



Prof. Dr. Michael A. R. Meier

Karlsruhe Institute of Technology (KIT)
Institute for Organic Chemistry
Fritz-Haber-Weg 6
76131 Karlsruhe, Germany

Email: m.a.r.meier@kit.edu; Web: www.meier-michael.com

Education and Professional History

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

Current scientific activities (past activities available upon request)

- Head of the Institute of Organic Chemistry (10/2016 -)
- Speaker of the Collaborative Research Center on Molecular Structuring of Soft Matter (Sonderforschungsbereich 1176; 08/2016 -)
- Elected president of working group Nachhaltige Chemie (sustainable chemistry) of the GDCh (German Chemical Society); before (2010-2014) elected vice-president.
- Associate Editor of ACS Sustainable Chemistry & Engineering
- Member of the editorial boards of (alphabetic order): European Journal of Lipid Science and Technology, Journal of Applied Polymer Science, Journal of Renewable Materials, Macromolecular Chemistry and Physics, Macromolecular Rapid Communications

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: 48; times cited: 8363 (data obtained on 8th of March 2019)

(192) M.A.R. Meier* Plant-Oil-Based Polyamides and Polyurethanes: Toward Sustainable Nitrogen-Containing Thermoplastic Materials, *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* Fatty Acid Derived Renewable Platform Chemicals via Selective Oxidation Processes, *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* Surface Functionalization of Silicon, HOPG, and Graphite Electrodes: Toward an Artificial Solid Electrolyte Interface, *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*, <https://doi.org/10.1002/anie.201804368>.

- (185) K. N. Onwukamike, S. Grelier, E. Grau, H. Cramail,* M.A.R. Meier* 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.
- (184) A. C. Boukis, M.A.R. Meier* Data storage in sequence-defined macromolecules via multicomponent 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* Multicomponent reactions provide key molecules for secret communication, *Nature Communications* **2018**, 9, Article number: 1439.
- (181) M. Unverferth, M.A.R. Meier* A Sustainable Tandem Catalysis Approach to Plant Oil-Based Polyols via Schenck-Ene Reaction and Epoxidation, *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* A Combined Photochemical and Multicomponent Reaction Approach to Precision Oligomers, *Chem. Eur. J.* **2018**, 24, 3413-3419.
- (179) K. N. Onwukamike, T. Tassaing, S. Grelier, E. Grau, H. Cramail,* M.A.R. Meier* Detailed Understanding of the DBU/CO₂ Switchable Solvent System for Cellulose Solubilization and Derivatization, *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* Sustainable succinylation of cellulose in a CO₂-based switchable solvent and subsequent Passerini 3-CR and Ugi 4-CR modification, *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.
- (174) A. Sehlinger, N. Bartnick, I. Gunkel, M.A.R. Meier,* L. Montero de Espinosa* Phase Segregation in Supramolecular Polymers Based on Telechelics Synthesized Via Multicomponent Reactions, *Macromol. Chem. Phys.* **2017**, 1700302.
- (173) T. Stößer, C. Li, J. Unruangsri, P. K. Saini, R.J. Sablong, M.A.R. Meier, K. Williams,* C. Koning* Bio-derived polymers for coating applications: comparing poly(limonene carbonate) and poly(cyclohexadiene carbonate), *Polym. Chem.* **2017**, 8, 6099-6105.
- (172) A. Llevot, S.O. Steinmüller, B. Bitterer, B. Ridder, J. Berson, S. Walheim, T. Schimmel, S. Bräse, F. Scheiba, M.A.R. Meier* Sequence-controlled molecular layers on surfaces by thiol-ene chemistry: synthesis and multitechnique characterization, *Polym. Chem.* **2017**, 8, 5826-5828.
- (171) S.C. Solleder, S. Martens, P. Espeel, F. Du Prez,* M.A.R. Meier* Combining Two Methods of Sequence Definition in a Convergent Approach: Scalable Synthesis of Highly Defined and Multifunctionalized Macromolecules, *Chem. Eur. J.* **2017**, 23, 13906.

- (170) Z. Söyler, M.A.R. Meier* Sustainable functionalization of cellulose and starch with diallyl carbonate in ionic liquids, *Green Chem.* **2017**, *19*, 3899-3907.
- (169) Y.S. Raupp, C. Yildiz, W. Kleist,* M.A.R. Meier* Aerobic oxidation of alpha-pinene catalyzed by homogeneous and MOF-based Mn catalysts, *Appl. Catal. A* **2017**, *546*, 1-6.
- (168) A. Llevot, A.C. Boukis, S. Oelmann, K. Wetzel, M.A.R. Meier* An Update on Isocyanide-Based Multicomponent Reactions in Polymer Science, *Top. Curr. Chem.* **2017**, *375*, 66.
- (167) L.C. Over, M. Hergert, M.A.R. Meier* Metathesis Curing of Allylated Lignin and Different Plant Oils for the Preparation of Thermosetting Polymer Films with Tunable Mechanical Properties, *Macromol. Chem. Phys.* **2017**, *1700177*.
- (166) A.S. Trita, L.C. Over, J. Pollini, S. Baader, S. Riegsinger, M.A.R. Meier,* L. J. Gooßen* Synthesis of potential bisphenol A substitutes by isomerising metathesis of renewable raw materials, *Green Chem.* **2017**, *19*, 3051-3060.
- (165) B. Ridder, D. S. Mattes, A. Nesterov-Mueller, F. Breitling,* M.A.R. Meier* Peptide array functionalization via the Ugi four-component reaction, *Chem. Commun.* **2017**, *53*, 5553-5556.
- (164) M. von Czapiewski, M.A.R. Meier* Catalytic Oxyfunctionalization of Methyl 10-undecenoate for the Synthesis of Step-Growth Polymers, *Macromol. Chem. Phys.* **2017**, *1700153*.
- (163) A. Llevot, B. Monney, A. Sehlinger, S. Behrens,* M.A.R. Meier* Highly efficient Tsuji-Trost allylation in water catalyzed by Pd nanoparticles, *Chem. Commun.* **2017**, *53*, 5175-5178.
- (162) M. J. Soares, P.-K. Dannecker, C. Vilela, J Bastos, M.A.R. Meier,* Andreia F. Sousa* Poly(1,20-eicosanediyl 2,5-furandicarboxylate), a biodegradable polyester from renewable resources, *Eur. Polym. J.* **2017**, *90*, 301-311.
- (161) S. C. Solleder, R. V. Schneider, K. S. Wetzel, A. C. Boukis, M.A.R. Meier* Recent Progress in the Design of Monodisperse, Sequence-Defined Macromolecules, *Macromol. Rapid Commun.* **2017**, *38*, 1600711.
- (160) A. C. Boukis, B. Monney, M.A.R. Meier* Synthesis of structurally diverse 3,4-dihydropyrimidin-2(1H)-ones via sequential Biginelli and Passerini reactions, *Beilstein J. Org. Chem.* **2017**, *13*, 54-62.
- (159) C. Over, E. Grau, S. Grelier, M.A.R. Meier,* H. Cramail* Synthesis and Characterization of Epoxy Thermosetting Polymers from Glycidylated Organosolv Lignin and Bisphenol A, *Macromol. Chem. Phys.* **2017**, *1600411*.
- (158) Z. Söyler, M.A.R. Meier* Catalytic Transesterification of Starch with Plant Oils: A Sustainable and Efficient Route to Fatty Acid Starch Esters, *ChemSusChem* **2017**, *10*, 182-188.
- (157) M. von Czapiewski, K. Gugau, L. Todorovic, M.A.R. Meier* Synthesis of polyacrylates from limonene by catalytic oxidation and multi-component reaction, *Eur. Polym. J.* **2016**, *83*, 359-366.
- (156) A. Llevot,* M.A.R. Meier* Renewability - a principle of utmost importance!, *Green. Chem.* **2016**, *18*, 4800-4803.
- (155) B. Ridder, T.C. Foertsch, A. Welle, D.S. Mattes, C. von Bojnicic-Kninski, F.F. Loeffler, A. Nesterov-Mueller, M.A.R. Meier,* F. Breitling* Development of a poly(dimethylacrylamide) based matrix material for solid phase high density peptide array synthesis employing a laser based material transfer, *Appl. Surf. Sci.* **2016**, *389*, 942-951.

