman spectroscopy and multivariate curve resolution](#)

A. Z. Samuel, M. Zhou, M. Ando, R. Mueller, T. Liebert, Th. Heinze, Hiro-o Hamaguchi
Analytical Chemistry **88** (2016) 4644-4650.

423. [Synthesis and structure characterization of soluble starch ethyl carbonates](#)

R. Hampe, Th. Heinze
Starch/Stärke **68** (2016) 505-513.

422. [Bacteria-responsive multilayer coatings comprising polycationic nanospheres for bacteria biofilm prevention on urinary catheters](#)

A. Francesko, M. M. Fernandes, K. Ivanova, S. Amorim, R. L. Reis, I. Pashkuleva, E. Mendoza, A. Pfeifer, Th. Heinze, T. Tzanov
Acta Biomaterialia **33** (2016) 203-212.

421. [Zwitterionic cellulose carbamate with regioselective substitution pattern - a coating material possessing antimicrobial activity](#)

Th. Elschner, C. Lüdecke, D. Kalden, M. Roth, B. Löffler, K. D. Jandt, Th. Heinze
Macromolecular Bioscience **16** (2016) 522-534.

420. [Synthesis of novel cellulose carbamates possessing terminal amino groups and their bioactivity](#)

K. Ganske, C. Wiegand, U.-C. Hipler, Th. Heinze
Macromolecular Bioscience **16** (2016) 451-461.

419. [Cellulose: Structure and properties](#)
Th. Heinze
Advances in Polymer Science **271** (2016) 1-52.
418. [Stimuli-responsive nanoparticles from ionic cellulose derivatives](#)
Y. Wang, Th. Heinze, K. Zhang
Nanoscale **8** (2016) 648-657.
417. [Simple synthesis of reactive and nanostructure forming hydrophobic amino cellulose derivatives](#)
M. Obst, Th. Heinze
Macromolecular Materials and Engineering **301** (2016) 65-70.
416. [Biofunctional materials based on amino cellulose derivatives – a nanobiotechnological concept](#)
Th. Heinze, M. Siebert, P. Berlin, A. Koschella
Macromolecular Bioscience **16** (2016) 10-42.
415. [Bio-nano composite for remote melting](#)
R. Müller, M. Zhou, T. Liebert, A. Dellith, S. Dutz, D. Borin, Th. Heinze
Proceedings of the 15th IEEE International Conference on Nanotechnology, July 27-30, 2015, Rome, Italy, 1-4.
414. [Cellulosic Biomaterials](#)
H. Wondraczek, Th. Heinze
Living Reference Work, Continuously updated edition Polysaccharides - Bioactivity and Biotechnology, K. G. Ramawat, J.-M. Mérillon (Eds), ISBN: 978-3-319-03751-6 (Online), **2015**, 1-34.
413. [Nanoparticle formulation of AEA and BAEA cellulose carbamates increases biocompatibility and antimicrobial activity](#)
C. Wiegand, M. Nikolajski, U.-C. Hipler, Th. Heinze
Macromolecular Bioscience **15** (2015) 1242-1251.
412. [Polysaccharidbasierte Immobilisierung](#)
P. Miethe, Th. Heinze
labor&more **8** (2015) 30-34.
411. [Gene auf Zucker](#)
D. Fischer, Th. Heinze
labor&more **8** (2015) 28-29.
410. [Designing hydrophobically modified polysaccharide derivatives for highly efficient enzyme immobilization](#)
T. Mohan, R. Rathner, D. Reishofer, M. Koller, Th. Elschner, S. Spirk, Th. Heinze, K. Stana-Kleinschek, R. Kargl
Biomacromolecules **16** (2015) 2403-2411.
409. [Magnetic biocomposites for remote melting](#)
M. Zhou, T. Liebert, R. Müller, A. Dellith, C. Gräfe, J. H. Clement, Th. Heinze
Biomacromolecules **16** (2015) 2308-2315.

408. [6-Deoxy-6-aminoethyleneamino cellulose: synthesis and study of hemocompatibility](#)
M. Zieger, M. Wurlitzer, C. Wiegand, K. Reddersen, S. Finger, P. Elsner, P. Laudeley, T. Liebert, Th. Heinze, U.-C. Hipler
Journal of Biomaterials Science, Polymer Edition **26** (2015) 931-946.
407. [Preparation of reactive fibre interfaces using multifunctional cellulose derivatives](#)
B. Vega, H. Wondraczek, L. Bretschneider, T. Näreoja, P. Fardim, Th. Heinze
Carbohydrate Polymers **132** (2015) 261-273.
406. *Lösen von Cellulose einfach gemacht*
Th. Heinze, M. Kostag, T. Liebert
GIT Labor-Fachzeitschrift **6** (2015) 52-54.
405. [Enzymatic functionalization of cork surface with antimicrobial hybrid biopolymer/silver nanoparticles](#)
A. Francesko, L. Blandón, M. Vázquez, P. Petkova, J. Morató, A. Pfeifer Th. Heinze, E. Mendoza, T. Tzanov
ACS Applied Materials & Interfaces **7** (2015) 9792-9799.
404. [Cellulose carbonates: A platform for promising biopolymer derivatives with multifunctional capabilities](#)
Th. Elschner, Th. Heinze
Macromolecular Bioscience **15** (2015) 735-746.
403. [Characterization of sodium carboxymethyl cellulose by comprehensive two-dimensional liquid chromatography](#)
M. Shakun, Th. Heinze, W. Radke
Carbohydrate Polymers **130** (2015) 77-86.
402. [Comparison testing of methods for gel permeation chromatography of cellulose: coming closer to a standard protocol](#)
A. Potthast, S. Radosta, B. Saake, S. Lebioda, Th. Heinze, U. Henniges, A. Isogai, A. Koschella, P. Kosma, Th. Rosenau, S. Schiehser, H. Sixta, M. Strlič, G. Strobin, W. Vorwerk, H. Wetzel
Cellulose **22** (2015) 1591-1613.
401. [Homogeneous tosylation of agarose as an approach towards novel functional polysaccharide materials](#)
M. Gericke, Th. Heinze
Carbohydrate Polymers **127** (2015) 236-245.
400. [Studies on the sulfation of cellulose \$\alpha\$ -lipoate and ability of the sulfated product to stabilize colloidal suspensions of gold nanoparticles](#)
V. Sarbova, A. Koschella, F. Cheng, S. M. Kelly, Th. Heinze
Carbohydrate Polymers **124** (2015) 117-123.
399. [Photocontrol of mechanical properties of pulp fibers and fiber-to-fiber bonds via self-assembled polysaccharide derivatives](#)
O. Grigoray, H. Wondraczek, St. Daus, K. Kühnöl, S. K. Latifi, P. Sacketi, P. Fardim,

- P. Kallio, Th. Heinze
Macromolecular Materials and Engineering **300** (2015) 277-282.
398. [Reversibly crystalline nanoparticles from cellulose alkyl esters via nanoprecipitation](#)
K. Zhang, A. Geissler, Th. Heinze
Particle & Particle Systems Characterization **32** (2015) 258-266.
397. [Cationically modified 6-deoxy-6-azido cellulose as a water-soluble and reactive biopolymer derivative](#)
L. Bretschneider, A. Koschella, Th. Heinze
Polymer Bulletin **72** (2015) 473-485.
396. [2-Hydroxypropyltrimethylammonium xylan adsorption onto rod-like cellulose nanocrystal](#)
J. H. Sim, S. Dong, K. Römhild, A. Kaya, D. Sohn, K. Tanaka, M. Roman, Th. Heinze, A. R. Esker
Journal of Colloid & Interface Science **440** (2015) 119-125.
395. [Film formation of \$\omega\$ -aminoalkylcellulose carbamates – a quartz crystal microbalance \(QCM\) study](#)
Th. Elschner, A. Doliška, M. Bračić, K. Stana-Kleinschek, Th. Heinze
Carbohydrate Polymers **116** (2015) 111-116.
394. [Triggering protein adsorption on tailored cationic cellulose surfaces](#)
T. Mohan, K. Niegelhell, C. Zarth, R. Kargl, S. Köstler, V. Ribitsch, Th. Heinze, S. Spirk, K. Stana-Kleinschek
Biomacromolecules **15** (2014) 3931–3941.
393. [Characterization of hydrothermally isolated xylan from beech wood by capillary electrophoresis with laser-Induced fluorescence and mass spectrometry detection](#)
P. Jac, Th. Elschner, C. Reiter, S.C. Bunz, H.M. Vorbrodt, A. Pfeifer, C. Neusüß, Th. Heinze, G.K.E. Scriba
Cellulose **21** (2014) 3993-4007.
392. [Rapid flow through immunoassay for CRP determination based on polyethylene filters modified with \$\omega\$ -aminocellulose carbamate](#)
Th. Elschner, F. Scholz, P. Miethe, Th. Heinze
Macromolecular Bioscience **14** (2014) 1539-1546.
391. [Studies about the solvent-dependent substitution pattern of starch acetates](#)
R. Hampe, Th. Heinze
Macromolecular Materials and Engineering **299** (2014) 1188-1196.
390. [Acetone based cellulose solvent](#)
M. Kostag, T. Liebert, Th. Heinze
Macromolecular Rapid Communications **35** (2014) 1419-1422.
389. [Modification of pine pulp during oxygen delignification by xylan self-assembly](#)
O. Grigoray, J. Järnström, E. Heikkilä, P. Fardim, Th. Heinze
Carbohydrate Polymers **112** (2014) 308-315.

388. [Photoresponsive cellulose fibers by surface modification with multifunctional cellulose derivatives](#)
O. Grigoray, H. Wondraczek, E. Heikkilä, P. Fardim, Th. Heinze
Carbohydrate Polymers **111** (2014) 280-287.
387. [Flocculation efficiency of novel amphiphilic starch derivatives: A comparative study](#)
S. Y. Bratskaya, S. Genest, K. Petzold-Welcke, Th. Heinze, S. Schwarz
Macromolecular Materials and Engineering **299** (2014) 722-728.
386. [A promising cellulose-based polyzwitterion with pH-sensitive charges](#)
Th. Elschner, Th. Heinze
Beilstein Journal of Organic Chemistry **10** (2014) 1549-1556.
385. [Whiter, brighter, and more stable cellulose paper coated with antibacterial carboxymethyl starch stabilized ZnO nanoparticles](#)
F. Cheng, J. W. Betts, S. M. Kelly, D. Wareham, A. Kornherr, F. Dumestre, J. Schaller, Th. Heinze
Journal of Materials Chemistry B: Materials for Biology and Medicine **2** (2014) 3057-3064.
384. [Sonochemically processed cationic nanocapsules: Efficient antimicrobials with membrane disturbing capacity](#)
M. M. Fernandes, A. Francesko, J. Torrent-Burgués, F. J. Carrión-Fité, Th. Heinze, T. Tzanov
Biomacromolecules **15** (2014) 1365-1374.
383. [Temperature-responsive thin films from cellulose stearyl triester](#)
A. Geissler, E. Bonaccorso, L.-O. Heim, Th. Heinze, K. Zhang
The Journal of Physical Chemistry, Part: Part C: Energy Conversion and Storage, Optical and Electronic Devices, Interfaces, Nanomaterials, and Hard Matter, Section: C: Surfaces, Interfaces, Porous Materials, and Catalysis **118** (2014) 2408-2417.
382. [Molten imidazole - a starch solvent](#)
Th. Heinze, T. Jordan, S. Schmidt, T. Liebert
Green Chemistry **16** (2014) 1967-1973.
381. [Synthesis of soluble cellulose tosylates in an eco-friendly medium](#)
Th. Heinze, S. Schmidt, T. Liebert
Green Chemistry **16** (2014) 1941-1946.
380. [Synthesis of cellulose tricarbonates in 1-butyl-3-methylimidazolium chloride/pyridine](#)
Th. Elschner, M. Kötteritzsch, Th. Heinze
Macromolecular Bioscience **14** (2014) 161-165.
379. [Cellulose scaffolds with an aligned and open porosity fabricated via ice-templating](#)
St. Flauder, Th. Heinze, F. A. Müller
Cellulose **21** (2014) 97-103.

