Prof. Dr. Michael A. R. Meier

Karlsruhe Institute of Technology (KIT)

Institute for Organic Chemistry (IOC) and Institute of Biological and Chemical Systems – Functional Molecular Systems (IBCS-FMS)

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Education and Professional History

as of 10.2010: Full professor for Applied Chemistry at the Karlsruhe Institute of Technology (KIT),

Institute of Organic Chemistry, Germany. As of 07.2019, additionally group leader at the Karlsruhe Institute of Technology (KIT), Institute of Biological and Chemical

Systems – Functional Molecular Systems (IBCS-FMS), Germany.

06.2009 - 09.2010: Juniorprofessor for sustainable organic synthesis at the University of Potsdam,

Germany.

10.2006 - 12.2009: Principal investigator of the research group "renewable raw materials" at the

University of Applied Sciences Oldenburg / Ostfriesland / Wilhelmshaven, Faculty of

Technology, Emden, Germany.

05.2006 - 10.2006: Postdoc and project leader for the Dutch Polymer Institute (DPI) at the department of

Chemical Engineering and Chemistry, Laboratory of Macromolecular Chemistry and Nanoscience with Prof. U. S. Schubert, Eindhoven University of Technology, The

Netherlands.

05.2002 - 04.2006: Ph.D.-student at the department of Chemical Engineering and Chemistry, Laboratory

of Macromolecular Chemistry and Nanoscience with Prof. U. S. Schubert, Eindhoven University of Technology, The Netherlands. Thesis title: "Facing current challenges in

(supra-) macromolecular science – a high-throughput approach –"

11.1996 - 02.2002: study of chemistry at the University of Regensburg; diploma-thesis: "Fluorosensing of

Ammonium Ions via Molecular Recognition in Polymeric Emulsion Membranes" with Prof. O. Wolfbeis, Institute of Analytical Chemistry, Chemo- & Biosensors, University

of Regensburg, Germany.

06.1995: general qualification for university entrance from the Apian Gymnasium in Ingolstadt,

Germany (Abitur).

Awards and honors

11/2006:	Golden Thesis Award 2006 from the Dutch Polymer Institute (DPI)
11/2009	H. P. Kaufmann Prize of the Deutsche Gesellschaft für Fettwissenschaft
09/2010	Young Lipid Scientists Award of the European Federation for the Science and Technology of Lipids
09/2012	Outstanding Young Scientists Award of the BioEnvironmental Polymer Society (BEPS)
04/2013	Young Scientist Research Award of the American Oil Chemists Society (AOCS)
05/2014	Call (Ruf) to a chair in Polymer Chemistry at the Eindhoven University of Technology (TU/e), The Netherlands; declined
2017	Fellow of the Royal Society of Chemistry (FRSC)
2018	2018 Materials Today EPJ Award (3rd place, awarded 05/2019 in Budapest)
04/2019	Call (Ruf) to a chair in Organic and Macromolecular Chemistry at the Johannes Gutenberg-Universität (JGU, Mainz, Germany) in combination with a GFK-Fellowship; declined
2023	Coating Science International: CoSi Science Award 2023

Current scientific activities (past activities available upon request)

- Head of the Institute of Organic Chemistry (10/2016 9/2019 & 10/2021)
- Associate Editor of ACS Sustainable Chemistry & Engineering (03/2018)
- Member of the selection committee of the Wöhler-Preis für Nachhaltige Chemie (GDCh) and the Carl-Roth-Förderpreis (committee chair, GDCh)
- Chair of the local section Karlsruhe of the German Chemical Society (GDCh; 10/22 ; deputy chair from 10/2021 10/22)
- Wiley Polymer Scientific Advisory Board, representative for Macromolecular Chemistry and Physics (10/22)
- Member of the editorial (advisory) boards of (alphabetic order): European Journal of Lipid Science and Technology, Global Challenges, Macromolecular Chemistry and Physics, Macromolecular Rapid Communications, Tetrahedron Chem, Journal of Applied Polymer Science, Journal of Renewable Materials.