- (154) A. Llevot,* P.-K. Dannecker, M. von Czapiewski, L.C. Over, Z. Söyler, **M.A.R. Meier*** Renewability is not Enough: Recent Advances in the Sustainable Synthesis of Biomass-derived Monomers and Polymers, *Chem. Eur. J.* **2016**, 22, 11510-11521.
- (153) F.F. Loeffler,* T.C. Foertsch, R. Popov, D.S. Mattes, M. Schlageter, M. Sedlmayr, B. Ridder, F.-X. Dang, C. von Bojnicic-Kninski, L.K. Weber, A. Fischer, J. Greifenstein, V. Bykovskaya, I. Buliev, F.R. Bischoff, L. Hahn, **M.A.R. Meier**, S. Bräse, A.K. Powell, T.S. Balaban, F. Breitling,* A. Nesterov-Mueller* High-flexibility combinatorial peptide synthesis with laser-based transfer of monomers in solid matrix material, *Nature Communications* **2016**, 7, Article number: 11844.
- (152) S. Oelmann, S.C. Solleder, **M.A.R. Meier*** Controlling molecular weight and polymer architecture during the Passerini three component step-growth polymerization, *Polym. Chem.* **2016**, 7, 1857-1860.
- (151) A.C. Boukis, A. Llevot, **M.A.R. Meier*** High Glass Transition Temperature Renewable Polymers via Biginelli Multicomponent Polymerization, *Macromol. Rapid Commun.* **2016**, 37, 643-649.
- (150) M. Unverferth, **M.A.R. Meier*** Selective Formation of C36-Dimer Fatty Acids via Thiol-Ene Addition for Copolyamide Synthesis, *Eur. J. Lipid. Sci. Tech.* **2016**, 118, 1470-1474.
- (149) A. Hufendiek, A. Carlmark, **M.A.R. Meier***, C. Barner-Kowollik* Fluorescent Covalently Cross-Linked Cellulose Networks via Light-Induced Ligation, *ACS Macro Lett.* **2016**, 5, 139-143.
- (148) S.C. Solleder, D. Zengel, K.S. Wetzel, **M.A.R. Meier*** A Scalable and High-Yield Strategy for the Synthesis of Sequence-Defined Macromolecules, *Angew. Chem. Int. Ed.* **2016**, 55, 1204-1207.
- (147) W. Maassen, **M.A.R. Meier***, N. Willenwacher* Unique adhesive properties of pressure sensitive adhesives from plant oils, *Int. J. Adhes. Adhesi.* **2016**, 64, 65-71.
- (146) U. Biermann, A. Sehlinger, **M.A.R. Meier***, J.O. Metzger* Catalytic copolymerization of methyl 9,10-epoxystearate and cyclic anhydrides under neat conditions, *Eur. J. Lipid. Sci. Tech.* **2016**, 118, 104-110.
- (145) L.C. Over, **M.A.R. Meier*** Sustainable allylation of organosolv lignin with diallyl carbonate and detailed structural characterization of modified lignin, *Green Chem.* **2016**, 18, 197-207.
- (144) S. Oelmann, **M.A.R. Meier*** Synthesis of Modified Polycaprolactams Obtained from Renewable Resources, *Macromol. Chem. Phys.* **2015**, 216, 1972-1981.
- (143) O. Kreye, **M.A.R. Meier*** Base catalyzed sustainable synthesis of phenyl esters from carboxylic acids using diphenyl carbonate, *RSC Adv.* **2015**, 5, 53155-53160.
- (142) W. Maaßen, S. Oelmann, D. Peter, W. Oswald, N. Willenbacher, **M.A.R. Meier*** Novel insights into pressure sensitive adhesives based on plant oils, *Macromol. Chem. Phys.* **2015**, 216, 1609-1618.
- (141) A. Sehlinger, B. Verbraeken, **M.A.R. Meier***, R. Hoogenboom* Versatile side chain modification via isocyanide-based multicomponent reactions: Tuning the LCST of poly(2-oxazoline)s, *Polym. Chem.* **2015**, 6, 3828-3836.
- (140) S. C. Solleder, K. S. Wetzel, **M.A.R. Meier*** Dual Side Chain Control in the Synthesis of Novel Sequence-Defined Oligomers through the Ugi Four-Component Reaction, *Polym. Chem.* **2015**, 6, 3201-3204.
- (139) M. Winkler, T. M. Lacerda, F. Mack, **M.A.R. Meier*** Renewable Polymers from Itaconic Acid by Polycondensation and Ring-Opening-Metathesis Polymerization, *Macromolecules* **2015**, 48, 1398-1403.