378. [Formation of nanostructured cellulose stearyl esters via nanoprecipitation](#)
A. Geissler, M. Biesalski, Th. Heinze, K. Zhang
Journal of Materials Chemistry A **4** (2014) 1107-1116.
377. [Protein-like fully reversible tetramerisation and super-association of an aminocellulose](#)
M. Nikolajski, G. G. Adams, R. B. Gillis, D. Tabot Besong, A. J. Rowe, Th. Heinze, S. E. Harding
Scientific Reports **4** (2014) article no. 3861 (doi:10.1038/srep03861).
376. [Xylan derivatives and their application potential - Mini-review of own results](#)
K. Petzold-Welcke, K. Schwikal, St. Daus, Th. Heinze
Carbohydrate Polymers **100** (2014) 80-88.
375. [Ionic liquids as solvents for homogeneous derivatization of cellulose: Challenges and opportunities](#)
Th. Heinze, M. Gericke
In: Z. Fang, R. L. Smith Jr., X. Qi (eds.) Production of Biofuels and Chemicals with Ionic Liquids, Springer (2013), pp. 107-144.
374. [Novel bioactive amino-functionalized cellulose nanofibers](#)
K. Römhild, C. Wiegand, U. C. Hipler, Th. Heinze
Macromolecular Rapid Communications **34** (2013) 1767-1771.
373. [Charge-directed fiber surface modification by molecular assemblies of functional polysaccharides](#)
B. Vega, H. Wondraczek, C. S. P. Zarth, E. Heikkilä, P. Fardim, Th. Heinze
Langmuir **29** (2013) 13388-13395.
372. [MultiSig: a new high-precision approach to the analysis of complex biomolecular systems](#)
R. B. Gillis, G. G. Adams, Th. Heinze, M. Nikolajski, S. E. Harding, A. J. Rowe
European Biophysics Journal **42** (2013) 777-786.
371. [Characterization of highly substituted, cationic amphiphilic starch derivatives: Dynamic surface tension and intrinsic viscosity](#)
S. Genest, S. Schwarz, K. Petzold-Welcke, Th. Heinze, B. Voit
Starch/Stärke **65** (2013) 999-1010.
370. [Cellulose and microcrystalline cellulose from rice straw and banana plant waste - Preparation and characterization](#)
M. M. Ibrahim, W. K. El-Zawawy, Y. Jüttke, A. Koschella, Th. Heinze
Cellulose **20** (2013) 2403-2416.
369. [Efficient cellulose solvent: Quaternary ammonium chlorides](#)
M. Kostag, T. Liebert, O. A. El Seoud, Th. Heinze
Macromolecular Rapid Communications **34** (2013) 1580-1584.
368. [Determination of the DS distribution of non-degraded sodium carboxymethyl cellulose by gradient chromatography](#)

M. Shakun, Th. Heinze, W. Radke
Carbohydrate Polymers 98 (2013) 943-950.

367. [Studies on the structure of coumarin-modified dextran nanoparticles by fluorescence spectroscopy](#)

H. Wondraczek, A. Kotiaho, M. Niemi, P. Fardim, Th. Heinze
Carbohydrate Polymers **97** (2013) 45-51.

366. [Comprehensive analysis of the substituent distribution in 3-O-ethyl/propyl cellulose derivatives](#)

J. Cuers, A. Koschella, Y. Wang, Th. Heinze, P. Mischnick
Carbohydrate Polymers **96** (2013) 246-252.

365. [Molar mass characterization of sodium carboxymethyl cellulose by SEC-MALLS](#)

M. Shakun, H. Maier, Th. Heinze, P. Kilz, W. Radke
Carbohydrate Polymers **95** (2013) 550-559.

364. [Evaluation of cellulose and carboxymethyl cellulose/poly\(vinyl alcohol\) membranes](#)

M. M. Ibrahim, A. Koschella, G. Kadry, Th. Heinze
Carbohydrate Polymers **95** (2013) 414-420.

363. [Synthesis and antibacterial effects of aqueous colloidal solutions of silver nanoparticles using aminocellulose as a combined reducing and capping reagent](#)

F. Cheng, J. W. Betts, St. M. Kelly, J. Schaller, Th. Heinze
Green Chemistry **15** (2013) 989-998.

362. [Syntheses and detailed structure characterization of dextran carbonates](#)

Th. Elschner, H. Wondraczek, Th. Heinze
Carbohydrate Polymers **93** (2013) 216-223.

361. [Perichromism: A powerful tool for probing the properties of cellulose and its derivatives](#)

L. C. Fidale, Th. Heinze, O. A. El Seoud
Carbohydrate Polymers **93** (2013) 129-134.

360. [Nanoparticles from conventional cellulose esters: evaluation of preparation methods](#)

H. Wondraczek, K. Petzold-Welcke, P. Fardim, Th. Heinze
Cellulose **20** (2013) 751-760.

359. [Self-Association of novel mixed 3-mono-O-alkyl cellulose: Effect of the hydrophobic moieties ratio](#)

A. Sullo, Y. Wang, A. Koschella, Th. Heinze, T. J. Foster
Carbohydrate Polymers **93** (2013) 574-581.

358. [Biocompatible Multishell Architecture for Iron Oxide Nanoparticles](#)

J. Wotschadlo, T. Liebert, J. H. Clement, N. Anspach, St. Hoepfner, T. Rudolph, R. Müller, U. S. Schubert, Th. Heinze
Macromolecular Bioscience **13** (2013) 93-105.

357. [Interactions of a cationic cellulose derivative with an ultrathin cellulose support](#)
T. Mohan, C. S. P. Zarth, A. Doliška, R. Kargl, Th. Grießer, S. Spirk, Th. Heinze, K. Stana-Kleinschek
Carbohydrate Polymers **92** (2013) 1046-1053.
356. [Suitability of viability assays for testing biological effects of coated superparamagnetic nanoparticles](#)
F. Bähring, F. Schlenk, J. Wotschadlo, N. Buske, T. Liebert, C. Bergemann, Th. Heinze, A. Hochhaus, D. Fischer, J. H. Clement
IEEE Transactions on Magnetism **49** (2013) 383-388.
355. [Synthesis and aminolysis of polysaccharide carbonates](#)
Th. Elschner, K. Ganske, Th. Heinze
Cellulose **20** (2013) 339-353.
354. *Cellulose: Chemistry of cellulose derivatization*
Th. Heinze, A. Koschella, T. Liebert, V. Harabagiu, S. Coseri
In: P. Navard (ed.) [The Polysaccharide Network of Excellence \(NOE\) Research Initiatives and Results](#), Springer, Wien, 2012, pp. 283-327.
353. *Pulp fibers for papermaking and cellulose dissolution*
P. Fardim, T. Liebert, Th. Heinze
In: P. Navard (ed.) [The Polysaccharide Network of Excellence \(NOE\) Research Initiatives and Results](#), Springer, Wien, 2012, pp. 253-282.
352. *Polysaccharides: Molecular and supramolecular structures. Terminology*
Th. Heinze, K. Petzold-Welcke, J. E. G. van Dam
In: P. Navard (ed.) [The Polysaccharide Network of Excellence \(NOE\) Research Initiatives and Results](#), Springer, Wien, 2012, pp. 23-64.
351. [Hybrid Fe₃O₄@amino cellulose nanoparticles in organic media -Heterogeneous ligands for atom transfer radical polymerizations](#)
L. C. Fidale, M. Nikolajski, T. Rudolph, S. Dutz, Th. Heinze, F. H. Schacher
Journal of Colloid and Interface Science **390** (2012) 25-33.
350. *Blending of Cellulose and Chitosan in Alkyl Imidazolium Ionic Liquids*
O. Kuzmina, Th. Heinze, D. Wawro
ISRN Polymer Science 2012, 251950, DOI: [10.5402/2012/251950](#).
349. [Characterization of viscose fibers modified with 6-deoxy-6-amino cellulose sulfate](#)
T. Genco, L. Fras Zemljic, M. Bračič, K. Stana-Kleinschek, Th. Heinze
Cellulose **19** (2012) 2057-2067.
348. [New regioselective substituted cellulose ethers: thermo-rheological study](#)
A. Sullo, Y. Wang, J. R. Mitchell, A. Koschella, Th. Heinze, T. J. Foster
Special Publication - Royal Society of Chemistry (2012), **335**(Gums and Stabilisers for the Food Industry 16), 45-57.
347. [2-O-methyl- and 3,6-di-O-methyl-celluloses from natural cellulose: synthesis and structure characterization](#)

A. Nakagawa, C. Ishizu, V. Sarbova, A. Koschella, T. Takano, Th. Heinze, H. Kamitakahara
Biomacromolecules **13** (2012) 2760-2768.

346. [Recent Developments in Structure Design of 3-O-Ethers of Cellulose](#)

Y. Wang, A. Koschella, Th. Heinze
Lenzinger Berichte **90** (2012) 93-102.

345. [Study about the efficiency of esterification of cellulose under homogeneous condition dependence on the chain length and solvent](#)

M.C.V. Nagel, Th. Heinze
Lenzinger Berichte **90** (2012) 85-92.

344. [The removal of stickies with modified starch and chitosan - Highly cationic and hydrophobic types compared with unmodified ones](#)

G. Petzold, K. Petzold-Welcke, H. Qi, K. Stengel, S. Schwarz, Th. Heinze
Carbohydrate Polymers **90** (2012) 1712-1718.

343. [Thermoresponsive hydrogel of diblock methylcellulose: Formation of ribbon-like supramolecular nanostructures by self-assembly](#)

A. Nakagawa, F. Steiniger, W. Richter, A. Koschella, Th. Heinze, H. Kamitakahara
Langmuir **28** (2012) 12609-12618.

342. [Enhanced Dewatering of Polyelectrolyte Nanocomposites by Hydrophobic Polyelectrolytes](#)

J. Kittle, H. Wondraczek, C. Wang, F. Jiang, M. Roman, Th. Heinze, A. Esker
Langmuir **28** (2012) 11086-11094.

341. [Charging behaviour and stability of the novel amino group containing cellulose ester cellulose-4-\[N-methylamino\]butyrate hydrochloride](#)

C. S. P. Zarth, L. F. Z., D. Čakara, M. Bračić, A. Pfeifer, K. Stana-Kleinschek, Th. Heinze
Macromolecular Chemistry and Physics **213** (2012) 1669-1676.

340. [Mixed 3-mono-O-alkyl cellulose: Synthesis, structure characterization and thermal properties](#)

Th. Heinze, Y. Wang, A. Koschella, A. Sullo, T. J. Foster
Carbohydrate Polymers **90** (2012) 380-386.

339. [Studies on the fibre surfaces modified with xylan polyelectrolytes](#)

B. Vega, K. Petzold-Welcke, P. Fardim, Th. Heinze
Carbohydrate Polymers **89** (2012) 768-776.

338. [Recent advances in cellulose chemistry](#)

Th. Heinze, K. Petzold-Welcke
In: [Polysaccharide Building Blocks: A sustainable approach to the development of renewable biomaterials](#),
Wiley, Eds. Y. Habibi, L. A. Lucia, 2012, pp. 1-50.

337. [Amino-functionalized cellulose nanoparticles: Preparation, characterization, and interactions with living cells](#)

M. Nikolajski, J. Wotschadlo, J. H. Clement, Th. Heinze
Macromolecular Bioscience **12** (2012) 920-925.

336. [*Ionic Liquids - Promising but Challenging Solvents for Homogeneous Derivatization of Cellulose*](#)

M. Gericke, P. Fardim, Th. Heinze
Molecules **17** (2012) 7458-7502.

335. [*Water soluble photoactive cellulose derivatives: Synthesis and characterization of mixed \[\(4-methyl-2-oxo-2H-chromen-7-yl\)oxy\] acetic acid- \(3-carboxypropyl\)trimethylammonium chloride esters of cellulose*](#)

H. Wondraczek, A. Pfeifer, Th. Heinze
Cellulose **19** (2012) 1327-1335.

334. [*Synthesis and characterization of aminocellulose sulfates as novel ampholytic polymers*](#)

Th. Heinze, T. Genco, K. Petzold-Welcke, H. Wondraczek
Cellulose **19** (2012) 1305-1313

333. *Celluloses and Polyoses/Hemicelluloses*

Th. Heinze, T. Liebert

In: Matyjaszewski K and Möller M (eds.) Polymer Science: A Comprehensive Reference, Vol 10, Elsevier, Amsterdam, 2012, pp. 83-152.

332. [*Functional polysaccharide composite nanoparticles from cellulose acetate and potential applications*](#)

M. R. Kulterer, V. E. Reichel, R. Kargl, St. Köstler, V. Sarbova, Th. Heinze, K. Stana-Kleinschek, V. Ribitsch

Advanced Functional Materials **22** (2012) 1749-1758.

331. [*Studies on the tosylation of cellulose in mixtures of ionic liquids and a co-solvent*](#)

M. Gericke, J. Schaller, T. Liebert, P. Fardim, F. Meister, Th. Heinze
Carbohydrate Polymers **89** (2012) 526-536.

330. [*Homogenous synthesis of 3-allyloxy-2-hydroxypropyl-cellulose in NaOH/urea aqueous system*](#)

H. Qi, T. Liebert, Th. Heinze

Cellulose **19** (2012) 925-932.

329. [*Physicochemical properties and bioactivity of a novel class of cellulose derivatives: 6-Deoxy-6-amino cellulose sulfate*](#)

T. Genco, L. Fras Zemljic, M. Bračič, K. Stana-Kleinschek, Th. Heinze

Macromolecular Chemistry and Physics **213** (2012) 539-548.

328. [*Simple synthesis of mixed cellulose acylate phosphonates applying n-propyl phosphonic acid anhydride*](#)

Th. Heinze, V. Sarbova, M. C. V. Nagel

Cellulose **19** (2012) 523-531.

327. [*Synthesis and characterization of branched polysaccharides by reaction of cellulose with 2,3,4,6-tetraacetyl-1-bromo- \$\alpha\$ -D-glucopyranoside*](#)

A. Koschella, S. Dorn, Th. Heinze, A. Togola, B. S. Paulsen
Archive for Organic Chemistry 2012 (3) 76-89.

326. [Employing perichromism for probing the properties of carboxymethyl cellulose films: an expedient, accurate method for the determination of the degree of substitution of the biopolymer derivative](#)

L. C. Fidale, P. M. Lima, L. M. A. Hortêncio, P. A. R. Pires, Th. Heinze, O. A. El Seoud
Cellulose **19** (2012) 151-159.

325. [Alkyl \$\beta\$ -D-cellulosides: non-reducing cellulose mimics](#)

M. Meiland, T. Liebert, A. Baumgärtel, U. S. Schubert, Th. Heinze
Cellulose **18** (2011) 1585-1598.

324. [Synthesis of diblock methylcellulose derivatives with regioselective functionalization patterns](#)

A. Nakagawa, D. Fenn, A. Koschella, Th. Heinze, H. Kamitakahara
Journal of Polymer Science, Part A, Polymer Chemistry **49** (2011) 4964-4976.

323. [Physical properties of diblock methylcellulose derivatives with regioselective functionalization patterns: first direct evidence that a sequence of 2,3,6-tri-O-methyl-glucopyranosyl units causes thermoreversible gelation of methylcellulose](#)

A. Nakagawa, D. Fenn, A. Koschella, Th. Heinze, H. Kamitakahara
Journal of Polymer Science, Part B, Polymer Physics **49** (2011) 1539-1546.

322. [Xylan and Xylan Derivatives – Basis of Functional Polymers for the Future](#)

Th. Heinze, S. Daus
RSC Polymer Chemistry Series No. 1, Renewable Resources for Functional Polymers and Biomaterials, Ed. P.A. Williams, Royal Society of Chemistry 2011, 88-129.

