Prof. Dr. Michael A. R. Meier

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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*

Additional (selected) scientific activities

- Head of the Institute of Organic Chemistry (10/2016 -)
- Speaker of the Collaborative Research Center on Molecular Structuring of Soft Matter (Sonderforschungsbereich 1176; 08/2015 -)
- Elected president of the GDCh (German Chemical Society) working group Nachhaltige Chemie (sustainable chemistry); before (2010-2014) elected vice-president.
- Member of the editorial boards of (alphabetic order): ChemSusChem, European Journal of Lipid Science and Technology, European Polymer Journal, Green Chemistry, Journal of Applied Polymer Science, Journal of Renewable Materials, Macromolecular Chemistry and Physics, Macromolecular Rapid Communications
- Previously Editor for the *European Polymer Journal* (2014-16; resigned as of 01.01.2017 to focus on other duties; before: advisory board 2011-2013)
- Previously Associate Editor of the *European Journal of Lipid Science and Technology* (2011-2015; resigned as of 01.01.2016 to focus on other duties; before: advisory board 2010-2011)
- continuously refereeing for internationally renowned journals (*Angewandte Chemie*, *Chem. Commun.*, *Chem. Eur. J.*, *Green Chem.*, *Macromolecules*, *ChemSusChem*, …)
- project refereeing (e.g. Deutsche Forschungsgemeinschaft, Deutsche Bundesstiftung Umwelt, UK research council, The Netherlands Organisation for Scientific Research (NWO), …)
- Organization of the scientific workshop "Fats and Oils as Renewable Feedstock for the Chemical Industry" together with Prof. Dr. J.O. Metzger (09/2007; 03/2009; 03/2010; 03/2011, 03/2012, 03/2013, 03/2014, 03/2015) as well as several other conferences/meetings.

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 ISI Web of Knowledge^{SM} [search: Author=(Meier MAR), all databases]:
h-index: 42; *times cited: 5864 (data obtained on 27th of January 2017)*

(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**, *accepted.*

(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**, *DOI: 10.1002/macp.201600411.*

(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 (ATMET) 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 Sçehitoĝlua, 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 CO_2: 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(e-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 Copolyesters 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, *Macomol. Rapid Commun.* **2012**, *33*, 2023-2028.

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(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.

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(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.

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