- (138) K. Fuchise, P. Lindemann, S. Heißler, H. Gliemann, V. Trouillet, A. Welle, J. Berson, S. Walheim, T. Schimmel,* M.A.R. Meier,* C. Barner-Kowollik* A Photolithographic Approach to Spatially Resolved Cross-Linked Nanolayers, *Langmuir* **2015**, *31*, 3242-3253.
- (137) A. Sehlinger, K. Ochsenreither, N. Bartnick, M.A.R. Meier* Potentially biocompatible polyacrylamides derived by the Ugi four-component reaction, *Eur. Polym. J.* **2015**, *65*, 313-324.
- (136) A. Hufendiek, C. Barner-Kowollik,* M.A.R. Meier* Renewable, fluorescent, and thermoresponsive: cellulose copolymers via light-induced ligation in solution, *Polym. Chem.* **2015**, *6*, 2188-2191.
- (135) C. de O. Romera, P.B. Cardoso, M.A.R. Meier, C. Sayer, P.H.H. Araújo* Acyclic triene metathesis (ADMET) miniemulsion polymerization of linseed oil produces polymer nanoparticles with comparable molecular weight to that of bulk reactions, *Eur. J. Lipid Sci. Tech.* **2015**, *117*, 235-241.
- (134) Y. Peng, F. Totsingan, M.A.R. Meier, M. Steinmann, F. Wurm, A. Koh, R.A. Gross* Sophorolipids: Expanding structural diversity by ring-opening cross-metathesis, *Eur. J. Lipid Sci. Tech.* **2015**, *117*, 217-228.
- (133) A. Sehlinger, M.A.R. Meier* Passerini & Ugi Multi-Component Reactions in Polymer Science, *Adv. Polym. Sci.* **2015**, *269*, 61-86.
- (132) O. Kreye, L.C. Over, T. Nitsche, R.Z. Lange, M.A.R. Meier* Organic carbonates: sustainable and environmentally-friendly ethylation, allylation, and benzylation reagents, *Tetrahedron* **2015**, *71*, 293-300.
- (131) B.Ö. Öztürk, S. Karabulut Sçehitoğlu, M.A.R. Meier* A latent and controllable Ruthenium-Indenylidene catalyst for Emulsion ROMP in water, *Eur. Polym. J.* **2015**, *62*, 116-123.
- (130) M. Winkler, C. Romain, M.A.R. Meier,* C.K. Williams* Renewable polycarbonates and polyesters from 1,4-cyclohexadiene, *Green Chem.* **2015**, *17*, 300-306.
- (129) A. Sehlinger, R. Schneider, M.A.R. Meier* Ugi Reactions with CO₂: Access to Functionalized Polyurethanes, Polycarbonates, Polyamides, and Polyhydantoins, *Macromol. Rapid Commun.* **2014**, *35*, 1866-1871.
- (128) O. Kreye, C. Trefzger, A. Sehlinger, M.A.R. Meier* Multicomponent Reactions with a Convertible Isocyanide: Efficient and Versatile Grafting of ADMET-Derived Polymers, *Macromol. Chem. Phys.* **2014**, *215*, 2207-2220.
- (127) M. Unverferth, M.A.R. Meier* Tuning the polarity of ADMET derived star-shaped polymers via thiol-ene chemistry, *Polymer* **2014**, *55*, 5571-5575.
- (126) A. Hufendiek, V. Trouillet, M.A.R. Meier,* C. Barner-Kowollik* Temperature Responsive Cellulose-graft-Copolymers via Cellulose Functionalization in an Ionic Liquid and RAFT Polymerization, *Biomacromolecules* **2014**, *15*, 2563-2572.
- (125) M. von Czapiewski, M.A.R. Meier* Regioselective catalytic acetoxylation of limonene, *Cat. Sci. Tech.* **2014**, *4*, 2318-2325.
- (124) A. Sehlinger, P.-K. Dannecker, O. Kreye, M.A.R. Meier* Diversely Substituted Polyamides: Macromolecular Design Using the Ugi Four-Component Reaction, *Macromolecules* **2014**, *47*, 2774-2783.
- (123) M. Winkler, M.A.R. Meier* Olefin Cross-Metathesis as a Valuable Tool for the Preparation of Renewable Polyesters and Polyamides from Unsaturated Fatty Acid Esters and Carbamates, *Green Chem.* **2014**, *16*, 3266-3271.