321. [Stable Cellulose Nanospheres for Cellular Uptake](#)

T. Liebert, M. Kostag, J. Wotschadlo, Th. Heinze
Macromolecular Bioscience **11** (2011) 1387-1392.

320. [Tailoring the Degree of Polymerization of Low Molecular Weight Cellulose](#)

M. Meiland, T. Liebert, Th. Heinze
Macromolecular Materials and Engineering **296** (2011) 802-809.

319. [Meltable Dextran Esters As Biocompatible and Functional Coating Materials](#)

T. Liebert, J. Wotschadlo, P. Laudeley, Th. Heinze
Biomacromolecules **12** (2011) 3107-3113.

318. [Proteinähnliche Oligomerisierung von Kohlenhydraten](#)

Th. Heinze, M. Nikolajski, St. Daus, T. M. D. Besong, N. Michaelis, P. Berlin, G. A. Morris, A. J. Rowe, St. E. Harding
Angewandte Chemie **123** (2011) 8761-8763.

317. [Protein-like Oligomerization of Carbohydrates](#)

Th. Heinze, M. Nikolajski, St. Daus, T. M. D. Besong, N. Michaelis, P. Berlin, G. A.

Morris, A. J. Rowe, St. E. Harding
Angewandte Chemie, International Edition **50** (2011) 8602-8604.

316. [The dissolution of cellulose in NaOH-based aqueous system by two-step process](#)

H. Qi, Q. Yang, L. Zhang, T. Liebert, Th. Heinze
Cellulose **18** (2011) 237-245.

315. [Expedient, accurate methods for the determination of the degree of substitution of cellulose carboxylic esters: Application of Uv-vis spectroscopy \(dye solvatochromism\) and FTIR](#)

R. Casarano, L. C. Fidale, C. M. Lucheti, Th. Heinze, O. A. El Seoud
Carbohydrate Polymers **83** (2011) 1285-1292 .

314. [Pure, transparent-melting starch esters: Synthesis and Characterization](#)

T. Liebert, M. C. V. Nagel, T. Jordan, A. Heft, B. Grünler, Th. Heinze
Macromolecular Rapid Communications **32** (2011) 1312-1318.

313. [Thermal studies of plant carbohydrate polymer hydrogels](#)

M. S Iqbal, J. Akbar, S. Saghir, A. Karim, A. Koschella, Th. Heinze, M. Sher
Carbohydrate Polymers **86** (2011) 1775-1783.

312. [Synthesis and characterization of novel amino cellulose esters](#)

C. S. P. Zarth, A. Koschella, A. Pfeifer, S. Dorn, Th. Heinze
Cellulose **18** (2011) 1315-1325.

311. [Equilibrium Water Contents of Cellulose Films Determined via Solvent Exchange and Quartz Crystal Microbalance with Dissipation Monitoring](#)

J D. Kittle, X. Du, F. Jiang, C. Qian, Th. Heinze, M. Roman, A. R. Esker
Biomacromolecules **12** (2011) 2881-2887.

310. *Configurations, Structures, and Morphologies of Cellulose*

S. Schubert, K. Schlüter, Th. Heinze

In: POLYSACCHARIDES IN MEDICINAL AND PHARMACEUTICAL APPLICATIONS,

SMITHERS iSMITHERS, Ed. V. Popa, iSmithers, 2011, pp. 1-55.

309. [A "Click-Chemistry" Approach to Cellulose-based Hydrogels](#)

A. Koschella, M. Hartlieb, Th. Heinze
Carbohydrate Polymers **86** (2011) 154-161.

308. [Homogeneous Sulfation of Xylan from Different Sources](#)

S. Daus, K. Petzold-Welcke, M. Kötteritzsch, A. Baumgaertel, U. S. Schubert, Th. Heinze

Macromolecular Materials and Engineering **296** (2011) 551-561.

307. [Tailored Media for Homogeneous Cellulose Chemistry: Ionic Liquid/Co-Solvent Mixtures](#)

M. Gericke, T. Liebert, O. A. El Seoud, Th. Heinze
Macromolecular Materials and Engineering **296** (2011) 483-493.

306. [Properties of spruce sulfite pulp and birch kraft pulp after sorption of cationic birch xylan](#)

K. Schwikal, Th. Heinze, B. Saake, J. Puls, A. Kaya, A. R. Esker
Cellulose **18** (2011) 727-737.

305. [3-O-Propyl cellulose: Cellulose ether with exceptionally low flocculation temperature](#)

Th. Heinze, A. Pfeifer, V. Sarbova, A. Koschella
Polymer Bulletin **66** (2011) 1219-1229.

304. *Ionische Flüssigkeiten: Lösemittel für die Cellulosechemie*

M. Gericke, T. Liebert, Th. Heinze
Nachrichten aus der Chemie **59** (2011) 405-409.

303. [Semi-Synthetic Polysaccharide Sulfates as Anticoagulant Coatings for PET - I: Cellulose Sulfate](#)

M. Gericke, A. Doliska, J. Stana, T. Liebert, Th. Heinze, K. Stana-Kleinschek
Macromolecular Bioscience **11** (2011) 549-556.

302. [Protonation behavior of 6-deoxy-6-\(2-aminoethyl\)amino cellulose: a potentiometric titration study](#)

L. Fras Zemljič, D. Čakara, N. Michaelis, Th. Heinze, K. Stana Kleinschek
Cellulose **18** (2011) 33-43

301. [Synthesis of highly functionalized dextran alkyl carbonates showing nanosphere formation](#)

H. Wondraczek, Th. Elschner, Th. Heinze
Carbohydrate Polymers **83** (2011) 1112-1118.

300. [Photoactive Polysaccharides](#)

H. Wondraczek, A. Kotiaho, P. Fardim, Th. Heinze
Carbohydrate Polymers **83** (2011) 1048-1061.

299. [Fluorescent nanoparticles for ratiometric pH-monitoring in the neutral range](#)

A. Schulz, J. Wotschadlo, Th. Heinze, G. J. Mohr
Journal of Materials Chemistry **20** (2010) 1475-1483.

298. [Esterification of cellulose with acyl-1H-benzotriazole](#)

M.C.V. Nagel, Th. Heinze
Polymer Bulletin **65** (2010) 873-881.

297. [Phase Behaviour of Hydroxypropyl Cellulose/ Polyacrylamide Gels](#)

C. Castro, A. Morales, A. Koschella, Th. Heinze
Macromolecular Symposia **296(1)** (2010) 429-435

296. [Semi-Synthetic Sulfated Polysaccharides - Promising Materials for Biomedical Applications and Supramolecular Architecture](#)

Th. Heinze, S. Daus, M. Gericke, T. Liebert
In: Polysaccharides: Development, Properties and Applications, Ed. A. Tiwari, Nova Science Publishers, 2010, pp. 213-259

295. *Cellulose Sulfates - Novel synthesis and polyelectrolyte complex formation*
M. Gericke, T. Liebert, Th. Heinze
8th International Symposium "Materials made of Renewable Resources", 09.-
10.09.2010, CD-ROM.
294. [Probing the dependence of the properties of cellulose acetates and their films on the degree of biopolymer substitution: use of solvatochromic indicators and thermal analysis](#)
L. C. Fidale, C. Ißbrücker, P. L. Silva, C. M. Lucheti, Th. Heinze, O. A. El Seoud
Cellulose **17** (2010) 937-951
293. [Study on Synthesis and NMR Characterization of 2,3-O-Hydroxyethyl Cellulose Depending on Synthesis Conditions](#)
K. Petzold-Welcke, M. Kötteritzsch, D. Fenn, A. Koschella, Th. Heinze
Macromolecular Symposia **294(2)** (2010) 133-140
292. [Homogenous Carboxymethylation of Cellulose in the New Alkaline Solvent LiOH/Urea Aqueous Solution](#)
H. Qi, T. Liebert, F. Meister, L. Zhang, Th. Heinze
Macromolecular Symposia **294(2)** (2010) 125-132
291. [Carboxymethylation of Bacterial Cellulose](#)
K. Schluffer, T. Heinze
Macromolecular Symposia **294(2)** (2010) 117-124
290. [Comparison of Benzyl Celluloses Synthesized in Aqueous NaOH and Dimethyl Sulfoxide/Tetrabutylammonium Fluoride](#)
Esther Rohleder and Thomas Heinze
Macromolecular Symposia **294(2)** (2010) 107-116
289. [Pure Cellulose Nanoparticles from Trimethylsilyl Cellulose](#)
M. Kostag, S. Köhler, T. Liebert, Th. Heinze
Macromolecular Symposia **294(2)** (2010) 96-106
288. [Solvent Effects on the NMR Chemical Shifts of Imidazolium-Based Ionic Liquids and Cellulose Therein](#)
St. Hesse-Ertelt, Th. Heinze, B. Kosan, K. Schwikal, F. Meister
Macromolecular Symposia **294(2)** (2010) 75-89
287. [Mesophases in a Gel from Hydroxypropyl Cellulose/Polyacrylamide](#)
C. Castro-Guerrero, A. Morales-Cepeda, O. Kharissova, A. Koschella, Thomas Heinze
Macromolecular Symposia **294(2)** (2010) 58-63
286. [Novel Cellulose Products Prepared by Homogeneous Functionalization of Cellulose in Ionic Liquids](#)
S. Dorn, M. Schöbitz, K. Schluffer, Th. Heinze
ACS Symposium Series **1033** (2010) 275-285
285. [Comparison of Solution-State Properties of Cellulose Dissolved in NaOH/Water and in Ionic Liquid \(EMIMAc\)](#)

T. Budtova, M. Egal, R. Gavillon, M. Gericke, Th. Heinze, T. Liebert, C. Roy, K. Schluffer, P. Navard
ACS Symposium Series **1033** (2010) 179-196

284. [Dimethyl Sulfoxide and Ammonium Fluorides — Novel Cellulose Solvents](#)
Th. Heinze, Sarah Köhler
ACS Symposium Series **1033** (2010) 103-118

283. [Homogeneous methylation of wood pulp cellulose dissolved in LiOH/urea/H₂O](#)
M. C. V. Nagel, A. Koschella, K. Voiges, P. Mischnick, Th. Heinze
European Polymer Journal **46** (2010) 1726-1735

282. [Synthetic photocrosslinkable polysaccharide sulfates](#)
H. Wondraczek, A. Pfeifer, Th. Heinze
European Polymer Journal **46** (2010) 1688-1695

281. [Towards unnatural xylan based polysaccharides: reductive amination as a tool to access highly engineered carbohydrates](#)
S. Daus, Th. Elschner, Th. Heinze
Cellulose **17** (2010) 825-833

280. [Preparation and Subsequent Shaping of Cellulose Acetates Using Ionic Liquids](#)
B. Kosan, S. Dorn, F. Meister, Th. Heinze
Macromolecular Materials and Engineering **295** (2010) 676-681

279. [Novel Cellulose-based Polyelectrolytes Synthesized via Click Reaction](#)
A. Koschella, M. Richter, Th. Heinze
Carbohydrate Research **345** (2010) 1028-1033

278. [Studies on the Boronation of Methyl- \$\beta\$ -D-Cellobioside - a Cellulose Model](#)
M. Meiland, Th. Heinze, W. Günther, T. Liebert
Carbohydrate Research **345** (2010) 257-263

277. [Synthesis of water-soluble cellulose esters applying carboxylic acid imidazolides](#)
S. Dorn, A. Pfeifer, K. Schluffer, Th. Heinze
Polymer Bulletin **64** (2010) 845-854

276. [Aerogels from Unaltered Bacterial Cellulose: Application of scCO₂ Drying for the Preparation of Shaped, Ultra-Lightweight Cellulosic Aerogels](#)
F. Liebner, E. Haimer, M. Wendland, M.-A. Neouze, K. Schluffer, P. Mieth, Th. Heinze, A. Potthast, Th. Rosenau
Macromolecular Bioscience **10** (2010) 349-352

275. [2,3-O-Methyl Cellulose: Studies on Synthesis and Structure Characterization](#)
K. Petzold-Welcke, M. Kötteritzsch, Th. Heinze
Cellulose **17** (2010) 449-457

274. [Interactions of Ionic Liquids with Polysaccharides 9. Hydroxyalkylation of Cellulose without Additional Inorganic Bases](#)
S. Köhler, T. Liebert, Th. Heinze, A. Vollmer, P. Mischnick, E. Möllmann, W. Becker
Cellulose **17** (2010) 437-448

273. [Xylan-Based Nanoparticles: Prodrugs for Ibuprofen Release](#)
St. Daus, Th. Heinze
Macromolecular Bioscience **10** (2010) 211-220
272. [Restricted dissolution and derivatization capacities of cellulose fibres under uniaxial elongational stress](#)
N. Le Moigne, M. Spinu, Th. Heinze, Patrick Navard
Polymer **51** (2010) 447-453.
271. [Evaluation of molten inorganic salt hydrates as reaction medium for the esterification of cellulose](#)
K. Thümmler, S. Fischer, J. Peters, T. Liebert, Th. Heinze
Cellulose **17** (2010) 161-165.
270. [Structure elucidation of uniformly ¹³C-labeled bacterial celluloses from different Gluconacetobacter xylinus strains](#)
St. Hesse-Ertelt, Th. Heinze, E. Togawa, T. Kondo
Cellulose **17** (2010) 139-151.
269. [Hydroxypropyl Xylan Self-Assembly at Air/Water and Water/Cellulose Interfaces](#)
A. Kaya, D. A. Drazenovich, W. G. Glasser, Th. Heinze, A. R. Esker
ACS Symposium Series **1019** (2009) 173-191
268. [Polysaccharide Derivatives for the Modification of Surfaces by Self-Assembly](#)
Th. Heinze, S. Hornig, N. Michaelis, K. Schwikal
ACS Symposium Series **1019** (2009) 195-221.
267. [Versatile Concept for the Structure Design of Polysaccharide-based Nanoparticles](#)
Thomas Heinze and Stephanie Hornig
ACS Symposium Series **1017** (2009) 169-183
266. [Modification of cellulose in ionic liquids towards biomedical applications](#)
T. Liebert, J. Wotschadlo, M. Gericke, S. Köhler, P. Laudeley, and T. Heinze
ACS Symposium Series **1017** (2009) 115-132
265. [Polyelectrolyte Synthesis and In Situ Complex Formation in Ionic Liquids](#)
M. Gericke, T. Liebert, Th. Heinze
Journal of the American Chemical Society **131** (2009) 13220-13221.
264. [Surface Plasmon Resonance Studies of Pullulan and Pullulan Cinnamate Adsorption onto Cellulose](#)
A. Kaya, X. Du, Z. Liu, J. W. Lu, J. R. Morris, W. G. Glasser, Th. Heinze, A. R. Esker
Biomacromolecules **10** (2009) 2451-2459.
263. *Structure--property-relationships of regioselectively functionalized cellulose ethers*
D. Fenn, A. Koschella, Th. Heinze
8th International Symposium on "Materials Made from Renewable Resources", 09.-10.09.2009, CD-ROM.