Professional Societies

- American Chemical Society
- Gesellschaft Deutscher Chemiker e.V.
- Deutsche Gesellschaft für Fettwissenschaft
- European Federation for the Science and Technology of Lipids
- Bioenvironmental Polymer Society (BEPS)

Refereed journal publications

Publication statistics according to Web of Science by Clarivate Analytics

[search: Author=(Meier MAR), all databases]:

h-index: 60; times cited: 14009 (data obtained on 30th of October 2023)

(254) P. Conen, R. Nickisch, M.A.R. Meier* <u>Synthesis of highly substituted alkenes by sulfur-mediated olefination of N-tosylhydrazones</u>, *Commun. Chem.* **2023**, *accepted*.

- (253) F.C.M. Scheelje, M.A.R. Meier* <u>Non-Isocyanate Polyurethanes Synthesized from Terpenes Using Thiourea Organocatalysis and Thiol-Ene-Chemistry</u>, *Commun. Chem.* **2023**, *6*, 239.
- (252) T. Sehn, M.A.R. Meier* <u>Structure-Property Relationships of Short Chain (Mixed) Cellulose Esters Synthesized in a DMSO/TMG/CO₂ Switchable Solvent System, *Biomacromolecules* **2023**, *in press*. (DOI: 10.1021/acs.biomac.3c00762)</u>
- (251) S. Wegelin, M.A.R. Meier* <u>Solution Self-Assembly of Branched Macromolecules Obtained via Iterative OPE Synthesis and the Passerini Three-Component Reaction</u>, *Macromol. Chem. Phys.* **2023**, *224*, 2300337.
- (250) P. Bohn, V. Hirschberg, S. Buchheiser, D. Moatsou, H. Nirschl, M.A.R. Meier* <u>Synthesis and characterization of uniform OCL-OEG block cooligomers</u>, *Polym. Chem.* **2023**, *14*, 4765-4773.
- (249) R. Nickisch, W.M. de Vos, M.A.R. Meier, M.I. Baig* <u>Removal of Transition-Metal Ions by Metal-Complexing Polythiosemicarbazone Membranes</u>, *ACS Appl. Polym. Mater.* **2023**, *5*, 7240-7251.
- (248) I. Ribca, B. Sochor, S.V.V. Roth, M. Lawoko, M.A.R. Meier, M. Johansson <u>Effect of Molecular Organization on the Properties of Fractionated Lignin-Based Thiol–Ene Thermoset Materials</u>, *ACS Omega* **2023**, *8*, 25478-25486.
- (247) C. Libretti, M.A.R. Meier* <u>Cellulose Functionalization with Methyl Ferulate in a Switchable Solvent System</u>, *Macromolecules* **2023**, *56*, 7532-7542.
