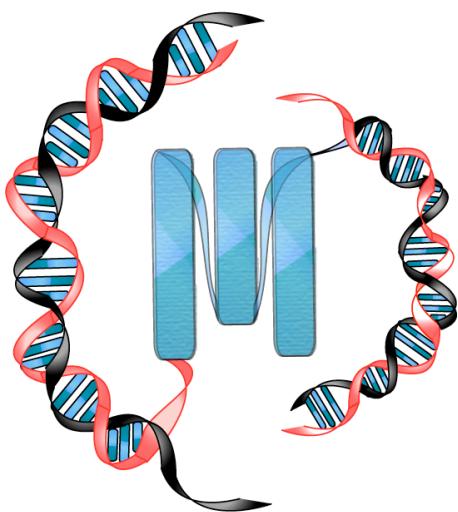


**INSTITUT FÜR MAKROMOLEKULARE CHEMIE
UNIVERSITÄT FREIBURG**

Hermann – Staudinger – Haus



**Bericht über
die wissenschaftlichen Aktivitäten**

2014

Stefan-Meier-Str. 31, 79104 Freiburg, Deutschland

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SCHADT, Kristina Katharina	Neue Matrixmaterialien für die chemische Befestigungstechnik auf Basis von Polyethylenimin/Acrylat-Netzwerken und Polymerzement
SCHREIBER, Andreas	Self-Assembled Protein-Based Nanoarchitectures: A Chemical & Synthetic Biology Approach Towards Functional Biomaterials for <i>in vitro</i> and <i>in vivo</i> Application
TESKE, Nele	Clickable Degradable Aliphatic Polyesters and their Application as Nanoparticles for Imaging and Targeted Cellular Uptake
VOIGT, Julia	The Role of Polyelectrolytes in Nanoprecipitation and their Effect on Nanoparticle Uptake into Cells
WARTIG, Alessa	Funktionalisiertes Graphen als Additiv für den Flammenschutz von Polypropylen
YAO, Chunyan	Enzym-Kofaktor Engineering & Entwicklung von Biosensorelementen mit Hilfe unnatürlicher Aminosäuren
ZHANG, Bin	Investigation of Structure Formation and Reorganization of Polymer Crystals: New approaches to the unsolved problems in polymer crystallization

MASTERARBEITEN

BOUTEGHMES, Nel Salem	Synthesis and Characterization of a Multimodal Nanoprobe for Biomedical Imaging
BURKARD, Jochen	Mechanochemische Funktionalisierung von Graphen und Kohlenstoff/Polymer-Hybride
GISIN, Joshua	Einfluss des Vernetzertyps auf Emulsions- und Dispersionspolymerisation von Styrol
HÖNES, Roland	Entwicklung und Untersuchung von kolloidalen Host-Tracer-Systemen
KEMAJOU, Charles B. Tschouboun	Thermorheologische Eigenschaften teilmethylierter, hyperverzweigter Polyglycerine und hyperverzweigter Polyethylenglykole
KRAHL, Fabian	Synthesis and preparation of scintillating glasses for neutron detection
LU, Yuan	Growth and characterization of MBE CdTe layers
NÜBLING, Fritz	Synthese von Bis(2-furyl)naphthalinbisimid/Tetrafluorbenzol Copolymeren mittels direkter C-H-Arylierung
SCHWÄRZLE, David	Auf dem Weg zu selbstreinigenden Oberflächen: Photochemische Herstellung von enzymhaltigen Hydrogelbeschichtungen
WANG, Jingwei	Photoluminescence Characterization of Semiconductors
WERNER, Marcel	Untersuchung von Struktur und Phasenverhalten PEG-stabilisierter Fluoroacrylat-Dispersionen
WU, Yue	Performing Computer Tomography Scans Using a Medipix Semiconductor Module
XIA, Maoyan	Crystal Growth and Characterization of $\text{SrI}_2:\text{Eu}^{2+}$ Scintillators
ZHANG, Wenli	Thermisch reduziertes Graphitoxid und Mehrlagengraphen für Graphen/PMMA-Nanokomposite