- (122) M. Winkler, Y. Raupp, L. Köhl, H. Wagner, **M.A.R. Meier*** Modified poly(ϵ -caprolactone)s: An efficient and renewable access via Thia-Michael addition and Baeyer-Villiger oxidation, *Macromolecules* **2014**, *47*, 2842-2846.
- (121) A. Schenzel, A. Hufendiek, C. Barner-Kowollik,* **M.A.R. Meier*** Catalytic Transesterification of Cellulose in Ionic Liquids: Sustainable Access to Cellulose Esters, *Green Chem.* **2014**, *16*, 3266-3271.
- (120) P. B. Cardoso, A. Musyanovych, K. Landfester, C. Sayer, P.H.H. de Araújo, **M.A.R. Meier*** ADMET reactions in miniemulsion, *J. Polym. Sci. A Polym. Chem.* **2014**, *52*, 1300-1305.
- (119) A. Sehlinger, T. Stalling, J. Martens, **M.A.R. Meier*** Oxa- and Thiazolidine-Containing Polymers Derived via the Asinger Four-Component Reaction: the Ring Matters, *Macromol. Chem. Phys.* **2014**, *215*, 412-420.
- (118) R. Gomes, S. Roming, A. Przybilla, **M.A.R. Meier**, C. Feldmann* Barium peroxide nanoparticles: synthesis, characterization and their use for actuating the luminol chemiluminescence, *J. Mater. Chem. C* **2014**, *2*, 1513-1518.
- (117) S. Solleder, **M.A.R. Meier*** Sequence Control in Polymer Chemistry via the Passerini Three Component Reaction, *Angew. Chem. Int. Ed.* **2014**, *53*, 711-714.
- (116) M. Winkler, **M.A.R. Meier*** Highly efficient Oxyfunctionalization of Unsaturated Fatty Acid Esters: An attractive Route for the Synthesis of Polyamides from Renewable Resources, *Green Chem.* **2014**, *16*, 1784-1788.
- (115) O. Kreye, D. Kugele, L. Faust, **M.A.R. Meier*** Divergent Dendrimer Synthesis via the Passerini three Component Reaction and Olefin Cross-Metathesis, *Macromol. Rapid Commun.* **2014**, *35*, 317-322.
- (114) N. Kolb, M. Winkler, C. Syldatk, **M.A.R. Meier*** Long-chain polyesters and polyamides from biochemically derived fatty acids, *Eur. Polym. J.* **2014**, *51*, 159-166.
- (113) L. Montero de Espinosa, A. Gevers, B. Woldt, M. Graß, **M.A.R. Meier*** Sulfur-containing fatty acid-based plasticizers via thiol-ene addition and oxidation: Synthesis and evaluation in PVC formulations, *Green Chem.* **2014**, *16*, 1883-1896.
- (112) M. Firdaus, **M.A.R. Meier,*** U. Biermann, J. O. Metzger Renewable co-polymers derived from castor oil and limonene, *Eur. J. Lipid. Sci. Tech.* **2014**, *116*, 31-36.
- (111) A. Sehlinger, R. Schneider, **M.A.R. Meier*** Passerini addition polymerization of an AB-type monomer – A convenient route to versatile polyesters, *Eur. Polym. J.* **2014**, *50*, 150-157.
- (110) M. Winkler, M. Steinbiß, **M.A.R. Meier*** A more sustainable Wohl–Ziegler bromination: Versatile derivatization of unsaturated FAMEs and synthesis of renewable polyamides, *Eur. J. Lipid Sci. Tech.* **2014**, *116*, 44-51.
- (109) A. Sehlinger, L. Montero de Espinosa, **M.A.R. Meier*** Synthesis of Diverse Unsymmetric α,ω -Dienes via the Passerini Three Component Reaction for Head-to-Tail ADMET Polymerization, *Macromol. Chem. Phys.* **2013**, *214*, 2821-2828.
- (108) M. Unverferth, O. Kreye, A. Prohammer, **M.A.R. Meier*** Renewable Non-Isocyanate Based Thermoplastic Polyurethanes via Polycondensation of Dimethyl Carbamate Monomers with Diols, *Macromol. Rapid Commun.* **2013**, *34*, 1569-1574.
- (107) A. Sehlinger, O. Kreye, **M.A.R. Meier*** Tunable polymers obtained from Passerini multicomponent reaction derived acrylate monomers, *Macromolecules* **2013**, *46*, 6031-6037.

- (106) L. Montero de Espinosa, M. Winkler, **M.A.R. Meier*** Acyclic Diene Metathesis Polymerization and Heck Polymer-Polymer Conjugation for the Synthesis of Star-shaped Block Copolymers, *Macromol. Rapid Commun.* **2013**, *34*, 1381-1386.
- (105) Y. Peng, J. Decatur, **M.A.R. Meier***, R. Gross* Ring-Opening Metathesis Polymerization of a Naturally Derived Macrocyclic Glycolipid, *Macromolecules* **2013**, *46*, 3293-3300.
- (104) O. Kreye, H. Mutlu, **M.A.R. Meier*** Sustainable routes to polyurethane precursors, *Green Chem.* **2013**, *15*, 1431-1455.
- (103) O. Kreye, S. Oelmann, **M.A.R. Meier*** Renewable Aromatic-Aliphatic Copolymers Derived from Rapeseed, *Macromol. Chem. Phys.* **2013**, *214*, 1452-1464.
- (102) N. Kolb, R. Hofsäß, **M.A.R. Meier*** α -Arylation of saturated fatty acids, *Eur. J. Lipid Sci. Tech.* **2013**, *115*, 729-734.
- (101) H. Mutlu, R. Hofsäß, R.E Montenegro, **M.A.R. Meier*** Self-metathesis of fatty acid methyl esters: Full conversion by choosing the appropriate plant oil, *RSC Adv.* **2013**, *3*, 4927-4934.
- (100) M. Firdaus, **M.A.R. Meier*** Renewable polyamides and polyurethanes derived from limonene, *Green Chem.* **2013**, *15*, 370-380.
- (99) O. Kreye, S. Wald, **M.A.R. Meier*** Introducing Catalytic Lossen rearrangements: Sustainable access to Carbamates and Amines, *Adv. Synth. Catal.* **2013**, *355*, 81-86.
- (98) M. Firdaus, **M.A.R. Meier*** Renewable Co-Polymers derived from Vanillin and Fatty Acid Derivatives, *Eur. Poly. J.* **2013**, *49*, 156-166.
- (97) M. von Czapiewski, O. Kreye, H. Mutlu, **M.A.R. Meier*** Cross-metathesis versus palladium-catalyzed C-H activation: Acetoxy ester functionalization of unsaturated fatty acid methyl esters, *Eur. J. Lipid Sci. Technol.* **2013**, *115*, 76-85.
- (96) N. Kolb, **M.A.R. Meier*** Grafting onto a renewable unsaturated polyester via thiol–ene chemistry and cross-metathesis, *Eur. Polym. J.* **2013**, *49*, 843-852.
- (95) O. Türünç, **M.A.R. Meier*** The thiol-ene (click) reaction for the synthesis of plant oil derived polymers, *Eur. J. Lipid Sci. Technol.* **2013**, *115*, 41-54.
- (94) L. Montero de Espinosa, K. Kempe, U.S. Schubert, R. Hoogenboom, **M.A.R. Meier*** Side-Chain Modification and Grafting Onto via Olefin Cross-Metathesis, *Macromol. Rapid Commun.* **2012**, *33*, 2023-2028.
- (93) C. Vilela, A.J.D. Silvestre, **M.A.R. Meier*** Plant Oil-Based Long-Chain C26 Monomers and Their Polymers, *Macromol. Chem. Phys.* **2012**, *213*, 2220-2227.
- (92) O. Türünç, M. Firdaus, G. Klein, **M.A.R. Meier*** Fatty acid derived renewable polyamides via thiol–ene additions, *Green Chem.* **2012**, *14*, 2577-2583.
- (91) N. Kolb, **M.A.R. Meier*** Monomers and their polymers derived from saturated fatty acid methyl esters and dimethyl carbonate, *Green Chem.* **2012**, *14*, 2429-2435.
- (90) M. Winkler, J.O. Mueller, K.K. Oehlenschlaeger, L. Montero de Espinosa, **M.A.R. Meier***, C. Barner-Kowollik* Highly Orthogonal Functionalization of ADMET Polymers via Photo-Induced Diels–Alder Reactions, *Macromolecules* **2012**, *45*, 5012-5019.