- (246) I. Ribca, B. Sochor, M. Betker, S.V. Roth, M. Lawoko, O. Sevastyanova, M.A.R. Meier, M. Johansson Impact of lignin source on the performance of thermoset resins, Eur. Polym. J. **2023**, 194, 112141.
- (245) J. Wolfs, F.C.M. Scheelje, O. Matveyeva, M.A.R. Meier* <u>Determination of the degree of substitution of cellulose esters via ATR-FTIR spectroscopy</u>, *J. Polym. Sci.* **2023**, *61*, 2697.
- (244) J. Wolfs, I. Ribca, M.A.R. Meier,* M. Johansson* <u>Polythionourethane Thermoset Synthesis via Activation of Elemental Sulfur in an Efficient Multicomponent Reaction Approach</u>, *ACS Sustainable Chem. Eng.* **2023**, *11*, 3952-3962.
- (243) F.C.M. Scheelje, F.C.C. Destaso, H. Cramail,* M.A.R. Meier* <u>Nitrogen-Containing Polymers Derived from Terpenes: Possibilities and Limitations</u>, *Macromol. Chem. Phys.* **2023**, *224*, 2200403.
- (242) L. Santos Correa, M.A.R. Meier* <u>Ruthenium Catalyzed Oxidative Cleavage of High Oleic Sunflower Oil:</u> <u>Considerations Regarding the Synthesis of a Fully Biobased Triacid</u>, *Eur. J. Lipid Sci. Tech.* **2023**, *125*, 2200171.
- (241) M. Rhein, S. Zarbakhsh, M.A.R. Meier* <u>Further Insights into the Catalytic Reduction of Aliphatic Polyesters to Polyethers</u>, *Macromol. Chem. Phys.* **2023**, *224*, 2200289.
- (240) P. Bohn, M.P. Weisel, J. Wolfs, M.A.R. Meier* Molecular data storage with zero synthetic effort and simple read-out, *Sci. Rep.* **2022**, *12*, 13878.
- (239) M. Rhein, A. Demharter, B. Felker, M.A.R. Meier* <u>A Fully Biobased Aromatic Polyester Polyol for Polyisocyanurate Rigid Foams: Poly(diethylene furanoate)</u>, *ACS Appl. Polym. Mat.* **2022**, *4*, 6514-6520.
- (238) R. Nickisch, P. Conen, M.A.R. Meier* <u>Polythiosemicarbazones by Condensation of Dithiosemicarbazides and Dialdehydes</u>, *Macromolecules* **2022**, 55, 3267-3275.
- (237) A. Travanut, P.F. Monteiro, S. Smith, S.M. Howdle, A.M. Grabowska, B. Kellam, M.A.R. Meier, C. Alexander* <u>Passerini chemistries for synthesis of polymer pro-drug and polymersome drug delivery nanoparticles</u>, *J. Mater. Chem. B* **2022**, *10*, 3895-3905.