BACHELORARBEITEN

DOLCH, Dominik	Untersuchung der mechanischen und flammschützenden Eigenschaften von PP / MG-PO _x Nanocomposites
GATTI, Felix Joachim	Lineare isocyanatfrei hergestellte Polyurethane auf Basis von Butadiencarbonat
HECKEL, Jonas	Synthese und Charakterisierung eines photovernetzbaren Mikrogels
KUNZ, Susanna	Synthese von Polythiophen mit sterisch anspruchsvollen Seitenketten mittels direkter C-H Arylierung
MARTIN, Johannes	Synthese von alternierenden Copolymeren mit Thiophen-Benzothiadiazol-Thiophen/Carbazol mittels direkter C-H-Arylierung
MAX, Johannes	Synthese von flexiblen isocyanatfreien Polyurethanen auf der Basis von Cardanol
MICHAELIS, Claudia	Synthese von Kern-Schale-Partikel für Host-Tracer-Systeme
PENG, Z.	Anhydrid-gehärtete Epoxidharz-Komposite auf der Basis von Aluminiumoxid und Aluminiumhydroxid Nanopartikeln
RAUBER, Martin	Effect of Size, Shape and Crystallinity of Tripod Shaped SPIO Nanoparticles on Relaxivity
SEHL, Elmar	Neue Al- und Mg-basierte Trägermaterialien für bimodale Polyethylen-Reaktorblends
STEGERER, Dominik	RAFT Copolymerisation von DMAEMA und Spiropyran-funktionellen Methacrylaten
TRITZ, Florian	Synthese von Carbonsäure funktionalisierten cyclischen Carbonaten für NIPU-Ionomere

VORTRÄGE UND POSTER

1. ARYA, N.
NEFFE, AT.
GEBAUER, T.
LENDLEIN, A.
SHASTRI, V. P.

Chondrocyte re-differentiation on ethyl lysine diisocyanate cross-linked gelatin scaffolds:
Application in cartilage tissue engineering
Tissue Engineering and Regenerative Medicine International Society EU Chapter, Genova, Italy, June 2014 , Poster

2. ARYA, N.
NEFFE, AT.
GEBAUER, T.
LENDLEIN, A.
SHASTRI, V. P.

Evaluation of ethyl lysine diisocyanate cross-linked gelatin-based support structures for cartilage tissue engineering
Makromolekulares Kolloquium Freiburg, Freiburg, Germany, February 2014, Poster

3. ARYA, N.
FORGET, A.
SHASTRI V. P.

RGD-linked carboxylated agarose injectable hydrogels for cartilage tissue engineering
Tissue Engineering and Regenerative Medicine International Society EU Chapter, Genova, Italy, June, 2014, Poster

4. BLATTMANN, H.
SCHIMPF, V.
WEYAND, S.
KAMPOWSKI, T.
SPECK, T.
REITER, G.
KRAFT, T.
MÜLHAUPT, R.

Grüne Polyurethane für bioinspirierte Hybridmaterialien (GrünPUR)
23. Internes FMF-Kolloquium, Schluchsee, Oktober 2014

5. BURGER, S.
BARTSCH, E.

Influence of polymer size and cross link density of microgels on polymer-colloid phase diagrams
Tag der Forschung an der Fakultät für Chemie und Pharmazie 2014, Albert-Ludwigs-Universität, Juli 2014, Poster

6. BURGER, D.
BARTSCH, E.

Structural Clarification Of Core-Shell Particles by Static Light Scattering
Tag der Forschung an der Fakultät für Chemie und Pharmazie 2014, Albert-Ludwigs-Universität, Juli 2014, Poster

7. CHRISTENSEN, J.
VONWIL, D.
BONGIOVANNI, A.
SHASTRI, V. P.

Non-Invasive Molecular Imaging of Cancer Growth and Metastasis in Rats Using Cells Expressing Far-Red Fluorescence Protein
World Molecular Imaging Congress 2014, Seoul, Korea, September 2014, Poster

8. FORGET, A.
GIANNI'BARBERA, R.
FOGLI, B.
BANFI, A.
SHASTRI, V. P.

Instructive Biomaterials for Therapeutic
Angiogenesis
*Macromolecular Colloquium, Freiburg, Germany,
February 2014, Poster*
9. GÖLDEN, S.
KIESSLING, A.
BARTSCH, E.

Forced Rayleigh Scattering made simple: A
Photoreactive Dye to Probe all Diffusion Domains
28th ECIS, Limassol, September 2014, Poster
10. GÖLDEN, S.
KIESSLING, A.
BARTSCH, E.