262. *Nanoprecipitation: An efficient technique for the preparation of versatile polymer nanoparticles*

St. Hornig, Th. Heinze, C. Remzi Becer, U. S. Schubert
Polymer Preprints **50** (2009) 394-395.

261. *Fluorescent polysaccharide nanoparticles for pH-sensing*

St. Hornig, A. Schulze, G. J. Mohr, Th. Heinze
Journal of Photopolymer Science and Technology **22** (2009) 671-673.

260. [Homogenous carboxymethylation of cellulose in the NaOH/urea aqueous solution](#)

H. Qi, T. Liebert, F. Meister, Thomas Heinze
Reactive and Functional Polymers **69** (2009) 779-784

259. [Self-association of cellulose ethers with random and regioselective distribution of substitution](#)

S. Sun, T.J. Foster, W. MacNaughtan, J.R. Mitchell, D. Fenn, A. Koschella, Th. Heinze
Journal of Polymer Science, Part B, Polymer Physics **47** (2009) 1743-1752.

258. [Ammonium-Based Cellulose Solvents Suitable for Homogeneous Etherification](#)

S. Köhler, T. Liebert, Th. Heinze
Macromolecular Bioscience **9** (2009) 836-841

257. [Comparative in vitro study on cytotoxicity, antimicrobial activity and binding capacity for pathophysiological factors in chronic wounds of alginate and silver-containing alginate](#)

C. Wiegand, Th. Heinze, U.-C. Hipler
Wound Repair and Regeneration **17** (2009) 511-521.

256. [Unconventional Reactivity of Cellulose Dissolved in Ionic Liquids](#)

M. Schöbitz, F. Meister, Th. Heinze
Macromolecular Symposia **280** (2009) 102-111

255. [Regioselectively Oxidized Cellulose Ethers](#)

X. Yin, A. Koschella, Th. Heinze
Macromolecular Symposia **280** (2009) 95-101

254. [Novel Cellulose Ethers: Synthesis and Structure Characterization of 3-Mono-O-\(3'-hydroxypropyl\) Cellulose](#)

K. Schumann, A. Pfeifer, Th. Heinze
Macromolecular Symposia **280** (2009) 86-94

253. [Unconventional Cellulose Products Through Nucleophilic Displacement Reactions](#)

K. Petzold-Welcke, N. Michaelis, Th. Heinze
Macromolecular Symposia **280** (2009) 72-85

252. [Hot Topics in Polysaccharide Chemistry - Selected Examples](#)

Th. Heinze
Macromolecular Symposia **280** (2009) 15-27

251. [Synthetic polymeric nanoparticles by nanoprecipitation](#)
St. Hornig, Th. Heinze, C. Remzi Becer, U. S. Schubert
J. Mater. Chem. **19** (2009) 3838-3840.
250. [Rheological properties of cellulose/ionic liquid solutions: from dilute to concentrated states](#)
M. Gericke, K. Schluffer, T. Liebert, Th. Heinze, T. Budtova
Biomacromolecules **10** (2009) 1188-1194
249. [Evaluation of fluorescent polysaccharide nanoparticles for pH sensing in biosamples](#)
A. Schulz, St. Hornig, T. Liebert, E. Birckner, Th. Heinze, G.J. Mohr
Organic and Biomolecular Chemistry **7** (2009) 1884-1889
248. [Determination of the surface coverage of adsorbed dextran and \$\beta\$ -cyclodextrin derivatives on gold by surface titration](#)
St. Hornig, T. Liebert, A.R. Esker, S.L. Stoll, J. Mertzman, W.G. Glasser, Th. Heinze
Langmuir **25** (2009) 4845-4847
247. [Magnetic nanoparticles coated with tailored polysaccharide-based shells – Interaction with human cells](#)
J. Wotschadlo, T. Liebert, Th. Heinze, K. Wagner, M. Schnabelrauch, S. Dutz, R. Müller, F. Steiniger, M. Schwalbe, T. Kroll, K. Höffken, N. Buske, J. Clement
Journal of Magnetism and Magnetic Materials **321** (2009) 1469-1473
246. [Preparation and characterization of nanoparticles based on dextran-drug conjugates](#)
St. Hornig, H. Bunjes, Th. Heinze
Journal of Colloid and Interface Science **338** (2009) 56-62.
245. [Novel 3-Mono-O-Hydroxyethyl Cellulose: Synthesis and Structure Characterization](#)
D. Fenn, Th. Heinze
Cellulose **16** (2009) 853-861.
244. [Regioselectively oxidized 3-O-alkyl ethers of cellulose: Synthesis and Characterization](#)
X. Yin, A. Koschella, Th. Heinze
Reactive and Functional Polymers **69** (2009) 341-346.
243. [Clicking Pentafluorostyrene Copolymers: Synthesis, Nanoprecipitation and Glycosylation](#)
C. Remzi Becer, K. Babiuch, D. Pilz, St. Hornig, Th. Heinze, M. Gottschaldt, U. S. Schubert
Macromolecules **42** (2009) 2387-2394.
242. [Novel 3-O-propargyl cellulose as a precursor for regioselective functionalization of cellulose](#)
D. Fenn, M. Pohl, Th. Heinze
Reactive and Functional Polymers **69** (2009) 347-352.

241. [Ethylation of arabinoxylan from Ispaghula \(Plantago ovata\) seed husk](#)
S. Saghir, M. Saeed Iqbal, A. Koschella, Th. Heinze
Carbohydrate Polymers **77** (2009) 125-130.
240. [Studies of the molecular flexibility of novel dendronized carboxymethyl cellulose derivatives](#)
M. Pohl, G.A. Morris, S.E. Harding, Th. Heinze
European Polymer Journal **45** (2009) 1098-1110.
239. [Seven-membered ring boronates at trans-diol moieties of carbohydrates](#)
M. Meiland, Th. Heinze, W. Günther, T. Liebert
Tetrahedron Letters **50** (2009) 469-472.
238. [Biofunctional Surfaces based on Dendronized Cellulose](#)
M. Pohl, N. Michaelis, F. Meister, Th. Heinze
Biomacromolecules **10** (2009) 382-389.
237. [Interaction of Ionic Liquids with Polysaccharides - 8. Synthesis of Cellulose Sulfates Suitable for Symplex Formation](#)
M. Gericke, T. Liebert, Th. Heinze
Macromolecular Bioscience **9** (2009) 343-353.
236. [Interactions of Ionic Liquids with Polysaccharides - 7: Thermal Stability of Cellulose in Ionic Liquids and N-Methylmorpholine-N-oxide](#)
S. Dorn, F. Wendler, F. Meister, Th. Heinze
Macromolecular Materials and Engineering **293** (2008) 907-913.
235. [Novel biopolymer structures synthesized by dendronization of 6-deoxy-6-aminopropargyl cellulose](#)
M. Pohl, Th. Heinze
Macromolecular Rapid Communications **29** (2008) 1739-1745.
234. [Spectral assignments and anisotropy data of cellulose I_{alpha}: ¹³C-NMR chemical shift data of cellulose I_{alpha} determined by INADEQUATE and RAI techniques applied to uniformly ¹³C-labeled bacterial celluloses of different Gluconacetobacter xylinus strains](#)
St. Hesse-Ertelt, R. Witter, A.S. Ulrich, T. Kondo, Th. Heinze
Magnetic Resonance in Chemistry **46** (2008) 1030-1036. (ISSN: 0749-1581, John Wiley & Sons, Ltd)
233. [Influence of the functionalization pattern of ethyl cellulose on the interactions with polystyrene latex particles in aqueous mixtures](#)
A. Wallström, M. Olsson, L. Järnström, A. Koschella, D. Fenn, Th. Heinze
Journal of Colloid and Interface Science **327** (2008) 51-57.
232. *Artificial Nano-Structures Based on Cellulose*
Th. Heinze, N. Michaelis, P. Berlin
8. Internationales Symposium "Alternative Cellulose - Herstellung, Verformung, Eigenschaften", 03.-04.09.2008, Rudolstadt, Tagungsband.

231. [Hydrogen bond formation in regioselectively functionalized 3-mono-O-methyl cellulose](#)
T. Kondo, A. Koschella, B. Heublein, D. Klemm, Th. Heinze
Carbohydrate Research **343** (2008) 2600-2604.
230. [Flocculation and binding properties of highly substituted cationic starches](#)
S. Yu. Bratskaya, S. Schwarz, T. Liebert, Th. Heinze
Russian Journal of Applied Chemistry **81** (2008) 862-866.
229. [Cellulose chemistry: Novel products and synthesis paths](#), Book chapter
Th. Heinze, K. Petzold
In: Monomers, Oligomers, Polymers and Composites from Renewable Resources (M.N. Belgacem, A. Gandini, Eds.), Elsevier, Oxford, UK, 2008, pp. 343-368 (ISBN 978-0-08-045316-3).
228. [Syntheses and Comparison of 2,6-Di-O-methyl Celluloses from Natural and Synthetic Celluloses](#)
H. Kamitakahara, A. Koschella, Y. Mikawa, F. Nakatsubo, Th. Heinze, D. Klemm
Macromolecular Bioscience **8** (2008) 690-700.
227. [Efficient Synthesis and Characterization of New Photoactive Dextran Esters Showing Nanosphere Formation](#)
H. Wondraczek, Th. Heinze
Macromolecular Bioscience **8** (2008) 606-614.
226. [Cellulose Swelling by Aprotic and Protic Solvents: What are the Similarities and Differences?](#)
L. C. Fidale, N. Ruiz, Th. Heinze, O. A. El Seoud
Macromolecular Chemistry and Physics **209** (2008) 1240-1254.
225. [Interactions of Ionic Liquids with Polysaccharides: 6. Pure Cellulose Nanoparticles from Trimethylsilyl Cellulose prepared in Ionic Liquids](#)
S. Köhler, T. Liebert, Th. Heinze
Journal of Polymer Science, Part A: Polymer Chemistry **46** (2008) 4070-4080.
224. [Structure characterization and carboxymethylation of arabinoxylan isolated from Ispaghula \(Plantago ovata\) seed husk](#)
S. Saghir, M. Saeed Iqbal, M. A. Hussain, A. Koschella, Th. Heinze
Carbohydrate Polymers **74** (2008) 309-317.
223. [Synthesis and characterization of methyl xylan](#)
K. Petzold, W. Günther, M. Kötteritzsch, Th. Heinze
Carbohydrate Polymers **74** (2008) 327-332
222. [Interactions of Ionic Liquids with Polysaccharides: IV. Dendronization of 6-Azido-6-Deoxy Cellulose](#)
Th. Heinze, M. Schöbitz, M. Pohl, F. Meister
Journal of Polymer Science, Part A: Polymer Chemistry **46** (2008) 3853-3859.
221. [Efficient allylation of cellulose in dimethyl sulfoxide/tetrabutylammonium fluoride trihydrate](#)

- Th. Heinze, T. Lincke, D. Fenn, A. Koschella
Polymer Bulletin **61** (2008) 1-9.
220. [Unconventional Synthesis of Pullulan Abietates](#)
M. A. Hussain, Th. Heinze
Polymer Bulletin **60** (2008) 775-783.
219. [Biocompatible fluorescent nanoparticles for pH-sensing](#)
St. Hornig, C. Biskup, A. Gräfe, J. Wotschadlo, T. Liebert, G. J. Mohr, Th. Heinze
Soft Matter **4** (2008) 1169-1172.
218. [Efficient Approach To Design Stable Water-Dispersible Nanoparticles of Hydrophobic Cellulose Esters](#)
St. Hornig, Th. Heinze
Biomacromolecules **9** (2008) 1487-1492.
217. [Interactions of Ionic Liquids with Polysaccharides: 5. Solvents and reaction media for the modification of cellulose](#)
T. Liebert, Th. Heinze
BioResources **3** (2008) 576-601.
216. [Water-soluble 3-O-Methoxyethyl cellulose: synthesis and characterization](#)
Th. Heinze, A. Koschella
Carbohydrate Research **343** (2008) 668-673.
215. [Efficient Method for the Preparation of Pure, Water-Soluble Cellodextrines](#)
T. Liebert, M. Seifert, Th. Heinze
Macromolecular Symposia **262** (2008) 140-149.
214. [Novel Bulky Esters of Biopolymers: Dendritic Cellulose](#)
M. Pohl, J. Schaller, F. Meister, Th. Heinze
Macromolecular Symposia **262** (2008) 119-128.
213. [Studies on the stabilization of modified Lyocell solutions](#)
F. Wendler, A. Konkin, Th. Heinze
Macromolecular Symposia **262** (2008) 72-84.
212. [Interactions of Ionic Liquids with Polysaccharides – 2: Cellulose](#)
Th. Heinze, S. Dorn, M. Schöbitz, T. Liebert, S. Köhler, F. Meister
Macromolecular Symposia **262** (2008) 8-22.
211. [Thermal stability of Lyocell solutions: Experimental and modelling using cluster analysis and partial least squares regression](#)
F. Wendler, A. Kolbe, J. Kraft, J.W. Einax, Th. Heinze
Macromolecular Theory and Simulations **17** (2008) 32-38.
210. [Swelling and dissolution of cellulose, Part V. Free floating cellulose derivatives fibers in aqueous systems and ionic liquids](#)
C. Cuissinat, P. Navard, Th. Heinze
Cellulose **15** (2008) 75-80.