- (236) A. Kirchberg, M. Khabazian Esfahani, M.-C. Röpert, M. Wilhelm, M.A.R. Meier* <u>Sustainable Synthesis of Non-Isocyanate Polyurethanes Based on Renewable 2,3-Butanediol</u>, *Macromol. Chem. Phys.* **2022**, 2200010.
- (235) J. T. Windbiel, M.A.R. Meier* <u>RAFT Polymerization of a Renewable Ricinoleic Acid-Derived Monomer and Subsequent Post-Polymerization Modification via the Biginelli-3-Component Reaction</u>, *Macromol. Chem. Phys.* **2022**, 2100360.
- (234) J. Wolfs, R. Nickisch, L. Wanner, M.A.R. Meier* <u>Sustainable One-Pot Cellulose Dissolution and Derivatization via a Tandem Reaction in the DMSO/DBU/CO₂ Switchable Solvent System, *J. Am. Chem. Soc.* **2021**, *143*, 18693-18702.</u>
- (233) K.A. Waibel, D. Barther, T. Malliaridou, D. Moatsou, M.A.R. Meier* One-Pot Synthesis of Thiocarbamates, Eur. J. Org. Chem. **2021**, 4508-4516.
- (232) J. Wolfs, M.A.R. Meier* A more sustainable synthesis approach for cellulose acetate using the DBU/CO₂ switchable solvent system, Green Chem. **2021**, 23, 4410-4420.
- (231) Y. S. Raupp, P. S. Löser, S. Behrens, M.A.R. Meier* <u>Selective Catalytic Epoxide Ring-Opening of Limonene Dioxide with Water</u>, *ACS Sustainable Chem. Eng.* **2021**, *9*, 7713-7718.
- (230) M. Heidari, K.N. Onwukamike, E. Grau, S. Grelier, H. Cramail,* M.A.R. Meier,* A. Greiner* <u>Direct</u> electrospinning of cellulose in the DBU-CO2 switchable solvent system, *Cellulose* **2021**, *28*, 6869-6880.
- (229) U. Biermann, U.T. Bornscheuer, I, Feussner, M.A.R. Meier,* J.O. Metzger <u>Fatty Acids and their Derivatives as Renewable Platform Molecules for the Chemical Industry, Angew. Chem. Int. Ed.</u> **2021**, *60*, 20144.
- (228) D. Hahn, R.V. Schneider, E. Foitzik, M.A.R. Meier* <u>A Practical and Efficient Synthesis of Uniform Conjugated Rod-Like Oligomers</u>, *Macromol. Rapid Commun.* **2021**, *42*, 2000735.
- (227) P.B.V. Scholten, G. Cartigny, B. Grignard, A. Debuigne, H. Cramail, M.A.R. Meier,* C. Detrembleur* Functional Polyethylenes by Organometallic-Mediated Radical Polymerization of Biobased Carbonates, ACS Macro Lett. **2021**, *10*, 313-320.
- (226) A. Kirchberg, M.A.R. Meier* Regeneration of Cellulose from a Switchable Ionic Liquid: Toward More Sustainable Cellulose Fibers, Macromol. Chem. Phys. **2021**, 222, 2000433.
- (225) R. Nickisch, P. Conen, S.M. Gabrielsen, M.A.R. Meier* <u>A more sustainable isothiocyanate synthesis by amine catalyzed sulfurization of isocyanides with elemental sulfur</u>, *RSC Adv.* **2021**, *11*, 3134-3142.
- (224) A. Travanut, P.F. Monteiro, S. Oelmann, S.M. Howdle, A.M. Grabowska, P.A. Clarke, A.A. Ritchie, M.A.R. Meier,* C. Alexander* <u>Synthesis of Passerini-3CR Polymers and Assembly into Cytocompatible Polymersomes, Macromol. Rapid Commun.</u> **2021**, *42*, 2000321.
- (223) E. Esen, P. Hädinger, M.A.R. Meier* <u>Sustainable Fatty Acid Modification of Cellulose in a CO₂-Based Switchable Solvent and Subsequent Thiol-Ene Modification</u>, *Biomacromolecules* **2021**, 22, 5586-593.
- (222) L. Filippi, M.A.R. Meier* <u>Fully Renewable Non-Isocyanate Polyurethanes via the Lossen Rearrangement</u>, *Macromol. Rapid Commun.* **2021**, *42*, 2000440.
- (221) K.A. Waibel, D. Moatsou, M.A.R. Meier* Synthesis and Encapsulation of Uniform Star-Shaped Block-Macromolecules, *Macromol. Rapid Commun.* **2021**, *42*, 2000467.
- (220) T. Windbiel, M.A.R. Meier* Synthesis of new Biginelli polycondensates: renewable materials with tunable high glass transition temperatures, *Polym. Int.* **2021**, *70*, 506-513.