One Dye to Probe them All: Differentiating Diffusion
Domains in Polymer Films with Fulgides
*14th JCF-Frühjahrssymposium, Jena, March 2014,
Poster*
11. GÖLDEN, S.
KIESSLING, A.
BARTSCH, E.

One Dye to Probe them All: Differentiating Diffusion
Domains in Polymer Films with Fulgides
*Tag der Forschung an der Fakultät für Chemie
und Pharmazie 2014, Albert-Ludwigs-Universität,
Juli 2014, Poster*
12. LAMICHHANE, S.
ARYA, N.
OJHA, N.
KOHLER, E.
SHASTRI, V. P.

*Synthesis, Characterization and Cytocompatibility of
Polysaccharide Functionalized Nanoparticles*
*E-MRS 2014 Spring Meeting, Lille, France, May,
2014, Oral Presentation*
13. LINDNER, P.
BURGER, S.
BARTSCH, E.

Investigation of deswelling of highly crosslinked
polystyrene microgel colloids in colloid-polymer
mixtures close to the glass transition lines
*Deutsche Tagung für Forschung mit
Synchrotronstrahlung, Neutronen und
Ionenstrahlen an Großgeräten, September 2014,
Bonn, Poster*

Jülich Soft Matter Days 2014, Bad Honnef, Poster
14. MÜLHAUPT, R.

Bio-inspired functional polymers
*ScienceTalks@Clariant, Clariant Innovation
Center*
Frankfurt Höchst, März 2014
15. MÜLHAUPT, R.

Makromolekulare Chemie: Von Hermann
Staudinger bis hin zu vielseitigen polymeren Stoffen
und multifunktionalen Systemen
Freiburger Schülertage, März 2014

16. MÜLHAUPT, R.
Energie- und Ressourceneffizienz mit Kunststoff
*Festvortrag zur Einweihung des High
Performance
Fiber Center ITCF Denkendorf, Mai 2014*
17. MÜLHAUPT, R.
Mesoscopic shape replication polymerization
catalysis
*PolyColl 2014, Swiss Chemical Society EMPA
CH-Dübendorf, Juni 2014*
18. MÜLHAUPT, R.
Scale-up of graphite oxide synthesis for binder-free
graphene dispersions, nanocomposites and 3D
printing of catalysts and supercaps
*Graphene Flagship, Chalmers Univ.of Technol.
Gothenburg Sweden, Juni 2014*
19. MÜLHAUPT, R.
Grüne Polymerchemie
*Tag der Forschung Albert-Ludwigs-Universität
Freiburg, Juli 2014*
20. MÜLHAUPT, R.
Isocyanate- and phosgene-free routes to green
polyurethanes exploiting carbon dioxide fixation
*8th ECNP Intern. Conf. on Nanostructured
Polymers and Nanocomposites Dresden,
September 2014*
21. MÜLHAUPT, R.
Functionalized graphene, graphene dispersions and
molecular carbon composites
*8th ECNP Intern. Conf. on Nanostructured
Polymers and Nanocomposites Dresden,
September 2014*
22. MÜLHAUPT, R.
Ressourceneffizienz und “All-Polyethylene”-Nano-
Composite für den Leichtbau durch Tandem-
Katalyse, kompartimentierte Multizentren-
Katalysatoren und mesoskopische Formreplikation
(multiKAT)
*BMBF-Forum MatRessource Darmstadt,
September 2014*
23. MÜLHAUPT, R.
3D Printing of biomaterials and batteries
*Sympos. Shaping the Future with Polymers for 3D
Printing DSM NL-Arnheim, Oktober 2014*
24. MÜLHAUPT, R.
Makromolekulare Chemie
Vortrag für Chemielehrer, November 2014
25. MÜLHAUPT, R.
Energie- und Ressourceneffizienz mit Kunststoff
*Innovationstag Kunststoff 2014, SKZ Das Kun-
Stoff-Zentrum Horb a.N., November 2014*

26. NICOLI', E.
SHASTRI V.P.

Albumin-Polyethylenimine-siRNA Nanocomplexes
for Improving siRNA Delivery Efficiency
*E-MRS 2014 Spring Meeting, Lille, France, May,
2014 Poster*
27. RATZSCH, K.-F.
FRIEDRICH, C.
WILHELM M.