- (89) M. Winkler, L. Montero de Espinosa, C. Barner-Kowollik*, **M.A.R. Meier*** A New Approach for Modular Polymer-Polymer Conjugations via Heck Coupling, *Chem. Sci.* **2012**, *3*, 2607-2615.
- (88) H. Mutlu, J. Ruiz, S.C. Solleeder, **M.A.R. Meier*** TBD catalysis with dimethyl carbonate: a fruitful and sustainable alliance, *Green Chem.* **2012**, *14*, 1728-1735.
- (87) U. Biermann, W. Butte, R. Koch, P.A. Fokou, O. Türünç, **M.A.R. Meier**, J.O. Metzger* Initiation of radical chain reactions of thiols and alkenes without any added initiator: Thiol-catalyzed cis-trans isomerization of methyl oleate, *Chem. Eur. J.* **2012**, *18*, 8201-8207.
- (86) H. Mutlu, A. N. Parvulescu, P. C. A. Bruijnincx, B. M. Weckhuysen, **M.A.R. Meier*** On the Polymerization Behavior of Telomers: Metathesis versus Thiol-Ene Chemistry, *Macromolecules* **2012**, *45*, 1866-1878.
- (85) O. Kreye, O. Türünç, A. Sehlinger, J. Rackwitz, **M.A.R. Meier*** Structurally diverse polyamides obtained from Ugi multicomponent reaction derived monomers, *Chem. Eur. J.* **2012**, *18*, 5767-5776.
- (84) O. Türünç, **M.A.R. Meier*** A Novel Polymerization Approach via Thiol-yne Addition, *J. Polym. Sci. Part A: Polym. Chem.* **2012**, *50*, 1689-1695.
- (83) R.E. Montenegro, **M.A.R. Meier*** Lowering the boiling point curve of biodiesel by cross-metathesis, *Eur. J. Lipid Sci. Technol.* **2012**, *114*, 55-62.
- (82) C.O. Akintayo, H. Mutlu, M. Kempf, M. Wilhelm, **M.A.R. Meier*** Acyclic Triene Metathesis Polymerization of Plukenetia Conophora Oil: Branched Polymers by Direct Polymerization of Renewable Resources, *Macromol. Chem. Phys.* **2012**, *44*, 7253-7262.
- (81) M. Firdaus, L. Montero de Espinosa, **M.A.R. Meier*** Terpene-Based Renewable Monomers and Polymers via Thiol–Ene Additions, *Macromolecules* **2011**, *44*, 7253-7262.
- (80) O. Türünç, L. Montero de Espinosa, **M.A.R. Meier*** Renewable Polyethylene Mimics Derived from Castor Oil, *Macromol. Rapid Commun.* **2011**, *32*, 1357-1361.
- (79) O. Kreye, T. Tóth, **M.A.R. Meier*** Copolymers derived from rapeseed derivatives via ADMET and thiol-ene addition, *Eur. Polym. J.* **2011**, *47*, 1804-1816.
- (78) C. Öztürk, H. Mutlu, **M.A.R. Meier**, S. H. Küsefoglu* 4-Vinylbenzenesulfonic acid adduct of epoxidized soybean oil: Synthesis, free radical and ADMET polymerizations, *Eur. Polym. J.* **2011**, *47*, 1467-1476.
- (77) E. del Río, G. Lligadas, J.-C. Ronda,* M. Galià, V. Cádiz, **M.A.R. Meier*** Shape Memory Polyurethanes from Renewable Polyols Obtained by ATMET Polymerization of Glyceryl Triundec-10-enoate and 10-Undecenol, *Macromol. Chem. Phys.* **2011**, *212*, 1392-1399.
- (76) O. Kreye, T. Tóth, **M.A.R. Meier*** Introducing Multicomponent Reactions to Polymer Science: Passerini Reactions of Renewable Monomers, *J. Am. Chem. Soc.* **2011**, *133*, 1790-1792.
- (75) O. Türünç, **M.A.R. Meier*** Thiol-Ene vs. ADMET: A complementary approach to fatty acid based biodegradable polymers, *Green Chem.* **2011**, *13*, 314-320.
- (74) L. Montero de Espinosa, **M.A.R. Meier*** Synthesis of star- and block-copolymers using ADMET: head-to-tail selectivity during step-growth polymerization, *Chem. Commun.* **2011**, *47*, 1908-1910.
- (73) U. Biermann, U. Bornscheuer, **M.A.R. Meier***, J.O. Metzger, H.J. Schäfer Oils and Fats as Renewable Raw Materials in Chemistry, *Angew. Chem. Int. Ed.* **2011**, *50*, 3854-3871.