209. [Swelling and dissolution of cellulose, Part IV. Free floating cotton and wood fibres in ionic liquids](#)
C. Cuissinat, P. Navard, Th. Heinze
Carbohydrate Polymers **72** (2008) 590-596.
208. [Selectively Dendronized Cellulose: Synthesis and Characterization](#)
M. Pohl, J. Schaller, F. Meister, Th. Heinze
Macromolecular Rapid Communications **29** (2008) 142-148.
207. [Unconventional methyl galactan synthesized via the thexyldimethylsilyl intermediate: Preparation, Characterization, and Properties](#)
A. Koschella, K. Inngjerdingen, B.S. Paulsen, G.A. Morris, S.E. Harding, Th. Heinze
Macromolecular Bioscience **8** (2008) 96-105.
206. [Functionalization pattern of tert-butyldimethylsilyl cellulose evaluated by NMR spectroscopy](#)
Th. Heinze, A. Pfeifer, K. Petzold
BioResources **3** (2008) 79-90.
205. [Novel approach towards hydrolytically stable starch acetates for physiological applications](#)
T. Liebert, W.-M. Kulicke, Th. Heinze
Reactive & Functional Polymers **68** (2008) 1-11.
204. *Studies on the synthesis of 2,6-di-O-thexyldimethylsilyl cellulose*
D. Fenn, A. Pfeifer, Th. Heinze
Cellulose Chemistry and Technology **41** (2007) 87-91.
203. [Octenylsuccinate Derivatives of Carboxymethyl Starch - Synthesis and Properties](#)
A. Cizová, A. Koschella, Th. Heinze, A. Ebringerová, I. Sroková
Starch/Stärke **59** (2007) 482-492.
202. [Interactions of Ionic Liquids with Polysaccharides - 1: Unexpected acetylation of cellulose with 1-ethyl-3-methylimidazolium acetate](#)
S. Köhler, T. Liebert, M. Schöbitz, J. Schaller, F. Meister, W. Günther, Th. Heinze
Macromolecular Rapid Communications **28** (2007) 2311-2317.
201. *Novel concept for structure design of polysaccharide-based nanoparticles*
Th. Heinze, St. Hornig
In: Tagungsband 6. Thüringer Biomaterial-Kolloquium, Erfurt 12./13.09. 2007, B. Grünler (Ed.), S. 259-263 (ISBN 978-3-00-021859-0).
200. [Efficient synthesis of cellulose furoates in 1-N-butyl-3-methylimidazolium chloride](#)
S. Köhler, Th. Heinze
Cellulose **14** (2007) 489-495.
199. [Applications of ionic liquids in carbohydrate chemistry: A window of opportunities](#)

O. El Seoud, A. Koschella, L.C. Fidale, S. Dorn, Th. Heinze
Biomacromolecules **8** (2007) 2629-2647.

198. [Novel bulky esters of cellulose](#)
Th. Heinze, M. Pohl, J. Schaller, F. Meister
Macromolecular Bioscience **7** (2007) 1225-1231.

197. *Novel nanoparticles based on xylan*
Th. Heinze, K. Petzold, St. Hornig
Cellulose Chemistry and Technology **41** (2007) 13-18.

196. [Dialkylaminoethyl xylans: polysaccharide ethers with pH-sensitive solubility](#)
K. Schwikal, Th. Heinze
Polymer Bulletin **59** (2007) 161-167.

195. [Synthesis and characterization of sulphur containing dextran- and cyclodextrin derivatives](#)
St. Hornig, T. Liebert, Th. Heinze
Polymer Bulletin **59** (2007) 65-71.

194. [Starch Derivatives of High Degree of Functionalization. 13. Novel Amphiphilic Starch Products](#)
Th. Heinze, S. Rensing, A. Koschella
Starch/Stärke **59** (2007) 199-207.

193. [New solvents for cellulose: Dimethyl sulfoxide/Ammonium fluorides](#)
S. Köhler, Th. Heinze
Macromolecular Bioscience **7** (2007) 307-314.

192. [Structure Design of Multifunctional Furoate and Pyroglutamate Esters of Dextran by Polymer-Analogous Reactions](#)
St. Hornig, T. Liebert, Th. Heinze
Macromolecular Bioscience **7** (2007) 297-306.

191. [Reactive polymeric nanoparticles based on unconventional dextran derivatives](#)
Th. Heinze, N. Michaelis, St. Hornig
European Polymer Journal **43** (2007) 697-703.

190. [Nanoscale structures of dextran esters](#)
St. Hornig, Th. Heinze
Carbohydrate Polymers **68** (2007) 280-286.

189. *Carboxymethylation of cellulose isolated from Bamboo (Dendrocalamus strictus) and its rheology*
R. Khullar, V.K. Varshney, Th. Heinze, M. Vieira-Nagel, P. K. Gupta, S. Naithani, P.L. Soni
Cellulose Chemistry and Technology **40** (2006) 545-552.

188. *7th International Symposium "Alternative Cellulose - Manufacturing, Forming, Properties" at the Thuringian Institute for Textiles and Plastics Research, Rudolstadt, Germany*

- Th. Heinze, Th. Schulze
Chemical Fibers International **56** (2006) 356-358.
187. [Studies on Non-natural Deoxyammonium Cellulose](#)
Th. Heinze, A. Koschella, M. Brackhagen, J. Engelhardt, K. Nachtkamp
Macromolecular Symposia **244** (2006) 74-82
186. [Regioselectively Functionalized Cellulose Derivatives: A Mini Review](#)
A. Koschella, D. Fenn, N. Illy, Th. Heinze
Macromolecular Symposia **244** (2006) 59-73
185. [Polysaccharide – Basis für Polymermaterialien der Zukunft](#)
Th. Heinze
Nachrichten aus der Chemie **54** (2006) 1195-1198.
184. [Cationic starches of high degree of functionalization: 12. Modification of cellulose and cellulose fibers towards high filler technology in papermaking](#)
S. Bratskaya, S. Schwarz, G. Petzold, T. Liebert, Th. Heinze
Industrial & Engineering Chemistry Research **45** (2006), 7374-7379.
183. [Functional Polymers Based on Dextran](#), Book chapter
Th. Heinze, T. Liebert, B. Heublein, St. Hornig
In: Polysaccharide II, Advances in Polymer Science **205**, Ed. D. Klemm, Springer Verlag Berlin, Heidelberg, 2006, pp. 199-291 (ISBN 978-3-540-37102-1).
182. [Synthesis and Characterization of Cellulose \$\alpha\$ -Lipoates: A Novel Material for Adsorption onto Gold](#)
T. Liebert, M. A. Hussain, M. N. Tahir, Th. Heinze
Polymer Bulletin **57** (2006) 857-863.
181. [Efficient homogeneous chemical modification of bacterial cellulose in the ionic liquid 1-N-butyl-3-methylimidazolium chloride](#)
K. Schluffer, H.-P. Schmauder, S. Dorn, Th. Heinze
Macromolecular Rapid Communications **27** (2006) 1670-1676.
180. *Towards the regiochemistry of cellulose*
A. Koschella, Th. Heinze
7. Internationales Symposium "Alternative Cellulose - Herstellung, Verformung, Eigenschaften", 06.-07.09.2006, Rudolstadt, Tagungsband S. 140-153.
179. [Fest-Flüssig-Trennung mit synthetischen und natürlichen Polymeren](#)
S. Schwarz, W. Jäger, G. Petzold, Th. Heinze, T. Liebert, S. Bratskaya, O. Krentz, W.-M. Kulicke, B.-R. Paulke
Chemie Ingenieur Technik **78** (2006) 1093-1099.
178. [Simple, expedient methods for the determination of water and electrolyte contents of cellulose solvent systems](#)
L. C. Fidale, S. Köhler, M. H. G. Prechtel, Th. Heinze, O. A. El Seoud
Cellulose **13** (2006) 581-592.

177. *Alles kein Hexenwerk-Smarte Lösungen für innovative Celluloseprodukte*
B. Stark, B. Kosan, B. Ondruschka, Th. Heinze, F. Meister
Labor & more **02** (2006) 62-63.
176. [Esterification of Polysaccharides](#), Buch ([Flyer](#), pdf, 222k; [Review](#))
Th. Heinze, T. Liebert, A. Koschella
Springer Verlag Heidelberg, 2006, (ISBN 3-540-32103-9).
175. [Electron spin resonance study of radicals generated in cellulose/N-methylmorpholine solutions after flash photolysis at 77 K](#)
A. Konkin, F. Wendler, H.-K. Roth, M. Schroedner, F. Meister, Th. Heinze, A. Aganov, R. Garipov
Magnetic Resonance in Chemistry **44** (2006) 594-605.
174. [A novel polymeric stabilizing system for modified Lyocell dopes](#)
F. Wendler, G. Graneß, R. Büttner, F. Meister, Th. Heinze
Journal of Polymer Science, Part B: Polymer Physics **44** (2006) 1702-1713.
173. [Carboxymethyl xylan - synthesis and detailed structure characterization](#)
K. Petzold, K. Schwikal, Th. Heinze
Carbohydrate Polymers **64** (2006) 292-298.
172. [Water soluble 3-mono-O-ethyl cellulose: Synthesis and characterization](#)
A. Koschella, D. Fenn, Th. Heinze
Polymer Bulletin **57** (2006) 33-41.
171. [Hydrophobic modification of starch via grafting with an oxazoline-derivative](#)
B. Kosan, F. Meister, T. Liebert, Th. Heinze
Cellulose **13** (2006) 105-113.
170. *Reiß- und schlingenfest, Ionische Flüssigkeiten: prozessinhärente Sicherheit in der Cellulosederivatisierung und -verformung*
B. Ondruschka, A. Stark, Th. Heinze, B. Kosan, F. Meister
CIT plus **9** (2006) 47-48.
169. [Properties and Flocculation Efficiency of Highly Cationized Starch Derivatives](#)
D.-O. Krentz, C. Lohmann, S. Schwarz, S. Bratskaya, T. Liebert, J. Laube, Th. Heinze, W.-M. Kulicke
Starch/Stärke **58** (2006) 161-169.
168. [Acylation and carbanilation of cellulose in ionic liquids](#)
S. Barthel, Th. Heinze
Green Chemistry **8** (2006) 301-306.
167. [Study of sulfonic acid esters from 1->4-, 1->3-, and 1->6-linked polysaccharides](#)
A. Koschella, T. Leermann, M. Brackhagen, Th. Heinze
Journal of Applied Polymer Science **100** (2006) 2142-2150.
166. [Studies on the Film Formation of Polysaccharide Based Furan-2-Carboxylic Acid Esters](#)

- St. Hesse, T. Liebert, Th. Heinze
Macromolecular Symposia **232** (2006) 57-67.
165. [Cationic Xylan Derivatives with High Degree of Functionalization](#)
K. Schwikal, Th. Heinze, A. Ebringerová, K. Petzold
Macromolecular Symposia **232** (2006) 49-56.
164. [Carboxymethyl Xylan - Control of Properties by Synthesis](#)
K. Petzold, K. Schwikal, W. Günther, Th. Heinze
Macromolecular Symposia **232** (2006) 27-36.
163. [Improvements in polysaccharides for use as blood plasma expanders](#)
W.-M. Kulicke, Th. Heinze
Macromolecular Symposia **231** (2006) 47-59.
162. [Click chemistry with polysaccharides](#)
T. Liebert, C. Hänsch, Th. Heinze
Macromolecular Rapid Communications **27** (2006) 208-213.
161. [Adsorption Behavior of Concanavalin A onto Thin Solid Films](#)
L.B.R. de Castro, Th. Heinze, D.F.S. Petri
Microscopy and Microanalysis **11** (S3) (2005) 70-73
160. *Carboxymethyl ethers of cellulose and starch - a review*
Th. Heinze
Khimiya Rastitel'nogo Syr'ya **3** (2005) 13-29.
159. [Evidence of autocatalytic reactions in cellulose/NMMO solutions with thermal and spectroscopic methods](#)
F. Wendler, G. Graneß, Th. Heinze
Lenzinger Berichte **84** (2005) 92-102.
158. [Benzylation of cellulose in the solvent dimethylsulfoxide/tetrabutylammonium fluoride trihydrate](#)
L. A. Ramos, E. Frollini, A. Koschella, Th. Heinze
Cellulose **12** (2005) 607-619.
157. [Novel nanoparticles based on dextran esters with unsaturated moieties](#)
St. Hornig, Th. Heinze, St. Hesse, T. Liebert
Macromolecular Rapid Communications **26** (2005) 1908-1912.
156. [Organic esters of cellulose: New perspectives for old polymers](#), Book chapter
O. El Seoud, Th. Heinze
In: Polysaccharides I, Structure, Characterization and Use, Advances in Polymer Science **186**, Ed. Th. Heinze, Springer Verlag Berlin, Heidelberg, 2005, pp. 103-149.
155. [Hemicellulose](#), Book chapter
A. Ebringerova, Z. Hromadkova, Th. Heinze
In: Polysaccharides I, Structure, Characterization and Use, Advances in Polymer Science **186**, Ed. Th. Heinze, Springer Verlag Berlin, Heidelberg, 2005, pp. 1-67.

154. [Starch derivatives of high degree of functionalization 11: Studies on alternative acylation of starch with long chain fatty acids homogeneously in N,N-dimethyl acetamide/LiCl](#)
C. Grote, Th. Heinze
Cellulose **12** (2005) 435-444.
153. [Characterization of Autocatalytic Reactions in Modified Cellulose/NMMO Solutions by Thermal Analysis and UV/VIS Spectroscopy](#)
F. Wendler, G. Graneß, Th. Heinze
Cellulose **12** (2005) 411-422.
152. [Effect of pulp composition on the characteristics of residuals in CMC made from such pulps](#)
K. Jardeby, U Germgård, B. Kreutz, Th. Heinze, U. Heinze, H. Lennholm
Cellulose **12** (2005) 385-393.
151. *Polysaccharide esters of uniform structure for medical and biotechnological use*
Th. Heinze, T. Liebert, St. Hesse, St. Hornig
5th International Symposium on "Materials Made from Renewable Resources", 01.-02.09.2005, CD-ROM.
150. [Thermostability of Lyocell dopes modified with surface-active additives](#)
F. Wendler, F. Meister, Th. Heinze
Macromolecular Materials and Engineering **290** (2005) 826-832.
149. [Solvents applied in the field of cellulose chemistry - a mini review](#)
Th. Heinze, A. Koschella
Polímeros: Ciencia e Tecnologia **15** (2005) 84-90.
148. [Effect of polyelectrolyte structural features on flocculation behavior: Cationic polysaccharides vs. synthetic polycations](#)
S. Bratskaya, S. Schwarz, J. Laube, T. Liebert, Th. Heinze, O. Krentz, C. Lohmann, W.-M. Kulicke
Macromolecular Materials and Engineering **290** (2005) 778-785.
147. [Nanoparticles on the basis of highly functionalized dextrans](#)
T. Liebert, S. Hornig, S. Hesse, Th. Heinze
Journal of the American Chemical Society **127** (2005) 10484-10485.
146. [Ionic liquids as reaction medium for cellulose functionalization](#)
Th. Heinze, K. Schwikal, S. Barthel
Macromolecular Bioscience **5** (2005) 520-525.
145. [Microscopic visualization of nanostructures of cellulose derivatives](#)
T. Liebert, S. Hornig, S. Hesse, Th. Heinze
Macromolecular Symposia **223** (2005) 253-266.
144. [Studies on the thermostability of modified Lyocell dopes](#)
F. Wendler, F. Meister, Th. Heinze
Macromolecular Symposia **223** (2005) 213-224.