Low-field NMR as a new in-situ combined method
for shear rheology
*9th Annual European Rheology Conference
(AERC 2014), April 2014, Karlsruhe, Poster*
28. RATZSCH, K.-F.
FRIEDRICH, C.
WILHELM M.

Rheo-NMR und FT-Rheologie
*TA-Anwendertreffen 2014, Würzburg, 20.-21.
März 2014, Vortrag*
29. RITTER, B. S.
STEMPFLE, F.
HEINY, M.
SHASTRI, V. P.
MÜLHAUPT, R.
MECKING, S.

Bio-based Long-Chain Polyesters with Polyethylene
Segments Derived from Plant Oil
*Macromolecular Colloquium, Freiburg, Germany,
February 2014*
30. SAREM, M.
VONWIL, D.
SHASTRI, V. P.

Quantification of Protein Adsorption Dynamics on
Three Dimensional Biomaterial Interfaces
*Macromolecular Colloquium, Freiburg, Germany,
February 2014, Poster*
31. SAREM, M.
ARYA, N.
WIESE, S.
MARTIN, I.
SHASTRI, V. P.

Synthetic Platform for Elucidating and
Recapitulating Endochondral Ossification
*EU Termis, Genova, Italy, June 2014, Oral
Presentation*
32. SAREM, M.
BARBERO, A.
ARYA, N.
KOHLER, E.
MARTIN, I.
SHASTRI, V. P.

Effect of Bone-Like Micro Environment on
Chondrocyte Phenotype: In Vitro and In Vivo
*Eurosia13, Bangalore, India, December 2014
Invited Oral Presentation*
33. SCHÄERTL, N.
BARTSCH, E.

Crystallization of binary colloidal mixtures with
depletion attraction
*Tag der Forschung an der Fakultät für Chemie
und Pharmazie 2014, Albert-Ludwigs-Universität,
Juli 2014, Poster*

34. SCHIEFER, D.
WEN, T.
WANG, Y.
GOURSOT, P.
KOMBER, H.
HANSELMANN, R.
BRAUNSTEIN, P.
REITER, G.
SOMMER, M.
- A hybrid P,N-Ligand for the Kumada catalyst transfer polycondensation of sterically hindered thiophenes
Tag der Forschung an der Fakultät für Chemie und Pharmazie 2014, Albert-Ludwigs-Universität, Juli 2014, Poster
35. SCHILLER, S. M.
- Protein-Tecton & Biomaterials in regenerative Medicine: Materials, Interfaces, Scaffolds, Devices and 3D Tissues
DGM-Meeting "Biomaterials" Uni Bayreuth, Bayreuth, Germany, February 2014
36. SCHILLER, S. M.
HUBER M.C.
SCHREIBER, A.
- Bioinspired Nanobiomaterials: Hierarchical Nano-object Architectures
Euro-Bio inspired Materials Conference, Potsdam, Germany, March 2014
37. SCHILLER, S. M.
- Modularer Produktionsorganismus und dessen funktionelle Expansion mit artifiziellen de novo Organellen und Enzymredesign – neue Chemie in “alten Zellen”
BMBF Forschungspreis „Nächste Generation biotechnologischer Verfahren“ 2014 Berlin, Juni 2014
38. SCHILLER, S. M.
- Vorstellung des Forschungspreisträgers “Biotech2020+”: De novo Organellen & Enzymredesign – Modulare Komponenten für die funktionelle Expansion von Zellen
17. Heiligenstädter Kolloquium – Technische Systeme für die Lebenswissenschaften, Heilbad Heiligenstadt, Germany, September 2014
39. SCHILLER, S. M.
HUBER, M. C.
SCHREIBER, A.
- Bionic Nanobiomaterials: Precision Protein engineering to Fine-Tube Cell Interaction for Regenerative Medicine
MSE-(Material -Science-Engineering) Congress, Darmstadt, Germany, September 2014
40. SCHILLER, S. M.
- Integration of complex functional elements towards modular production organism
Statusworkshop des Kompetenznetzes “Funktionelle Nanostrukturen” –Bioinspirierte Materialsynthese – Bad Herrenalb, Germany, September 2014