- (72) L. Montero de Espinosa, M.A.R. Meier* Plant Oils: The Perfect Renewable Resource for Polymer Science ?!, *Eur. Polym. J.* **2011**, 47, 837-852.
- (71) E. Del Rio, G. Lligadas, J. C. Ronda, M. Galià*, M.A.R. Meier, V. Cádiz Polyurethanes from polyols obtained by ADMET polymerization of a castor oil-based diene: Characterization and shape memory properties, *J. Polym. Sci. Part A: Polym. Chem.* **2011**, 49, 518-525.
- (70) U. Biermann, M.A.R. Meier*, J.O. Metzger Cross-metathesis of unsaturated triglycerides with methyl acrylate: synthesis of a dimeric metathesis product, *Eur. J. Lipid Sci. Technol.* **2011**, 113, 39-45.
- (69) H. Mutlu, L. Montero de Espinosa, M.A.R. Meier* Acylic Diene Metathesis (ADMET): a versatile tool for the construction of (defined) polymer architectures, *Chem. Soc. Rev.* **2011**, 40, 1404-1445.
- (68) O. Kreye, T. Tóth, M.A.R. Meier* Poly- α,β -unsaturated aldehydes derived from castor oil via ADMET polymerization, *Eur. J. Lipid Sci. Technol.* **2011**, 113, 31-18.
- (67) H. Mutlu, L. Montero de Espinosa, O. Türünç, M.A.R. Meier* About the activity and selectivity of less well-known metathesis catalysts during ADMET polymerizations, *Beilstein J. Org. Chem.* **2010**, 6, 1149-1158.
- (66) H. Mutlu, M.A.R. Meier* Living Ring Opening Metathesis Polymerization of Fatty Acid Derived Monomers, *J. Polym. Sci. Part A: Polym. Chem.* **2010**, 48, 5899-5906.
- (65) O. Türünç, M.A.R. Meier* Fatty acid derived monomers and related polymers via thiol-ene (click) additions, *Macromol. Rapid Commun.* **2010**, 31, 1822-1826.
- (64) U. Biermann, J. O. Metzger, M.A.R. Meier* Acylic Triene Metathesis Oligo- and Polymerization of High Oleic Sun Flower Oil, *Macromol. Chem. Phys.* **2010**, 211, 854-862.
- (63) L. Montero de Espinosa, M.A.R. Meier*, J. C. Ronda*, M. Galià, V. Cádiz Phosphorus-Containing Renewable Polyester-Polyols via ADMET Polymerization. Synthesis, Functionalization and Radical Cross-Linking, *J. Polym. Sci. Part A: Polym. Chem.* **2010**, 48, 1649-1660.
- (62) H. Mutlu, M.A.R. Meier* Castor oil as a renewable resource for the chemical industry, *Eur. J. Lipid Sci. Technol.* **2010**, 112, 10-30.
- (61) P.A. Fokou, M.A.R. Meier* Studying and suppressing olefin isomerization side reactions during ADMET polymerizations, *Macromol. Rapid Commun.* **2010**, 31, 368-373.
- (60) M. Kniese, M.A.R. Meier* A simple approach to reduce the environmental impact of olefin metathesis reactions: a green and renewable solvent compared to solvent free reactions, *Green Chem.* **2010**, 12, 169-173.
- (59) D.C. Webster*, M.A.R. Meier* Polymer Libraries: Preparation and Applications, *Adv. Polym. Sci.* **2010**, 225, 1-15.
- (58) G. B. Djigoué, M.A.R. Meier* Improving the Selectivity for the Synthesis of two Renewable Platform Chemicals via Olefin Metathesis, *Appl. Catal., A* **2009**, 368, 158-162.
- (57) L. Montero de Espinosa, J.C. Ronda*, M. Galià, V. Cádiz, M.A.R. Meier* Fatty Acid Derived Phosphorus-containing Polyesters Via Acyclic Diene Metathesis (ADMET) Polymerization, *J. Polym. Sci. Part A: Polym. Chem.* **2009**, 47, 5760-5771.
- (56) M.A.R. Meier* Metathesis with oleochemicals: New approaches for the utilization of plant oils as renewable resources in polymer science, *Macromol. Chem. Phys.* **2009**, 210, 1073-1079.

- (55) T.T.T. Ho, M.A.R. Meier* A design-of-experiments approach for the optimization and understanding of the cross-metathesis reaction of methyl acrylate with methyl ricinoleate, *ChemSusChem* **2009**, 2, 749-754.
- (54) H. Mutlu, M.A.R. Meier* Unsaturated PA X,20 from Renewable Resources via Metathesis and Catalytic Amidation, *Macromol. Chem. Phys.* **2009**, 210, 1019-1025.
- (53) P.A. Fokou, M.A.R. Meier* Use of a Renewable and Degradable Monomer to Study the Temperature-Dependent Olefin Isomerization during ADMET Polymerizations, *J. Am. Chem. Soc.* **2009**, 131, 1664-1665.
- (52) O.G. Schramm, M.A.R. Meier, R. Hoogenboom, H.P. van Erp, J.-F. Gohy, U. S. Schubert* Polymeric Nanocontainers with High Loading Capacity of Hydrophobic Drugs, *Soft Matter* **2009**, 5, 1662-1667.
- (51) O.G. Schramm, G.M. Pavlov, M.A.R. Meier, R. Hoogenboom, U.S. Schubert* A versatile approach to unimolecular water-soluble carriers: ATRP of PEGMA with hydrophobic star shaped polymeric core molecules as an alternative for PEGylation, *Macromolecules* **2009**, 42, 1808-1816.
- (50) T. Jacobs, A. Rybak, M.A.R. Meier* Cross-metathesis reactions of allyl chloride with fatty acid methyl esters: Efficient synthesis of α,ω -difunctional chemical intermediates from renewable raw materials, *Appl. Catal., A* **2009**, 353, 32-35.
- (49) P.A. Fokou, M.A.R. Meier* Acyclic Triene Metathesis (ATMET) polymerization with chain-stoppers: Molecular weight control in the synthesis of branched polymers, *Macromol. Rapid Commun.* **2008**, 29, 1620-1625.
- (48) A. Rybak, M.A.R. Meier* Cross-Metathesis of Oleyl Alcohol with Methyl Acrylate: Optimization of reaction conditions and comparison of their environmental impact, *Green Chem.* **2008**, 10, 1099-1104.
- (47) A. Rybak, M.A.R. Meier* ADMET with a monomer from renewable resources: molecular weight control and one step block copolymer preparation, *ChemSusChem* **2008**, 1, 542-547.
- (46) M. Chiper, M.A.R. Meier, D. Wouters, S. Hoeppener, C.-A. Fustin, J.-F. Gohy, U.S. Schubert* Supramolecular Self-Assembled Ni(II), Fe(II), and Co(II) ABA Triblock Copolymers, *Macromolecules* **2008**, 41, 2771-2777.
- (45) G. Çaylı, M.A.R. Meier* ATRP with monomers from renewable resources: Controlled bulk polymerization of methacrylate monomers derived from fatty alcohols, *Eur. J. Lipid Sci. Technol.* **2008**, 110, 853-859.
- (44) A. Rybak, P.A. Fokou, M.A.R. Meier* Metathesis as a versatile tool in oleochemistry, *Eur. J. Lipid Sci. Technol.* **2008**, 110, 797-804.
- (43) D. Kul, L.M. Van Renterghem, M.A.R. Meier, S. Strandman, H. Tenhu, S.S. Yilmaz, U.S. Schubert, F.E. Du Prez* Encapsulation and release by star-shaped block copolymers as unimolecular nanocontainers, *J. Polym. Sci. Part A: Polym. Chem.* **2008**, 46, 650-660.
- (42) A. Rybak, M.A.R. Meier* Cross-metathesis of fatty acid derivatives with methyl acrylate: renewable raw materials for the chemical industry, *Green Chem.* **2007**, 9, 1356-1361.
- (41) M.A.R. Meier*, J.O. Metzger, U.S. Schubert* Plant oil renewable resources as green alternatives in polymer science, *Chem. Soc. Rev.* **2007**, 36, 1788-1802.
- (40) M. Rasa, M.A.R. Meier, U.S. Schubert* Transport of Guest Molecules by Unimolecular Micelles Evidenced in Analytical Ultracentrifugation Experiments, *Macromol. Rapid Commun.* **2007**, 28, 1429-1433.
- (39) H.M.L. Thijs, M.A.R. Meier, U.S. Schubert* Application possibilities of preparative size exclusion chromatography to analytical problems in polymer science, *e-Polymers* **2007**, 46, 1-7.