- (219) M. Frölich, D. Hofheinz, M.A.R. Meier* Reading mixtures of uniform sequence-defined macromolecules to increase data storage capacity, Comms. Chem. **2020**, *3*, 184.
- (218) R. Nickisch, S.M. Gabrielsen, M.A.R. Meier* <u>Novel Access to Known and Unknown Thiourea Catalyst via a Multicomponent-Reaction Approach</u>, *ChemistrySelect* **2020**, *5*, 11915.
- (217) E. Esen, M.A.R. Meier* <u>Sustainable Functionalization of 2,3-Dialdehyde Cellulose via the Passerini Three-Component Reaction</u>, *ACS Sustainable Chem. Eng.* **2020**, *8*, 15755-15760.
- (216) R.V. Schneider, A. Sehlinger, M.A.R. Meier* <u>A Direct One-Pot Modification of β-Cyclodextrin via the Ugi-Five-Component Reaction</u>, *ChemistrySelect* **2020**, *5*, 10765.
- (215) P.B.V. Scholten, D. Moatsou, C. Detrembleur, M.A.R. Meier* <u>Progress Toward Sustainable Reversible Deactivation Radical Polymerization</u>, *Macromol. Rapid Commun.* **2020**, *41*, 2000266.
- (214) A.S. Abd-El-Aziz, M. Antonietti, C. Barner-Kowollik, W.H. Binder, A. Böker, C. Boyer, M.R. Buchmeiser, S.Z.D. Cheng, F. D'Agosto, G. Floudas, H. Frey, G. Galli, J. Genzer, L. Hartmann,* R. Hoogenboom, T. Ishizone, D.L. Kaplan, M. Leclerc, A. Lendlein, B. Liu, T.E. Long, S. Ludwigs, J.-F. Lutz, K. Matyjaszewski, M.A.R. Meier,* K. Müllen, M. Müllner, B. Rieger, T.P. Russell, D.A. Savin, A.D. Schlüter, U.S. Schubert, S. Seiffert, K. Severing, J.B. P. Soares, M. Staffilani,* B.S. Sumerlin, Y. Sun, B.Z. Tang, C. Tang, P. Theato, N. Tirelli, O. K. C. Tsui, M.M. Unterlass, P. Vana, B. Voit, S. Vyazovkin, C. Weder, U. Wiesner, W.-Y. Wong, C. Wu, Y. Yagci, J. Yuan, G. Zhang The Next 100 Years of Polymer Science, Macromol. Chem. Phys. 2020, 221, 2000216.
- (213) K.S. Wetzel, M. Frölich, S. C. Solleder, R. Nickisch, P. Treu, M.A.R. Meier* <u>Dual sequence definition</u> increases the data storage capacity of sequence-defined macromolecules, *Comms. Chem.* **2020**, *3*, 63.
- (212) P.S. Löser, P. Rauthe, M.A.R. Meier,* A. Llevot* <u>Sustainable catalytic rearrangement of terpene-derived epoxides: towards bio-based biscarbonyl monomers</u>, *Phil. Trans. R. Soc. A* **2020**, *378*, 0190267.
- (211) O. Franco,* M. Jakoby, R.V. Schneider, F. Hundemer, D. Hahn, B.S. Richards, S. Bräse, M.A.R. Meier, U. Lemmer, I.A. Howard* Sensitizing TADF Absorption Using Variable Length Oligo(phenylene ethynylene) Antennae, Front. Chem. **2020**, *8*, 126.
- (210) K. Waibel, R. Nickisch, N. Möhl, R. Seim, M.A.R. Meier* <u>A more sustainable and highly practicable synthesis of aliphatic isocyanides</u>, *Green Chem.* **2020**, *22*, 933-941.
- (209) E. Esen, M.A.R. Meier* <u>Modification of Starch via the Biginelli Multicomponent Reaction</u>, *Macromol. Rapid Commun.* **2020**, *41*, 1900375.
- (208) P. Bohn, M.A.R. Meier* Uniform poly(ethylene glycol): a comparative study, Polym. J. 2020, 52, 165-178.
- (207) P.B.V. Scholten, B.M. Özen, Z. Söyler, J.-M. Thomassin, M. Wilhelm, C. Detrembleur, M.A.R. Meier* Rheological and mechanical properties of cellulose/LDPE composites using sustainable and fully renewable compatibilisers, J. Appl. Polym. Sci. **2019**, 48744.
- (206) J. Demarteau, P.B.V. Scholtenm A. Kermagoret, J. De Winter, M.A.R. Meier, V. Monteil, A. Debuigne,* C. Detrembleur* Functional Polyethylene (PE) and PE-Based Block Copolymers by Organometallic-Mediated Radical Polymerization, *Macromolecules* **2019**, *52*, 9053-9063.
- (205) O.R. Schade, P.-K. Dannecker, K.F. Kalz, D. Steinbach, M.A.R. Meier,* J.-D. Grunwadt* <u>Direct Catalytic Route to Biomass-Derived 2,5-FurandicarboxylicAcid and Its Use as Monomer in a Multicomponent Polymerization</u>, *ACS Omega* **2019**, *4*, 16972-16979.