41. SCHILLER, S. M. From Organism to the Redesign of Complex Biobased Systems - Modular Cellular Components, Expansion of the Genetic Code, Cofactor-Enzyme Redesign & Protein-Tectons in Regenerative Medicine
B.R.A.I.N., Zwingenberg, October 2014
42. SCHILLER, S. M. Protein-Assembler Platform & Protein Tectons: Defined architectural building blocks for the de novo design of cellular organelles, regenerative medicine & bionanotechnology
Zymoresearch, Freiburg, November 2014
43. SCHILLER, S. M. Protein Tectons: Defined architectural building blocks for the de novo design of cellular organelles, regenerative medicine & bionanotechnology
Karlsruhe Institute of Technology (KIT), November 2014
44. SCHILLER, S. M. Chemical biology in complex molecular architecture formation and the defined distribution of functions in space: De novo organelles, enzymes & glycolipids
Hungarian Academy of Science, Budapest, Hungary November 2014
45. SCHNEIDER, J.
BARTSCH, E.
SHVETS, A. A.
SEMENOV, A. N. Colloidal stabilization by unattached homopolymers – when does depletion repulsion play a role
29th Australian Colloid and Surface Science Students Conference, Ballarat, Februar 2014, Oral Presentation

DPG SKM Spring Meeting, Dresden, März 2014, Oral Presentation

4th IRTG SoMaS Summer School, Mittelwhir, Juni 2014, Oral Presentation
46. SCHNEIDER, J.
BARTSCH, E.
SHVETS, A. A.
SEMENOV, A. N. Colloidal stabilization by unattached homopolymers – when does depletion repulsion play a role
28th ECIS, Limassol, September 2014, Poster
47. SCHREIBER, A.
HEGE, C.
KRAMER, M.
GRABOW, A.
HUBER, M. C.
SCHILLER, S. M. Protein-based Nanosystems & Biohybrid Materials: Tecton Libraries, Matrix Proteins & Biopolymers for Regenerative Medicine & Nano-Object Assembly
Tag der Forschung der Fakultät Chemie und Pharmazie Albert-Ludwigs-Universität Freiburg, Freiburg, Juli 201

48. SCHREIBER, A.
HUBER, M. C.
YAO, C.
MAKSIMOVIC, B.
MATHAIYAN, N.
SCHILLER, S. M.
- Chemical Biology Inside Cells & Their Biomimicry:
De Novo Organelles, Spatiotemporal Signalling
Platforms with Glycolipid Libraries, Enzymredesign
& New Chemistry inside the Cell
*Tag der Forschung der Fakultät Chemie und
Pharmazie, Albert-Ludwigs-Universität Freiburg,
Freiburg Juli 2014*
49. SCHUBERT, C.
GILLIG, C.
FREY, H.
FRIEDRICH, C.
- Melt Rheology and Thermal Behavior of
Hyperbranched Polyethers Depend on Site-
Selective Modification
*Jahrestreffen der Fachgruppen Computational
Fluid Dynamics, Mischvorgänge und Rheologie,
Würzburg, Februar 2014, Vortrag*
50. SCHUBERT, C.
GILLIG, C.
FREY, H.
FRIEDRICH, C.
- Melt Rheology and Thermal Behavior of
Hyperbranched Polyethers Depend on Site-
Selective Modification
*9th Annual European Rheology Conference
(AERC 2014), April, Karlsruhe, Poster*
51. SCHÜTT, S.
VOGT, A.
DISCH, C.
PROCZ, S.
FIEDERLE, M.
- Entwicklung eines Röntgendetektors durch
Direktabscheidung polykristalliner CdTe-Schichten
auf der Medipix Pixelausleseelektronik
*Deutsche Kristallzüchter Tagung, Halle an der
Saale, März 2014*
52. SCHÜTT, S.
VOGT, A.
DISCH, C.
FISCHER, F.
FAULER, A.
FIEDERLE, M.
- Direct Deposition of Thick Polycrystalline CdTe
Films on the Medipix Readout Chip Using a
Modified MBE System
*MBE: 18th International Conference on Molecular
Beam Epitaxy, Flagstaff, Arizona, USA,
September 2014*
53. SCHÜTT, S.
VOGT, A.
DISCH, C.
PROCZ, S.
FIEDERLE, M.
- Entwicklung eines Röntgendetektors durch
Direktabscheidung polykristalliner CdTe-Schichten
auf der Medipix Pixelausleseelektronik
*Jubiläum zum 50jährigen Bestehen der
Kristallographie Freiburg, Freiburg, Oktober 2014*
54. SHASTRI, V.P.
- Synthetic Extracellular Matrices: Translation of
Mechanobiology Paradigms to Angiogenic
Therapies
*European AngioMatTrain Summer School, Crete,
Greece, May 2014*