- (38) M. Chiper, [M.A.R. Meier](#), J.M. Kranenburg, U.S. Schubert* New Insights into Nickel(II), Iron(II), and Cobalt(II) Bis-Complex-Based Metallo-Supramolecular Polymers, *Macromol. Chem. Phys.* **2007**, *208*, 679-689.
- (37) [M.A.R. Meier](#), N. Adams, U.S. Schubert* Statistical Approach To Understand MALDI-TOFMS Matrixes: Discovery and Evaluation of New MALDI Matrixes, *Anal. Chem.* **2007**, *79*, 863-869.
- (36) T.J. Joncheray, K.M. Denoncourt, [M.A.R. Meier](#), U.S. Schubert, R.S. Duran* Two-Dimensional Self-Assembly of Linear Poly(ethylene oxide)-b-Poly(ϵ -caprolactone) Copolymers at the Air-Water Interface, *Langmuir* **2007**, *23*, 2423-2429.
- (35) T.J. Joncheray, K.M. Denoncourt, C. Mathieu, [M.A.R. Meier](#), U.S. Schubert, R.S. Duran* Langmuir and Langmuir-Blodgett films of poly(ethylene oxide)-b-poly(ϵ -caprolactone) star-shaped block copolymers, *Langmuir* **2006**, *22*, 9264-9271.
- (34) [M.A.R. Meier](#), M. Filali, J.-F. Gohy, U.S. Schubert* Star-shaped block copolymer stabilized palladium nanoparticles for efficient catalytic Heck cross-coupling reactions, *J. Mater. Chem.* **2006**, *16*, 3001-3006.
- (33) C.-A. Fustin, C. Colard, M. Filali, P. Guillet, A.-S. Duwez, [M.A.R. Meier](#), U.S. Schubert, J.-F. Gohy* Tuning the Hydrophilicity of Gold Nanoparticles Templatized in Star-Block Copolymers, *Langmuir* **2006**, *22*, 6690-6695.
- (32) [M.A.R. Meier](#), U.S. Schubert* Selected Examples of Successful Approaches in Combinatorial Materials Research, *Soft Matter* **2006**, *2*, 371-376.
- (31) [M.A.R. Meier](#), H. Hofmeier, C.H. Abeln, C. Ziatzios, M. Rasa, D. Schubert, U.S. Schubert* First GPC results of terpyridine based chain extended supramolecular polymers: comparison with viscosity and analytical ultracentrifugation, *e-Polymers* **2006**, no. 016, 1-7.
- (30) [M.A.R. Meier](#), D. Wouters, C. Ott, P. Guillet, C.-A. Fustin, J.-F. Gohy, U.S. Schubert* Supramolecular ABA Triblock Copolymers via a Polycondensation Approach: Synthesis, Characterization and Micelle Formation, *Macromolecules* **2006**, *39*, 1569-1576.
- (29) [M.A.R. Meier](#), U.S. Schubert* Synthesis and Characterization of 4 and 6 arm star-shaped poly(ϵ -caprolactone)s, *e-Polymers* **2005**, no. 085.
- (28) C. Guerrero-Sanchez, B.G.G. Lohmeijer, [M.A.R. Meier](#), U.S. Schubert* Synthesis of terpyridine-terminated polymers by anionic polymerization, *Macromolecules* **2005**, *38*, 10388-10396.
- (27) [M.A.R. Meier](#), S.N.H. Aerts, B.B.P. Staal, M. Rasa, U.S. Schubert* PEO-b-PCL block copolymers: Synthesis, detailed characterization and selected micellar drug encapsulation behavior, *Macromol. Rapid Commun.* **2005**, *26*, 1918-1924.
- (26) [M.A.R. Meier](#), U.S. Schubert* Fluorescent sensing of transition metal ions based on the encapsulation of dithranol in a polymeric core shell architecture, *Chem. Commun.* **2005**, *36*, 4610-4612.
- (25) M. Filali, [M.A.R. Meier](#), U.S. Schubert, J.-F. Gohy* Star-Block Copolymers as Templates for the Preparation of Stable Gold Nanoparticles, *Langmuir* **2005**, *21*, 7995-8000.
- (24) F. Wiesbrock, R. Hoogenboom, M.A.M. Leenen, [M.A.R. Meier](#), U.S. Schubert* Investigation of the living cationic ring-opening polymerization of 2-methyl-, 2-ethyl-, 2-nonyl- and 2-phenyl-2-oxazoline in a single-mode microwave reactor, *Macromolecules* **2005**, *38*, 5025-5034.
- (23) [M.A.R. Meier](#), U.S. Schubert* Combinatorial evaluation of the Host-Guest Chemistry of Star-Shaped Block Copolymers, *J. Comb. Chem.* **2005**, *7*, 356-359.