- (204) X. Guo, K.S. Wetzel, S.C. Solleder, S. Spann, M.A.R. Meier, M. Wilhelm, B. Luy, G. Guthausen*

 1H-PFG-NMR Diffusion Study on a Sequence-Defined Macromolecule: Confirming Monodispersity, Macromol.
 Chem. Phys. 2019, 220, 1900155.
- (203) P.-K. Dannecker, M.A.R. Meier* <u>Facile and Sustainable Synthesis of Erythritol bis(carbonate)</u>, a <u>Valuable Monomer for Non-Isocyanate Polyurethanes</u> (NIPUs), *Sci. Rep.* **2019**, *9*, 9858.
- (202) J.O. Holloway, K.S. Wetzel, S. Martens, F.E. Du Prez,* M.A.R. Meier* <u>Direct comparison of solution and solid phase synthesis of sequence-defined macromolecules</u>, *Polym. Chem.* **2019**, *10*, 3859-3867.
- (201) G. Klein, A. Llevot,* P. Löser, B. Bitterer, J. Helfferich, W. Wenzel, C. Barner-Kowollik, M.A.R. Meier* On the macrocyclization selectivity of meta-substituted diamines and dialdehydes: towards macrocycles with tunable functional peripheries, J. Incl. Phenom. Macrocycl. Chem. **2019**, *95*, 119-134.
- (200) K.S. Wetzel, M.A.R. Meier* <u>Monodisperse</u>, sequence-defined macromolecules as a tool to evaluate the <u>limits of ring-closing metathesis</u>, *Polym. Chem.* **2019**, *10*, 2716-2722.
- (199) A. Llevot,* M.A.R. Meier <u>Perspective: green polyurethane synthesis for coating applications</u>, *Polym. Int.* **2019**, *68*, 826-831.
- (198) M.A.R. Meier,* C. Barner-Kowollik*<u>A New Class of Materials: Sequence-Defined Macromolecules and Their Emerging Applications</u>, *Adv. Mater.* **2019**, *1806027*.
- (197) P.-K. Dannecker, U. Biermann,* A. Sink, F.R. Bloesser, J.O. Metzger, M.A.R. Meier* <u>Fatty Acid—Derived Aliphatic Long Chain Polyethers by a Combination of Catalytic Ester Reduction and ADMET or Thiol-Ene Polymerization</u>, *Macromol. Chem. Phys.* **2019**, *220*, 1800440.
- (196) K.N. Onwukamike, L. Lapuyade, L. Maillé, S. Grelier, E. Grau, H. Cramail,* M.A.R. Meier* <u>Sustainable Approach for Cellulose Aerogel Preparation from the DBU–CO₂ Switchable Solvent, ACS Sustainable Chem. Eng. **2019**, *7*, 3329-3338.</u>
- (195) P.-K. Dannecker, A. Sehlinger, M.A.R. Meier* <u>Polymacrocycles Derived via Ugi Multi-Component Reactions</u>, *Macromol. Rapid. Commun.* **2019**, *40*, 1800748.
- (194) K.N. Onwukamike, S. Grelier, E. Grau, H. Cramail,* M.A.R. Meier* <u>Critical Review on Sustainable Homogeneous Cellulose Modification: Why Renewability Is Not Enough</u>, *ACS Sustainable Chem. Eng.* **2019**, *7*, 1826-1840.
- (193) P.B.V. Scholten, C. Detrembleur,* M.A.R. Meier* <u>Plant-Based Nonactivated Olefins: A New Class of Renewable Monomers for Controlled Radical Polymerization</u>, *ACS Sustainable Chem. Eng.* **2019**, *7*, 2751-2762.
- (192) M.A.R. Meier* <u>Plant-Oil-Based Polyamides and Polyurethanes: Toward Sustainable Nitrogen-Containing Thermoplastic Materials</u>, *Macromol. Rapid Commun.* **2019**, *40*, 1800524.
- (191) S. Oelmann, A. Travanut, D. Barther, M. Romero, S.M. Howdle, C. Alexander,* M.A.R. Meier* Biocompatible Unimolecular Micelles Obtained via the Passerini Reaction as Versatile Nanocarriers for Potential Medical Applications, Biomacromolecules **2019**, *20*, 90-101.
- (190) R.V. Schneider, K.A. Waibel, A.P. Arndt, M. Lang, R. Seim, D. Busko, S. Bräse, U. Lemmer, M.A.R. Meier* Sequence-definition in stiff conjugated oligomers, Sci. Rep. **2018**, *8*, 17483.
- (189) M. von Czapiewski, M. Rhein, M.A.R. Meier* <u>Fatty Acid Derived Renewable Platform Chemicals via Selective Oxidation Processes</u>, *ACS Sustainable Chem. Eng.* **2018**, *6*, 15170-15179.