55. SHASTRI, V.P. Delivery of Macromolecules Across Biological Barriers
American Association of Pharmaceutical Scientists Meeting, San Diego, USA, May 2014
56. SHASTRI, V.P. Controlling Cell Fate Through Instructive Synthetic Environments
BIOSS Retreat, Schluchsee, Germany, July 2014
57. SHASTRI, V.P. Polymers Based Healthcare Technologies
Evonik, Essen, Germany, July 2014
58. SHASTRI, V.P. Synthetic, Instructive Cellular Environments for Cellular Organization
NMI Innovationsforum Workshop Biologisierung der Medizintechnik, Reutlingen, November 2014
59. SHASTRI, V.P. Synthetic, Instructive Cellular Environments for Cellular Organization
13th Eurasia Conference on Chemical Sciences, Bangalore, India, December 2014
60. SOMMER, M. Direct arylation in materials science
Leibniz Institute for Polymer Research Dresden e.V., Dresden, Germany, October 2014, Invited Talk
61. SOMMER, M. Direct arylation in materials science
Department of Macromolecular Chemistry, University of Bayreuth, Bayreuth, Germany, November 2014, Invited Talk
62. SOMMER, M. On the scope of direct arylation for the synthesis of well-defined conjugated polymers
GDCh Conference “Polymers and Energy”, Jena, Germany, September 2014, Talk
63. SOMMER, M. Direct arylation in materials chemistry: better than Stille and Suzuki coupling methodologies?
Tag der Forschung, Universität Freiburg, Juli 2014, Vortrag
64. SOMMER, M. Conjugated polymers: From fundamentals to applications in all-polymer solar cells
OPV Workshop Chalmers University, Göteborg, Sweden, July 2014, Invited Talk

65. STEMPFLE, F.
RITTER, B. S.
ROESLE, P.
MÜLHAUPT, R.
MECKING, S.
Plant-oil based linear long-chain aliphatic polyesters
for injection molding, film extrusion and
electrospinning
*7th Workshop on Fats and Oils as Renewable
Feedstock for the Chemical Industry, Karlsruhe,
Germany, March 2014*
66. TESKE, N.
SHASTRI, V. P.
Clickable Polyester
*Tag der Forschung an der Fakultät für Chemie
und Pharmazie 2014, Alber-Ludwigs-Universität,
Juni 2014, Poster*
67. VONWIL, D.
CHRISTENSEN, J.
SHASTRI, V. P.
Fluorescence Molecular Tomography Evolves
Beyond Mice: Validation in Rats Through Co-
Registration with Micro-CT
*World Molecular Imaging Congress 2014, Seoul,
Korea, September 2014, Poster*
68. WYSS, P. P.
XIANG, S.
THOMANN, R.
SHASTRI, V. P.
Functional MRI Probe for ROS Detection
*E-MRS 2014 Spring Meeting, Lille, France, May,
2014, Oral Presentation*
69. WYSS, P. P.
ROSTAS, A.
SCHLEICHER, E.
SHASTRI, V. P.
Peroxalate Nanoprobes for Hydrogen Peroxide
Detection with Electron Paramagnetic Resonance
*Eurosia13, Bangalore, India, December 2014,
Invited Oral Presentation*

VERANSTALTUNGEN

Makromolekulares Kolloquium Freiburg, Februar 2014 (circa 660 Teilnehmer)

Tag der Forschung, Fakultät für Chemie und Pharmazie, Juli 2014 (circa 150 Teilnehmer)

WISSENSCHAFTLICHE LEITUNG UND MITARBEITER

DIREKTOREN

PROF. DR. ROLF MÜLHAUPT
PROF. DR. V. PRASAD SHASTRI

DOZENTEN

PROF. DR. ECKHARD BARTSCH
PROF. DR. DR. CHRISTIAN FRIEDRICH

EMERITI

PROF. DR. WALTHER BURCHARD
PROF. DR. DR. H.C. HANS-JOACHIM CANTOW
PROF. DR. DR. H.C. HEINO FINKELMANN
PROF. DR. WOLFRAM GRONSKI
PROF. DR. DR. H.C. HANS ADAM SCHNEIDER