143. [Carboxymethyl ethers of cellulose and starch - a review](#)
Th. Heinze, A. Koschella
Macromolecular Symposia **223** (2005) 13-39.
142. [Carbamoylation applied for structure determination of cellulose derivatives](#)
T. Liebert, K. Pfeiffer, Th. Heinze
Macromolecular Symposia **223** (2005) 93-108.
141. [Structure determination of cellulose esters via subsequent functionalization and NMR spectroscopy](#)
T. Liebert, M.A. Hussain, Th. Heinze
Macromolecular Symposia **223** (2005) 79-92.
140. [Carboxymethylation of Cellulose in the New Solvent Dimethyl sulfoxide/Tetrabutylammonium Fluoride](#)
L. A. Ramos, E. Frollini, Th. Heinze
Carbohydrate Polymers **60** (2005) 259-267.
139. [Carboxymethylation of cellulose material \(Av DP 2600\) isolated from cotton \(Gossypium\) linters with respect to degree of substitution and rheological behaviour](#)
R. Khullar, V. K. Varshney, S. Naithani, Th. Heinze, P. L. Soni
Journal of Applied Polymer Science **96** (2005) 1477-1482.
138. [The influence of fibre wall thickness on the undissolved residuals in CMC solutions](#)
K. Jardeby, U. Germgard, B. Kreutz, Th. Heinze, U. Heinze, H. Lennholm
Cellulose **12** (2005) 167-175
137. [Starch derivatives of high degree of functionalization 10. Flocculation of kaolin dispersions](#)
S. Bratskaya, S. Schwarz, T. Liebert, Th. Heinze
Colloids & Surfaces A: Physicochemical and Engineering Aspects **254** (2005) 75-80.
136. [Studies on the synthesis of 2,3-O-hydroxyalkyl ethers of cellulose](#)
J. Schaller, Th. Heinze
Macromolecular Bioscience **5** (2005) 58-63.
135. [Tailored Cellulose Esters: Synthesis and Structure Determination](#)
T. F. Liebert, Th. Heinze
Biomacromolecules **6** (2005) 333-340.
134. *Chemical Functionalization of Cellulose*, **Book chapter**
Th. Heinze
In: Polysaccharide: Structural Diversity and functional versatility, 2nd edition, Ed. S. Dumitriu, Marcel Dekker, New York, Basel, Hong Kong, 2004, pp. 551-590.
133. [Surface modification of cellulose fibers: towards wood composites by biomimetics](#)
S.E. Gradwell, S. Renneckar, A.R. Esker, Th. Heinze, P. Gatenholm, C. Vaca-Garcia, W. Glasser
Comptes Rendus Biologies **327** (2004) 945-953.

132. [New polyurethane foams modified with cellulose derivatives](#)
J.L. Rivera-Armenta, Th. Heinze, A.M. Mendoza-Martinez
European Polymer Journal **40** (2004) 2803-2812.
131. [Studies on the homogeneous acetylation of cellulose in the novel solvent dimethyl sulfoxide/tetrabutylammonium fluoride trihydrate](#)
B.A.P. Ass, E. Frollini, Th. Heinze
Macromolecular BioScience **4** (2004) 1008-1013.
130. *Solvents applied in the field of cellulose chemistry*
Th. Heinze
6. Internationales Symposium "Alternative Cellulose - Herstellung, Verformung, Eigenschaften", 01.-02.09.2004, Rudolstadt, Tagungsband S. 1-11.
129. [Starch Derivatives of High Degree of Functionalization. 7. Preparation of Cationic 2-Hydroxypropyltrimethylammonium Chloride Starches](#)
Th. Heinze, V. Haack, S. Rensing
Starch/Stärke **56** (2004) 288-296.
128. [Water-soluble polysaccharides with pharmaceutical importance from Durian rinds \(Durio zibethinus Murr.\): isolation, fractionation, characterisation and bioactivity](#)
S. Hokputsa, W. Gerddit, S. Pongsamart, K. Inngjerdingen, Th. Heinze, A. Koschella, S.E.Harding, B.S. Paulsen
Carbohydrate Polymers **56** (2004) 471-481.
127. [Starch derivatives of high degree of functionalization 9: carboxymethyl starches](#)
Th. Heinze, T. Liebert, U. Heinze, K. Schwikal
Cellulose **11** (2004) 239-245.
126. [Chemical Characteristics of Cellulose Acetate](#)
Th. Heinze, T. Liebert
Macromolecular Symposia **208** (2004) 167-237.
125. [Acylation of Cellulose with N,N'-Carbonyldiimidazole-Activated Acids in the Novel Solvent Dimethyl Sulfoxide/Tetrabutylammonium Fluoride](#)
M. A. Hussain, T. Liebert, Th. Heinze
Macromolecular Rapid Communications **25** (2004) 916-920.
124. [Bioactive polysaccharides from the stems of the Thai medicinal plant Acanthus ebracteatus: their chemical and physical features](#)
S. Hokputsa, S.E. Harding, K. Inngjerdingen, K. Jumel, T.E. Michaelsen, Th. Heinze, A. Koschella, B.S. Paulsen
Carbohydrate Research **339** (2004) 753-762.
123. [Water-soluble Amphiphilic O-\(Carboxymethyl\)cellulose Derivatives - Synthesis and Properties](#)
I. Srokova, V. Tomanova, A. Ebringerova, A. Malovikova, Th. Heinze
Macromolecular Materials and Engineering **289** (2004) 63-69.

122. *First Report on a New Esterification Method for Cellulose*
M.A. Hussain, T. Liebert, Th. Heinze
Polymer News **29** (2004) 14-17.
121. *Chemical Functionalization of Xylan: A Short Review*, **Book chapter**
Th. Heinze, A. Koschella, A. Ebringerova
In: Hemicelluloses: Science and Technology, ACS Symposium Series No. **864**, 2004,
312-325.
120. [Tartaric acid starch ether – a novel biopolymer-based polyelectrolyte](#)
C. Grote, W. Lazik, Th. Heinze
Macromolecular Rapid Communications **24** (2003) 927-931.
119. [Unconventional Cellulose Products by Fluorination of Tosyl Cellulose](#)
A. Koschella, Th. Heinze
Macromolecular Symposia **197** (2003) 243-254.
118. [Novel Blends from Agave Fibers and Poly\(methyl methacrylate\)](#)
A. Koschella, Th. Heinze, J. L. Rivera Armenta, A. M. Mendoza Martinez
Macromolecular Symposia **197** (2003) 219-229.
117. [Empirical polarity parameters of cellulose and related materials](#)
S. Spange, K. Fischer, S. Prause, Th. Heinze
Cellulose **10** (2003) 201-212.
116. [Unconventional cellulose esters: synthesis, characterization, and structure property relations](#)
Th. Heinze, T. Liebert, K. Pfeiffer, M. A. Hussain
Cellulose **10** (2003) 283-296.
115. *Cellulose: Neue Derivate und Herstellungsverfahren*
Th. Heinze
In: Nachwachsende Rohstoffe für die Chemie, 8. Symposium, Landwirtschaftsverlag
GmbH, Münster, 2003, S. 128-139.
114. [Probing the polarity of various cellulose derivatives with genuine solvatochromic indicators](#)
K Fischer, Th. Heinze, S. Spange
Macromolecular Chemistry and Physics **204** (2003) 1315-1322.
113. *Novel O-(2-hydroxyethyl)cellulose-based biosurfactants*
I. Sroková, S. Minikova, A. Ebringerova, V. Sasinkova, Th. Heinze
Tensides Surfactants Detergents **40** (2003) 73-76.
112. [Application of the solvent dimethyl sulfoxide/tetrabutyl-ammonium fluoride trihydrate as reaction medium for the homogeneous acylation of Sisal cellulose](#)
G.T. Ciacco, T.F. Liebert, E. Frollini, Th.J. Heinze
Cellulose **10** (2003) 125-132.
111. *Unconventional Polysaccharide Chemistry*
Th. Heinze

Natural Polymers and Composites IV, Proceedings from the International Symposium on Natural Polymers and Composites, Sao Paulo, Brasilien, 1.-4.09.2002, S. 205-210.

110. *Zum Einfluß des Lösungszustandes von Carboxymethylcellulosen auf das Strukturbildungsverhalten in kolloidalen Systemen*

J. Kötz, S. Kosmella, W.-M. Kulicke, Th. Heinze

Cellulose Preprints, Zellcheming-Hauptversammlung (2002) 19-31.

109. [Materialien und Funktionspolymere aus nachwachsenden Rohstoffen](#)

Th. Heinze

Output **6** (2002) 26-28.

108. [Starch derivatives of high degree of functionalization, 8. Synthesis and flocculation behavior of cationic starches](#)

V. Haack, Th. Heinze, G. Oelmeyer, W.-M. Kulicke

Macromolecular Materials and Engineering **287** (2002) 495-502.

107. [Starch derivatives of high degree of functionalization 6. Multi step carboxymethylation of starch](#)

W. Lazik, Th. Heinze, K. Pfeiffer, G. Albrecht, P. Mischnick

Journal of Applied Polymer Science **86** (2002) 743-752.

106. *Cellulose*, Book chapter

D. Klemm, H.-P. Schmauder, Th. Heinze

In: Biopolymers: Biology, Chemistry, Biotechnology, Applications, Eds. E.

Vandamme, S. De Baets, A. Steinbüchel, Wiley-VCH, Weinheim, Vol. 6:

Polysaccharide II; **2002**, 275-319.

105. [Evaluation of molten inorganic salt hydrates as reaction medium for the derivatization of cellulose](#)

S. Fischer, K. Thümmler, K. Pfeiffer, T. Liebert, Th. Heinze

Cellulose **9** (2002) 293-300.

104. [Synthesis of novel adamantoyl cellulose using differently activated carbonic acid derivatives](#)

D. Gräbner, T. Liebert, Th. Heinze

Cellulose **9** (2002) 193-201.

103. *Emulsifying agents based on O-(carboxymethyl)starch*

I. Sroková, A. Ebringerová, Th. Heinze

Tenside, Surfactants, Detergents **38** (2001) 277-280.

102. *Starch derivatives of high degree of functionalization 5. Stepwise carboxymethylation of amylose*

K. Pfeiffer, Th. Heinze, W. Lazik

Chemical Papers **56** (2002) 261-266.

101. [Influence of the p-toluenesulfonylation of cellulose on the polymer dynamics investigated by dielectric spectroscopy](#)

J. Einfeldt, Th. Heinze, T. Liebert, A. Kwasniewski
Carbohydrate Polymers **49** (2002) 357-365.

100. [Cellulose derivatives from cellulosic material isolated from Agave lechuguilla and fourcroydes](#)

M.C. Vieira, Th. Heinze, R.A. Cruz, A.M. Mendoza
Cellulose **9** (2002) 203-212.

99. *Synthesis of a new polycyclic quinone by reduction of a dihydrobenzo[a]naphthacene-quinone*

U. Fernekorn, Th. Heinze, B. Schlegel, H.-M. Dahse, U. Gräfe
The Journal of Antibiotics **54** (2001) 191-192.

98. [Exploitation of reactivity and selectivity in cellulose functionalization using unconventional media for the design of products showing new superstructures](#)

T. Liebert, Th. Heinze
Biomacromolecules **2** (2001) 1124-1132.

97. *New ionic polymers by oxidation of cellulose derivatives*

M. Vieira, Th. Heinze
Polymer News **26** (2001) 274-276.

96. [Novel regioselectively 6-functionalized cationic cellulose polyelectrolytes prepared via cellulose sulfonates](#)

A. Koschella, Th. Heinze
Macromolecular Bioscience **1** (2001) 178-184.

95. [A new approach in the analysis of the substituent distribution of carboxymethyl cellulose](#)

B. Saake, S. Horner, J. Puls, Th. Heinze, W. Koch
Cellulose **8** (2001) 59-67.

94. [Starch derivatives of high degree of functionalization 4. Homogeneous tritylation of starch and subsequent carboxymethylation](#)

Th. Heinze, U. Heinze, C. Grote, J. Kötz, W. Lazik
Starch/Stärke **53** (2001) 261-268.

93. *New highly functionalized starch derivatives*, **Book Chapter**

U. Heinze, V. Haack, Th. Heinze
In: Biorelated Polymers: Sustainable Polymer Science and Technology, Eds. E. Chiellini, H. Gil, G. Braunegg, J. Buchert, P. Gatenholm, M. van der Zee, **2001**, 205-218.

92. *Synthesis and characterization of graft copolymers from natural fibers*

R.A. Cruz, Th. Heinze, A.M. Mendoza
International Journal of Polymeric Materials **51** (2002) 661-674.

91. [Unconventional methods in cellulose functionalization](#)

Th. Heinze, T. Liebert
Progress Polymer Science **26** (2001) 1689-1762.