- (188) K. N. Onwukamike, S. Grelier, E. Grau, H. Cramail,* M.A.R. Meier* On the direct use of CO₂ in multicomponent reactions: introducing the Passerini four component reaction, RSC Adv. **2018**, *8*, 31490-31495.
- (187) D. S. Moock, S. O. Steinmüller, I. D. Wessely, A. Llevot, B. Bitterer, M.A.R. Meier, S. Bräse, H. Ehrenberg, F. Scheiba* <u>Surface Functionalization of Silicon, HOPG, and Graphite Electrodes: Toward an Artificial Solid Electrolyte Interface</u>, *ACS Appl. Mater. Interfaces* **2018**, *10*, 24172-24180.
- (186) P.-K. Dannecker, U. Biermann,* M. von Czapiewski, J. O. Metzger, M.A.R. Meier* Renewable Polyethers via GaBr₃ Catalyzed Reduction of Polyesters, *Angew. Chem. Int. Ed.* **2018**, *57*, 8775.
- (185) K. N. Onwukamike, S. Grelier, E. Grau, H. Cramail,* M.A.R. Meier* <u>Sustainable Transesterification of Cellulose with High Oleic Sunflower Oil in a DBU-CO₂ Switchable Solvent, ACS Sustainable Chem. Eng. **2018**, 6, DOI: 10.1021/acssuschemeng.8b01186.</u>
- (184) A. C. Boukis, M.A.R. Meier* <u>Data storage in sequence-defined macromolecules via multicomponent</u> reactions, *Eur. Polym. J.* **2018**, *104*, 32-38.
- (183) P. B. V. Scholten, J. Demarteau, S. Gennen, J. De Winter, B. Grignard, A Debuigne, M.A.R. Meier, C. Detrembleur* Merging CO₂ Based Building Blocks with Cobalt-Mediated Radical Polymerization for the Synthesis of Functional Poly(vinyl alcohol)s, *Macromolecules* **2018**, *51*, 3379-3393.
- (182) A. C. Boukis, K. Reiter, M. Frölich, D. Hofheinz, M.A.R. Meier* <u>Multicomponent reactions provide key molecules for secret communication</u>, *Nature Communications* **2018**, *9*, Article number: 1439.
- (181) M. Unverferth, M.A.R. Meier* <u>A Sustainable Tandem Catalysis Approach to Plant Oil-Based Polyols via Schenck-Ene Reaction and Epoxidation</u>, *Eur. J. Lipid Sci. Technol.* **2018**, *120*, 1800015.
- (180) W. Konrad, F. R. Bloesser, K. S. Wetzel, A, C. Boukis, M.A.R. Meier,* C. Barner-Kowollik* <u>A Combined Photochemical and Multicomponent Reaction Approach to Precision Oligomers</u>, *Chem. Eur. J.* **2018**, *24*, 3413-3419.
- (179) K. N. Onwukamike, T. Tassaing, S. Grelier, E. Grau, H. Cramail,* M.A.R. Meier* <u>Detailed Understanding of the DBU/CO₂ Switchable Solvent System for Cellulose Solubilization and Derivatization</u>, *ACS Sustainable Chem. Eng.* **2018**, *6*, 1496-1503.
- (178) P. B. Cardoso, T. O. Machado, P. E. Feuser, C. Sayer, M.A.R. Meier,* H. H. Araujo* Biocompatible Polymeric Nanoparticles From Castor Oil Derivatives via Thiol-Ene Miniemulsion Polymerization, *Eur. J. Lipid Sci. Tech.* **2018**, *120*, 1700212.
- (177) Z. Söyler, K. N. Onwukamike, S. Grelier, E. Grau, H. Cramail, M.A.R. Meier* <u>Sustainable succinylation of cellulose in a CO2-based switchable solvent and subsequent Passerini 3-CR and Ugi 4-CR modification</u>, *Green Chem.* **2018**, *20*, 214-224.
- (176) M. von Czapiewski, M.A.R. Meier* Synthesis of Dimer Fatty Acid Methyl Esters by Catalytic Oxidation and Reductive Amination: An Efficient Route to Branched Polyamides, Eur. J. Lipid Sci. Tech. 2018, 120, 1700350.
- (175) S. Oelmann, M.A.R. Meier* Synthesis and unimolecular micellar behavior of amphiphilic star-shaped block copolymers obtained via the Passerini three component reaction, RSC Adv. **2017**, 7, 45195-45199.
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