WISSENSCHAFTLICHE MITARBEITER

DR. NEHA ARYA
DR. FORGET AURÉLIEN
DR. RALF HANSELMANN
DR. MATTHIAS HUBER
DR. STEFAN SCHILLER
DR. MICHAEL SOMMER
DR. RALF THOMANN
DR. YI THOMANN
DR. DANIEL VONWIL

DOKTORANDEN

AHRENS, Lucas	MATHAIYAN, Nehrukumar
BECKERT, Fabian	NICOLI, Elena
BLATTMANN, Hannes	OELKER, Katharina
BLUMENTHAL, Nils	RITTER, Benjamin S.
BODENDORFER, Simon	RUKEYAMU, Matztsidike
BÜHLER, Christian	SAMADI, Mariam
BURGER, Dominik	SAREM, Melika
BURGER, Stefanie	SCHÄRTL, Nicole
CHRISTENSEN, Jon	SCHIEFER, Daniel
DOLD, Martin	SCHLECHTENDAHL, Mark
GÖLDEN, Simon	SCHIMPF, Vitalij
HEGE, Cordula	SCHMIDT, Stanislaus
HEINY, Markus	SCHNEIDER, Jochen
HERRERA, Laura Cecilia	SCHREIBER, Andreas
HOFMANN, Daniel	SCHWABE, Jeremia
HUBER, Michael	STÜRZEL, Markus
KASPER, Patrick	SYGA, Isabel
KEINATH, Michaela	TESKE, Nele
KIRSCHVINK, Felix	VOIGT, Julia
LAMICHHANE, Surya	WARTIG, Karen-Alessa
LAZAR, Ion	WOLF, Jürgen Daniel
LESNICHII, Vasili	WYSS, Pradeep
LOMBECK, Florian	XIANG, Shengnan
MAKSIMOVIC, Biljana	YAO, Chunyan
MATLOUBI, Maziar	ZHANG, Wenli

STUDIERENDE IM BACHELORSTUDIUM

LUITZ, Manuel

MANGOLD, Mikel

OBERMAYER, Johannes

RAUBER, Martin

STUDIERENDE IM MASTERSTUDIUM

BOUTEGHMES, Nel Salem

GISIN, Joshua

GOURSOT, Pierre

HEILEMANN, Axel

KEMPE, Fabian

MÄKELÄ, Meri

NÜBLING, Fritz

PÖSSEL, Burkhardt

WERNER, Marcel

XU, Liang

GÄSTE DES INSTITUTS

BARTOLUCCI, C.
CNR, Italy

KOMBER, H. DR.
Leibniz Institut for Polymer Research Dresden e.V., Dresden, Germany

OMEIS, J. DR.
BYK-Chemie GmbH, Wesel, Germany

G A S T V O R T R Ä G E

im Institut für Makromolekulare Chemie der Universität Freiburg im Breisgau

(im Rahmen des Gemeinsamen Seminars über makromolekulare und physikalische Chemie und des IRTG: Soft Matter Science)

1. 08.01.14 DR. DIDDO DIDDENS
Institut Charles Sadron, University Strasbourg,
France
Segmental Mobilities in Polymer Melts, Polymer Blends and Polymer Electrolytes
2. 15.01.14 DR. HABIL. HANS JOACHIM SCHÖPE
University of Tübingen, Germany
Experimental determination of structural and dynamical heterogeneities in a metastable colloidal fluid
3. 22.01.14 JUN.-PROF. FELIX H. SCHACHER
Instit. of Org. and Macromol.Chem. & Jena Centre for Soft Matter, Jena, Germany
Controlled Crosslinking of Block Copolymer Nanostructures: Switchable Membranes, Patchy Particles and Robust Coatings
4. 29.01.14 DR. ALEXANDER KÜHNE
DWI – Interactive Mat.Res. at the RWTH Aachen, Germany
Conjugated Polymer Particles for Photonic and Biomedical Applications
5. 12.02.14 PROF. PATRICIA BASSEREAU
Institute Curie Paris, France
Cellular membrane traffic from a soft matter point of view
6. 30.04.14 PROF. DOMINIQUE AUSSERÉ
CNRS and Université du Maine France
ECOM: the ElectroChemical Optical Microscope
7. 07.05.14 PROF. AURÉLIEN ROUX
University of Geneva, Switzerland
Role of membrane elasticity in clathrin-mediated endocytosis
8. 13.05.14 PROF. ROBERT LISKA
Vienna University of Technology Austria
Biocompatible Polymers in Tissue Engineering