90. [Starch derivatives with high degree of functionalization III. Influence of reaction conditions and starting materials on molecular structure of carboxymethyl starch](#)
Th. Heinze, K. Pfeiffer, W. Lazik
Journal of Applied Polymer Science **81** (2001) 2036-2044.
89. [First synthesis of 3-O-functionalized cellulose ethers via 2,6-di-O-protected silyl cellulose](#)
A. Koschella, Th. Heinze, D. Klemm
Macromolecular Bioscience **1** (2001) 49-54.
88. *Peculiarities in the physico-chemical behavior of non-statistically substituted carboxymethylcelluloses*
J. Kötz, I. Bogen, Th. Heinze, U. Heinze, W.-M. Kulicke, S. Lange
Colloids and Surfaces A: Physicochemical and Engineering Aspects, **183-185** (2001) 621-633.
87. [Nucleophilic displacement reactions on tosyl cellulose by chiral amines](#)
Th. Heinze, A. Koschella, L. Magdaleno-Maiza, A.S. Ulrich
Polymer Bulletin **46** (2001) 7-13.
86. *New ionic polymers by subsequent functionalization of cellulose derivatives*
M. Vieira, T. Liebert, Th. Heinze
J.F. Kennedy, G.O. Phillips, P.A. Williams, H. Hatakeyama, Recent Advances in Environmentally Compatible Polymers, Woodhead Publishing, Cambridge, UK, 2001, 53-60.
85. *Starch derivatives of high degree of functionalization. Part 2. Determination of the functionalization pattern of p-toluenesulfonyl starch by peracylation and NMR spectroscopy*
R. Dicke, K. Rahn, V. Haack, Th. Heinze
Carbohydrate Polymers **45** (2001) 43-51.
84. [An alternative approach for deprotection of triphenylmethyl cellulose](#)
H. Leipner, S. Fischer, T. Liebert, Th. Heinze
Polymer Bulletin **45** (2001) 517-522.
83. [Xylan and xylan derivatives - biopolymers with valuable properties](#)
1. Naturally occurring xylans: structures, isolation, procedure and properties
A. Ebringerova, Th. Heinze
Macromolecular Rapid Communications **21** (2000) 542-556.
82. [New polymers based on cellulose](#)
Th. Heinze, M. Vieira, U. Heinze
Lenzinger Berichte **79** (2000) 39-44.
81. [Detailed investigations on the molecular structure of carboxymethyl cellulose with unusual substitution pattern by means of an enzyme-supported analysis](#)
B. Saake, S. Horner, Th. Kruse, J. Puls, T. Liebert, Th. Heinze
Macromolecular Chemistry and Physics **201** (2000) 1996-2002

80. *Characterisation of regioselectively functionalized 2,3-O-carboxymethyl cellulose by enzymatic and chemical methods*

U. Heinze, J. Schaller, Th. Heinze, S. Horner, B. Saake, J. Puls
Cellulose **7** (2000) 161-175.

79. *Werk- und Wirkstoffe aus Stärke, Das natürliche Polysaccharid als Quelle für innovative Produkte*

Th. Heinze, V. Haack

Forschungsmagazin der Friedrich-Schiller-Universität Jena **2000/2001** (Heft 9), 34-35.

78. [New water-soluble cellulose esters synthesized by an effective acylation procedure](#)

Th. Heinze, J. Schaller

Macromolecular Chemistry and Physics **201** (2000) 1214-1218.

77. [Effective preparation of cellulose derivatives in a new simple cellulose solvent](#)

Th. Heinze, R. Dicke, A. Koschella, A.-H. Kull, E.-A. Klohr, W. Koch

Macromolecular Chemistry and Physics **201** (2000) 627-631.

76. [Starch derivatives of high degree of functionalization, 1. Effective, homogeneous synthesis of p-toluenesulfonyl \(tosyl\) starch with a new functionalization pattern](#)

Th. Heinze, P. Talaba, U. Heinze

Carbohydrate Polymers **42** (2000) 411-420.

75. [New water soluble polysaccharide crosslinkers: Synthesis, viscometric studies about the crosslinking reaction and characterization of crosslinked products](#)

B. Heublein, G. Kühne, U. Heinze, Th. Heinze, D. Klemm, A. Nechwatal, M. Nicolai, K.-P. Mieck

Lenzinger Berichte **79** (2000) 45-49.

74. *Cellulosechemie - neue Horizonte für ein altes Polymer*

Th. Heinze

CHEManager **8** (1999) 19.

73. *New ionic polymers by cellulose functionalization*

Th. Heinze

6th Symposium on Renewable Resources, Schriftenreihe "Nachwachsende Rohstoffe", Band 14, Landwirtschaftsverlag **1999**, 150-160.

72. [Permeation and separation characteristics for benzene/cyclohexane mixtures through tosylcellulose membranes in pervaporation](#)

T. Uragami, K. Tsukamoto, T. Miyata, Th. Heinze

Cellulose **6** (1999) 221-231.

71. [Studies on grafting of cellulosic materials isolated from agave lechuguilla and fourcroydes](#)

R.A. Cruz, A.M. Mendoza, M.C. Vieira, Th. Heinze

Angewandte Makromolekulare Chemie **273** (1999) 86-90.

70. [Pervaporation characteristics for benzene/cyclohexane mixtures through benzoylcellulose membranes](#)
T. Uragami, K. Tsukamoto, T. Miyata, Th. Heinze
Macromolecular Chemistry and Physics **200** (1999) 1985-1900.
69. [Studies on the synthesis and characterization of carboxymethyl cellulose](#)
Th. Heinze, K. Pfeiffer
Angewandte Makromolekulare Chemie **266** (1999) 37-45.
68. [Carboxymethylation of cellulose in unconventional media](#)
Th. Heinze, T. Liebert, P. Klüfers, F. Meister
Cellulose **6** (1999) 153-165.
67. [Synthesis and structure characterization of 2,3-O-carboxymethylcellulose](#)
U. Heinze, Th. Heinze, D. Klemm
Macromolecular Chemistry and Physics **200** (1999) 896-902.
66. [Effective approaches for estimating the functionalization pattern of carboxymethyl starch of different origin](#)
Th. Heinze, K. Pfeiffer, T. Liebert, U. Heinze
Starch/Stärke **51** (1999) 11-16.
65. *New polymers from cellulose sulfonates*
Th. Heinze, K. Rahn
Journal of Pulp and Paper Science **25** (1999) 136-140.
64. *Enzymunterstützte Charakterisierung von Carboxymethylcellulose*
J. Puls, S. Horner, Th. Kruse, B. Saake, Th. Heinze
Papier (Darmstadt) **52** (1998) 743-748.
63. *Comprehensive cellulose chemistry, Volume 1 and 2, Book*
D. Klemm, B. Philipp, Th. Heinze, U. Heinze, W. Wagenknecht
WILEY-VCH, Weinheim, **1998**.
62. *Neue Horizonte in der Polymerforschung*
M. Arndt, U. Beginn, Th. Heinze, H. Motschmann
Nachrichten aus Chemie, Technik und Laboratorium **46** (1998) 1169-1174.
61. *Kolloideigenschaften statistisch, blockartig und regioselektiv substituierter Carboxymethylcellulosen*
J. Kötz, I. Bogen, U. Heinze, Th. Heinze, D. Klemm, S. Lange, W.-M. Kulicke,
Papier (Darmstadt) **52** (1998) 704-712.
60. [Development and evaluation of methods for determining the pattern of functionalization in sodium carboxymethylcelluloses](#)
P. Käuper, W.-M. Kulicke, S. Horner, B. Saake, J. Puls, J. Kunze, H.-P. Fink, U. Heinze, Th. Heinze, E.-A. Klohr, H. Thielking, W. Koch
Angewandte Makromolekulare Chemie **260** (1998) 53-63.

59. [New ionic polymers by cellulose functionalization, Feature article](#)
Th. Heinze
Macromolecular Chemistry and Physics **199** (1998) 2341-2364.
58. *Synthesis path versus distribution of functional groups in cellulose ethers*
T. Liebert, Th. Heinze
Macromolecular Symposia **130** (1998) 271-283.
57. *New cellulosic polymers by subsequent modification of 2,3-dialdehyde cellulose*
K. Rahn, Th. Heinze
Cellulose Chemistry and Technology **32** (1998) 173-183.
56. *The role of novel solvents and solution complexes for the preparation of highly engineered cellulose derivatives, Book chapter*
Th. Heinze, W.G. Glasser
In: Cellulose Derivatives: Modification, Characterization, and Nanostructures, Eds. Th. Heinze, W.G. Glasser, ACS Symposium Series No. **688**, 1998, 2-18.
55. *Induced phase separation - a new synthesis concept in cellulose chemistry, Book chapter*
T. Liebert, Th. Heinze
In: Cellulose Derivatives: Modification, Characterization, and Nanostructures, Eds. Th. Heinze, W.G. Glasser, ACS Symposium Series No. **688**, 1998, 61-72.
54. [Determination of empirical polarity parameters of the cellulose solvent N,N-dimethylacetamide/LiCl by means of the solvatochromic technique](#)
S. Spange, A. Reuter, E. Vilsmeier, Th. Heinze, D. Keutel, W. Linert
Journal of Polymer Science, Part A: Polymer Chemistry **36** (1998) 1945-1955.
53. *Organic solvents and sophisticated derivatives of cellulose - promising tools in cellulose chemistry, Review*
T. Liebert, Th. Heinze
Cellulose Chemistry and Technology **32** (1998) 3-18.
52. *New fluorescence active cellulose derivatives prepared by a convenient acylation reaction*
A. Koschella, G. Haucke, Th. Heinze
Polymer Bulletin **39** (1997) 597-604.
51. *Ionische Funktionspolymere aus Cellulose: Neue Synthesekonzepte, Strukturaufklärung und Eigenschaften*
Th. Heinze
Habilitationsschrift, Friedrich-Schiller-Universität Jena, **1997**.
50. *The first approach to non-aqueous solutions of carboxymethyl cellulose*
Th. Heinze, U. Heinze
Macromolecular Rapid Communications **18** (1997) 1033-1040.
49. *New polymers from cellulose sulfonates*
Th. Heinze, K. Rahn
In: Preprint Book of the "9th International Symposium on Wood and Pulp Chemistry", Montreal, Quebec, Canada, **1997**, C1-1 (ISBN 1-896742-14-9).

48. *Cellulose-p-toluenesulfonates: a valuable intermediate in cellulose chemistry*
Th. Heinze, K. Rahn
Macromolecular Symposia **120** (1997) 103-113.
47. *New approaches to advanced polymers by selective cellulose functionalization*,
Feature article
D. Klemm, Th. Heinze, B. Philipp, W. Wagenknecht
Acta Polymerica **48** (1997) 277-297.
46. [Thermal studies on homogeneously synthesized cellulose p-toluenesulfonates](#)
Th. Heinze, K. Rahn, M. Jaspers, H. Berghmans
Journal of Applied Polymer Science **60** (1996) 11, 1891-1900.
45. *Synthesis and characterization of the novel cellulose derivative dansyl cellulose*
Th. Heinze, J.A. Camacho Gomez, G. Haucke
Polymer Bulletin **37** (1996) 743-749.
44. *Synthese und Folgechemie von Cellulose-p-toluensulfonsäureestern - Pool für
neuartige Funktionspolymere*
Th. Heinze, K. Rahn
Das Papier (Darmstadt) **50** (1996) 721-729.
43. *The first report on a convenient synthesis of novel reactive amphiphilic
polysaccharides*
Th. Heinze, K. Rahn
Macromolecular Rapid Communications **17** (1996) 675-681.
42. *p-Toluenesulfonyl esters in cellulose modifications: acylation of remaining
hydroxyl groups*
Th. Heinze, K. Rahn, M. Jaspers, H. Berghmans
Macromolecular Chemistry and Physics **197** (1996) 4407-4424.
41. [Homogeneous synthesis of cellulose p-toluenesulfonates in N,N-
dimethylacetamide/LiCl solvent system](#)
K. Rahn, M. Diamantoglou, D. Klemm, H. Berghmans, Th. Heinze
Angewandte Makromolekulare Chemie **238** (1996) 143-163.
40. *Properties of regioselectively substituted anionic cellulose polyelectrolytes*,
Review
D. Klemm, Th. Heinze, W. Wagenknecht
Berichte der Deutschen Bunsen-Gesellschaft für Physikalische Chemie **100** (1996) 6,
730-733.
39. *Synthesis and carboxymethylation of organo-soluble trifluoroacetates and
formates of cellulose*
T. Liebert, D. Klemm, Th. Heinze
Journal Macromolecular Science-Pure and Applied Chemistry **33** (1996) 613-626.
38. *Studies on unconventional synthesis of carboxymethyl cellulose*
Th. Heinze, T. Liebert, D. Klemm

Preprints of American Chemical Society - Division of Polymeric Materials: Science and Engineering **72** (1995) 196-198.

37. *Effective esterification of carboxymethyl cellulose in a new non-aqueous swelling system*

S. Vogt, D. Klemm, Th. Heinze
Polymer Bulletin **36** (1996) 549-555.

36. *Polyglucane derivatives with regular substituent distribution, Review*

D. Klemm, Th. Heinze, A. Stein, T. Liebert
Macromolecular Symposia **99** (1995) 129-140.

35. *Regioselective derivatization of cellulose: routes of synthesis, effects on properties and areas of application, Review*

B. Philipp, W. Wagenknecht, I. Nehls, D. Klemm, A. Stein, Th. Heinze
Polymer News **21** (1996) 155-161.

34. *Synthesis and Characterization of photosensitive 4,4'-bis(dimethylamino)diphenylmethyl ethers of cellulose*

Th. Heinze, U. Erler, U. Heinze, J. Camacho, U.-W. Grummt, D. Klemm
Macromolecular Chemistry and Physics **196** (1995) 1937-1944.

33. *Regioselectively substituted esters and ethers of cellulose, Book chapter*

D. Klemm, A. Stein, Th. Heinze, B. Philipp, W. Wagenknecht
In: Polymeric Materials Encyclopedia: Synthesis, Properties and Applications, J.C. Salamone (Ed.), CRC Press, Inc., Boca Raton, USA, **1996**, 1043-1054.