- (22) R. Hoogenboom, M.A.R. Meier, U.S. Schubert* The introduction of high-throughput experimentation methods for Suzuki-Miyaura coupling reactions in university education, *J. Chem. Edu.* **2005**, 82, 1693-1696.
- (21) E. Holder, V. Marin, D. Kozodaev, M.A.R. Meier, B.G.G. Lohmeijer, U.S. Schubert* Iridium(III) complexes with PEO and PS polymer macroligands and light-emitting properties: Synthesis and characterization, *Macromol. Chem. Phys.* **2005**, 206, 989-997.
- (20) M.A.R. Meier, U.S. Schubert* Integration of MALDI-TOFMS as high-throughput screening tool into the workflow of combinatorial polymer research, *Rev. Sci. Instrum.* **2005**, 76, 062211/1-062211/5.
- (19) H. Zhang, R. Hoogenboom, M.A.R. Meier, U.S. Schubert* Combinatorial and high-throughput approaches in polymer science, *Meas. Sci. Technol.* **2005**, 16, 203-211.
- (18) R. Hoogenboom, F. Wiesbrock, M.A.M. Leenen, M.A.R. Meier, U.S. Schubert* Accelerating the Living Polymerization of 2-Nonyl-2-oxazoline by Implementing a Microwave Synthesizer into a High-Throughput Experimentation Workflow, *J. Comb. Chem.* **2005**, 7, 10-13.
- (17) M.A.R. Meier, J.-F. Gohy, C.-A. Fustin, U.S. Schubert* Combinatorial Synthesis of Star Shaped Block Copolymers: Host-Guest Chemistry of Unimolecular Reversed Micelles, *J. Am. Chem. Soc.* **2004**, 126, 11517-11521.
- (16) M.A.R. Meier, U.S. Schubert* Combinatorial Polymer Research and High-Throughput Experimentation: Powerful tools for the discovery and evaluation of new materials, *J. Mater. Chem.* **2004**, 14, 3289-3299.
- (15) M.W.M. Fijten, M.A.R. Meier, R. Hoogenboom, U.S. Schubert* Automated Parallel Investigations / Optimizations of the Reversible Addition-Fragmentation Chain Transfer Polymerization of Methyl Methacrylate, *J. Polym. Sci. Part A: Polym. Chem.* **2004**, 42, 5775-5783.
- (14) E. Holder, V. Marin, M.A.R. Meier, U.S. Schubert* A novel light-emitting mixed-ligand Iridium(III) complex with a terpyridine-PEG macroligand, *Macromol. Rapid Commun.* **2004**, 25, 1491-1496.
- (13) R. Hoogenboom, M.A.R. Meier, U.S. Schubert* Combinatorial methods and high-throughput experimentation in synthetic polymer chemistry, *Mat. Res. Soc. Symp. Proc.* **2004**, 804, 83-94.
- (12) V. Marin, E. Holder, M.A.R. Meier, R. Hoogenboom, U.S. Schubert* A Mixed Ruthenium Polypyridyl Complex Containing a PEG- Bipyridine Macroligand, *Macromol. Rapid Commun.* **2004**, 25, 793-798.
- (11) M.A.R. Meier, R. Hoogenboom, U.S. Schubert* Combinatorial methods, automated synthesis and high-throughput screening in polymer research: The evolution continues, *Macromol. Rapid Commun.* **2004**, 25, 21-33.
- (10) M.A.R. Meier, B.-J. de Gans, A.M.J. van den Berg, U.S. Schubert* Automated Multiple-layer spotting for MALDI-TOFMS of synthetic polymers utilizing ink-jet printing technology, *Rapid Commun. Mass Spectrom.* **2003**, 17, 2349-2353.
- (9) E. Holder, M.A.R. Meier, V. Marin, U.S. Schubert* New soluble functional polymers by free-radical copolymerization of methacrylates and bipyridine ruthenium complexes, *J. Polym. Sci. Part A: Polym. Chem.* **2003**, 41, 3954-3964.
- (8) M.A.R. Meier, B.G.G. Lohmeijer, U.S. Schubert* Characterization of defined metal containing supramolecular block copolymers, *Macromol. Rapid Commun.* **2003**, 24, 852-857.
- (7) M.A.R. Meier, U.S. Schubert* Terpyridine Modified PVC: Possibilities for Supramolecular Grafting and Cross-Linking, *J. Polym. Sci. Part A: Polym. Chem.* **2003**, 41, 2964-2973.

- (6) M.A.R. Meier, B.G.G. Lohmeijer, U.S. Schubert* Relative Binding Strength of Terpyridine Model Complexes under Matrix-assisted Laser Desorption/Ionisation Mass Spectrometry conditions, *J. Mass. Spectrom.* **2003**, *38*, 510-516.
- (5) M.A.R. Meier, R. Hoogenboom, M.W.M. Fijten, M. Schneider, U.S. Schubert* Automated MALDI-TOF-MS sample preparation in combinatorial polymer research, *J. Comb. Chem.* **2003**, *5*, 369-374.
- (4) M.A.R. Meier, U.S. Schubert* Evaluation of a new multiple-layer spotting technique for matrix-assisted laser desorption/ionization time-of-flight mass spectrometry of synthetic polymers, *Rapid Commun. Mass Spectrom.* **2003**, *17*, 713-716.
- (3) S. Schmatloch, M.A.R. Meier, U.S. Schubert* Instrumentation for Combinatorial and High-Throughput Polymer Research: A Short Overview, *Macromol. Rapid Commun.* **2003**, *24*, 33-46.
- (2) R. Hoogenboom, M.W.M. Fijten, M.A.R. Meier, U.S. Schubert* Living Cationic Polymerizations utilizing an Automated Synthesizer, *Macromol. Rapid Commun.* **2003**, *24*, 92-97.
- (1) R. Hoogenboom, M.A.R. Meier, U.S. Schubert* Combinatorial methods, automated synthesis and high-throughput screening in polymer research: Past and Present, *Macromol. Rapid Commun.* **2003**, *24*, 15-32.

Patents

M. Unverferth, M.A.R. Meier, VERFAHREN ZUR HERSTELLUNG EINES POLYOLS, DE: 10 2015 016 428 A1

O. Kreye, M.A.R. Meier, HERSTELLUNG VON CARBAMATEN ÜBER EINE BASENKATALYSIERTE LOSSEN-UMLAGERUNG, DE: 10 2012 100 127.8

M. Graß, B. Woldt, A. Gevers, B. Stefan, L. Montero de Espinosa, M.A.R. Meier, ESTER MIT SULFONGRUPPE, DE: 10 2012 223 673.2

M.A.R. Meier, A. Rybak, D. Geisker, HYDROXY- AND ALDEHYDE FUNCTIONAL COMPOUNDS (Preparation of functionalized fatty acids), WO/2010/083934

M.A.R. Meier, A. Rybak, D. Geisker, P. Hannen, M. Roos, METHOD FOR PRODUCING ALDEHYDE FUNCTIONAL COMPOUNDS, WO/2010/084053

M.A.R. Meier, J.-F. Gohy, U.S. Schubert, UNIMOLECULAR MICELLES CONTAINING METAL NANOPARTICLES AND THEIR USE AS CATALYST FOR SYNTHESIS OF CARBON-CARBON-BONDS, WO/2007/048423

Presentations

> 100 invited/keynote/plenary presentations at international conferences/workshops/institutes; list available upon request