32. *Investigations on homogeneous synthesis of carboxy groups-containing cellulose derivatives and the determination of the substituent distribution using HPLC, Book chapter*

Th. Heinze, U. Erler, D. Klemm
In: Cellulose and Cellulose Derivatives: Physico-Chemical Aspects and Industrial Applications, Eds. J.F. Kennedy, G.O. Phillips, P.A. Williams, L. Piculell, Woodhead Publishing Ltd., Cambridge, **1995**, 161-169.

31. *Investigations of amidation of C-6 carboxy cellulose, Book chapter*

K. Rahn, Th. Heinze, D. Klemm
In: Cellulose and Cellulose Derivatives: Physico-Chemical Aspects and Industrial Applications, Eds. J.F. Kennedy, G.O. Phillips, P.A. Williams, L. Piculell, Woodhead Publishing Ltd., Cambridge, **1995**, 213-219.

30. *Regioselektive Veresterung und Veretherung von Cellulose und Cellulosederivaten, Teil 3. Synthese regioselektiv substituierter Celluloseether und zusammenfassende Diskussion*

B. Philipp, D. Klemm, W. Wagenknecht, M. Wagenknecht, I. Nehls, A. Stein, Th. Heinze, U. Heinze, K. Helbig, J. Camacho
Das Papier (Darmstadt) **49** (1995) 102-108.

29. *Regioselektive Veresterung und Veretherung von Cellulose und Cellulosederivaten, Teil 2. Synthese regioselektiv substituierter Celluloseester*

B. Philipp, D. Klemm, W. Wagenknecht, M. Wagenknecht, I. Nehls, A. Stein, Th.

Heinze, U. Heinze, K. Helbig, J. Camacho
Das Papier (Darmsatdt) **49** (1995) 58-64.

28. *Regioselektive Veresterung und Veretherung von Cellulose und Cellulosederivaten, Teil 1. Problemstellung und Beschreibung der Reaktionssysteme*
B. Philipp, D. Klemm, W. Wagenknecht, M. Wagenknecht, I. Nehls, A. Stein, Th. Heinze, U. Heinze, K. Helbig, J. Camacho
Das Papier (Darmstadt) **49** (1995) 3-7.

27. [Formation, derivatization and application of bacterial cellulose](#)
U. Geyer, Th. Heinze, A. Stein, D. Klemm, S. Marsch, H.-P. Schmauder
International Journal of Biological Macromolecules **16** (1994) 343-347.

26. *Preparation of carboxymethyl cellulose sulfates of high degree of substitution*
S. Vogt, Th. Heinze, K. Röttig, D. Klemm
Carbohydrate Research **266** (1995) 315-20.

25. *Synthesis of 2,3-O-carboxymethylcellulose*
Th. Heinze, K. Röttig, I. Nehls
Macromolecular Rapid Communications **15** (1994) 311-317.

24. *Viscosity behaviour of multivalent metal ion containing carboxymethyl cellulose solutions*
Th. Heinze, U. Heinze, D. Klemm
Angewandte Makromolekulare Chemie **220** (1994) 123-132.

23. *Determination of the substituent pattern of heterogeneously and homogeneously synthesized carboxymethyl cellulose using high-performance liquid chromatography*
Th. Heinze, U. Erler, I. Nehls, D. Klemm
Angewandte Makromolekulare Chemie **215** (1994) 93-106.

22. *Properties and following reactions of homogeneously oxidized cellulose, Book chapter*
Th. Heinze, D. Klemm, M. Schnabelrauch, I. Nehls
In: Cellulosics: Chemical, Biochemical and Material Aspects, Eds. J.F. Kennedy, G.O. Phillips, P.A. Williams, E. Horwood, New York, **1993**, 349-355.

21. *Investigation of metal ion adsorption of carboxymethyl cellulose gel beads*
Th. Heinze, K. Helbig, D. Klemm
Acta Polymerica **44** (1993) 108-109.

20. *On the polarity and donor-acceptor properties of polysaccharides*
S. Spange, Th. Heinze, D. Klemm
Polymer Bulletin (Berlin) **28** (1992) 697-702.

19. *Investigations on the synthesis and characterization of carboxy groups-containing cellulose sulfates*
M. Schnabelrauch, Th. Heinze, D. Klemm, I. Nehls, J. Kötzt
Polymer Bulletin (Berlin) **27** (1991) 147-153.

18. *¹³C-NMR-spektroskopische Untersuchungen zur Oxidation von Cellulose im System H₃PO₄/NaNO₂*
I. Nehls, Th. Heinze, B. Philipp, D. Klemm, A. Ebringerova
Acta Polymerica **42** (1991) 7, 339-340.
17. *Fortschritte bei der regioselektiven Derivatisierung von Cellulose, Review*
D. Klemm, M. Schnabelrauch, A. Stein, Th. Heinze, U. Erler, S. Vogt
Das Papier (Darmstadt) **45** (1991)12, 773-778.
16. *Herstellung, Struktur und Anwendung von ionotropen Gelen aus carboxygruppenhaltigen Polysacchariden, Review*
Th. Heinze, D. Klemm, F. Loth, B. Philipp
Acta Polymerica **41** (1990) 5, 259-269.
15. *Synthesechemische Modifizierung von Cellulose zur Einführung reaktiver funktioneller Gruppen unter heterogenen Reaktionsbedingungen, Review*
M. Schnabelrauch, Th. Heinze, D. Klemm
Acta Polymerica **41** (1990) 2, 112-120.
14. *¹³C-NMR-spektroskopische Untersuchungen zur Regioselektivität homogener Substitutionsreaktionen im Anhydroglucosering der Cellulose*
I. Nehls, B. Philipp, W. Wagenknecht, D. Klemm, M. Schnabelrauch, A. Stein, Th. Heinze
Das Papier (Darmstadt) **44** (1990) 12, 633-640.
13. *Zum Polyelektrolytverhalten einer C-6-substituierten Carboxycellulose im Vergleich zu Carboxymethylcellulose*
J. Kötz, B. Philipp, I. Nehls, Th. Heinze, D. Klemm
Acta Polymerica **41** (1990) 6, 333-338.
12. *REM-Charakterisierung von ionotropen Gelen carboxylgruppenhaltiger Cellulosederivate*
H. Winkelmann, Th. Heinze, W. Linß
Beiträge zur Elektronenmikroskopie und Direktabbildung von Oberflächen **23** (1990) 465-470.
11. *Sphärische Xerogele aus Poly(styren-alt-maleinsäure) und Aluminiumionen*
Th. Heinze, H. Orlich, D. Klemm, M. Hartmann
Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universität Jena, Naturwissenschaftliche Reihe **39** (1990) 2/3, 286-290.
10. *Synthese von Carboxycellulose und ionotrope Gelbildung mit Calciumionen*
Th. Heinze, D. Klemm, F. Loth, I. Nehls
Angewandte Makromolekulare Chemie **178** (1990) 95-107.
9. *Untersuchungen zum Polymereinfluß auf Struktur und Bildungsmöglichkeiten von Xerogelen aus Carboxymethylcellulose und Aluminiumionen*
Th. Heinze, H. Winkelmann, D. Klemm
Acta Polymerica **41** (1990) 2, 76-81.

8. *Synthese oligomerer Biocide auf der Basis von Oxyethylenglykol-Trägern*
M. Schnabelrauch, H. Carlsohn, Th. Heinze, M. Hartmann, D. Klemm
Zeitschrift für Chemie **29** (1989) 8, 280-281.

7. *Sphärische Carboxymethylcellulose-Gelpartikel*
Th. Heinze, D. Klemm
Acta Polymerica **40** (1989) 2, 132-134.

6. *Struktur- und Quellungsuntersuchungen an Xerogelen aus Carboxymethylcellulose und Aluminiumionen*
Th. Heinze, D. Klemm, H. Winkelmann, W. Linß
Angewandte Makromolekulare Chemie **169** (1989) 69-82.

5. *Sphärische Trägermaterialien auf der Basis carboxygruppenhaltiger Cellulosederivate- Herstellung, Charakterisierung und Applikationsbeispiele*
Th. Heinze
Dissertation, Friedrich-Schiller-Universität Jena, 1989.

4. *Elektronenmikroskopische Charakterisierung von Carboxymethylcellulose-Partikeln*
H. Winkelmann, W. Linß, Th. Heinze, D. Klemm
Veröffentlichungen zur 12. Tagung Elektronenmikroskopie I, **1988**, 225-226.

3. *Untersuchungen zur Quellung von Cellulose durch 3-Methylpyrazol*
Th. Heinze, D. Klemm, F. Loth, H.-P. Fink
Acta Polymerica **37** (1986) 11/12, 742-743.

2. *Acylation of CMC accelerated by 4-DMAP*
D. Klemm, Th. Heinze
Synthetic Communication **16** (1986) 12, 1499-1508.

1. *Untersuchungen zur Polymerfixierung von 3-Methylpyrazol und 2,2-Dichlorpropionsäure an Cellulose und Carboxymethylcellulose*
Th. Heinze
Diplomarbeit, Friedrich-Schiller-Universität Jena, 1985.

Books

14. [Cellulose derivatives: Synthesis, structure, and properties](#)
Th. Heinze, O. A. El Seoud, A. Koschella
Springer International Publishing AG, 2018, ISBN 978-3-319-73168-1 (e-Book), ISBN 978-3-319-73167-4 (Harcover)

13. [Utilization of Lignocellulosic Materials](#)
Th. Heinze, M. Janura, A. Koschella (Eds.)
Macromolecular Symposia **294(2)**, Wiley-VCH, 2010

12. [Cellulose Solvents: For Analysis, Shaping and Chemical Modification](#)
T. F. Liebert, Th. J. Heinze, K. J. Edgar (Eds.)
ACS Symposium Series **1033**, American Chemical Society, 2010

11. [Polysaccharide Materials: Performance by Design](#)
K. J. Edgar, Th. Heinze, C. M. Buchanan (Eds.)
ACS Symposium Series **1017**, American Chemical Society, 2009
10. [Novel Aspects of the Renewable Resource Cellulose](#)
Th. Heinze, M. Janura, A. Koschella (Eds.)
Macromolecular Symposia **280**, Wiley-VCH, 2009
9. [Structure and Properties of Cellulose](#)
Th. Heinze, M. Janura, A. Koschella (Eds.)
Macromolecular Symposia **262**, Wiley-VCH, 2008.
8. [New Cellulose Products and Composites](#)
Th. Heinze, K. Fischer (Eds.)
Macromolecular Symposia **244**, Wiley-VCH, 2006.
7. [Esterification of Polysaccharides](#), Buch ([Flyer](#), pdf, 222k; [Review](#))
Th. Heinze, T. Liebert, A. Koschella
Springer Verlag Heidelberg, 2006, (ISBN 3-540-32103-9).
6. [Hemicelluloses](#)
K. Fischer, Th. Heinze (Eds.)
Macromolecular Symposia **232**, Wiley-VCH, 2006.
5. [Polysaccharides I, Structure, Characterization and Use](#)
Th. Heinze (Ed.)
Advances in Polymer Science **186**, Springer Verlag Berlin, Heidelberg, 2005.
4. [Cellulose and Cellulose Derivatives](#)
Th. Heinze, K. Fischer (Eds.)
Macromolecular Symposia **223**, Wiley-VCH, Weinheim, 2005.
3. *Ionische Funktionspolymere aus Cellulose: Neue Synthesekonzepte, Strukturaufklärung und Eigenschaften*
Th. Heinze
Shaker Verlag, Aachen **1998** (ISBN 3-8265-3300-3).
2. *Comprehensive Cellulose Chemistry*
Volume I: Fundamentals and Analytical Methods
Volume II: Functionalization of Cellulose
B. Philipp, D. Klemm, Th. Heinze, U. Heinze, W. Wagenknecht
WILEY-VCH, Weinheim, **1998**.
1. *Cellulose Derivatives: Synthesis, Characterization and Nanostructures*
Th. Heinze, W.G. Glasser (Eds.)
ACS Symposium Series Nr. 688, American Chemical Society, Washington, DC, USA, **1998**.

Book reviews

9. *Oligosaccharides in Food and Agriculture*

G. Eggleston and G.L. Cote (Eds.), 2003, ACS Symposium Series No. 849, Washington DC, USA

Th. Heinze

Polymer News **29** (2004) 30-31.

8. *Chitin: Fulfilling a Biomaterials Promise*

E. Khor, 2002, Elsevier, Amsterdam

Th. Heinze

Polymer News **27** (2002) 266.

7. *Biopolymers from Polysaccharides and Agroproteins*

R. A. Gross and C. Scholz (Eds.), 2001, ACS Symposium Series No. 786, Washington DC, USA

Th. Heinze

Polymer News **27** (2002) 71.

6. *Polysaccharide Applications, Cosmetics and Pharmaceuticals*

M. El-Nokaly and H.A. Soini (Eds.), 2000, ACS Symposium Series No. 737, Washington DC, USA

Th. Heinze

Polymer News, **26** (2001) 255-256.

5. *Polymers from Renewable Resources: Biopolyesters and Biocatalysis*

C. Scholz and R.A. Gross (Eds.), 2000, ACS Symposium Series No. 764, Washington DC, USA

Th. Heinze

Polymer News **26** (2001) 218-219.

4. *Synthetic versus Biological Networks, Volume 2 of The Wiley Polymer Networks Group Review Series*

B.T. Stokke, A. Elgsaeter, (Eds.) 1999, John Wiley & Sons, Chichester, New York, Weinheim, Brisbane, Singapore, Toronto

Advanced Materials, **13** (2001)1587-1588.

3. *Physical Chemistry of Non-aqueous Solutions of Cellulose and Its Derivatives*

Vera V. Myasoedova, 2000, JOHN WILEY & SONS, Chichester, New York, Weinheim, Brisbane, Singapore, Toronto

Th. Heinze

Macromolecular Chemistry and Physics **201** (2000) 2101-2102.

2. *Biopolymers: Utilizing Nature's Advanced Materials*

S.H. Imam, R.V. Greene, B.R. Zaidi, (Eds.) 1999, ACS Symposium Series No. 723, Washington DC, USA

Th. Heinze

Polymer News **25** (2000) 106-107.

1. *Polymers at Surfaces and Interfaces*

R.A.L. Jones and R.W. Richards, 1999, Cambridge University Press, UK

Th. Heinze

Polymer News **25** (2000) 70.