9. 14.05.14 DR. SOUREN GRIGORIAN
University of Siegen, Institute of Physics Germany
Real-time Synchroton Studies of Conjugated
Organic Systems
10. 19.05.14 PROF. DR. VIRGIL PERCEC
University of Pennsylvania, Philadelphia USA
A Materials Genome Approach to the Discovery of
First Biological Principles
11. 26.05.14 PROF. CHRISTOPHER K. OBER
Cornell University, Bard Hall, Ithaca, NY, USA
Making structures the length scale of molecules:
New materials and methods for lithography
12. 28.05.14 PROF. A. LEVENT DEMIREL
Koc University, Chemistry Department Istanbul
Turkey
Poly(2-alkyl-2-oxazoline)s: Bulk Crystallization and
Solution Self-Assembly
13. 04.06.14 DR. ANDREAS WALTHER
DWI at RWTH Aachen Germany
Self-Assembled Bioinspired Materials
14. 25.04.14 PD DR. CLEMENS FRANZ
DFG-Center for Functional Nanostructures KIT
Karlsruhe Germany
Studying cell-matrix interactions using atomic force
microscopy
15. 02.07.14 PROF. MARK GEOGHEGAN
University of Sheffield UK
Polyelectrolyte brushes: Friction, adhesion and
lubrication
16. 16.07.14 PROF. THOMAS PALBERG
Johannes Gutenberg University Mainz Germany
Self-organized dynamics of modular micro-
swimmers
17. 23.07.14 DR. MICHAEL RYAN HANSEN
Aarhus University Denmark
Probing Molecular Packing and Dynamics in
Functional Organic Materials
18. 30.07.14 DR. JOSHUA McGRAW
Universität des Saarlandes Saarbrücken Germany
Influence of slip and precursor thickness on polymer
microdroplet equilibration dynamics

19. 31.07.14 PROF. DR. NORBERT WILLENBACHER
Karlsruhe Institute of Technology KIT Germany
Stability and flow of highly concentrated colloidal dispersions
20. 22.09.14 DR. SHAHRYAM MIHAN
Basell Polyolefine GmbH Frankfurt a.M., Germany
Neuartige Polyethylen: Von der Konzeption bis zur industriellen Anwendung
21. 21.10.14 PROF. DR. KÜNKEL
BASF SE Ludwigshafen Germany
Biodegradable and Renewable Polymers
22. 22.10.14 DR. SOPHIE HAMEURY
University of Strasbourg France
Oxygen-Functionalized NHC Ligands and their Nickel(II), Silver(I) and Palladium(II) Complexes
23. 29.10.14 PROF. THOMAS SEERY
University of Connecticut, Storrs USA
Dynamic light scattering from light absorbing solutions: Phenomenology and model systems
24. 05.11.14 DR. ANDREAS ZUMBÜHL
University of Fribourg Switzerland
Mechanosensitive Phospholipid Vesicles – Balance of Forces at Play
25. 12.11.14 MATTHIAS ARRAS
Friedrich-Schiller-Universität Jena, Germany
Controlling and Understanding the Arrangement of Carbon Nanotubes in Polymer Nanocomposites
26. 19.11.14 DR. VOLKER KNECHT
Biomolecular Dynamics Group, Institute of Physics Univ.Freiburg
Combining computational and experimental approaches in studies of lipid membranes
27. 26.11.14 PROF. MONIKA SCHÖNHOFF
Universität Münster, Institut für Physikalische Chemie Münster
Functional Polyelectrolyte Materials: Charge transport, pHtriggering and molecular encapsulation
28. 03.12.14 PROF. THORSTEN HUGEL
Albert-Ludwigs-Universität Freiburg, Germany
Friction and Adhesion in the Nanoworld

29. 10.12.14 PROF. TUDOR LUCHIAN
Al. I. Cuza University Iasi, Romania
Nanoscopic Interrogation of Molecular Interactions
with Protein Nanopores
30. 15.12.14 DR. HABIL. KLAUS-DIETER KREUER
MPI for Solid State Research Stuttgart, Germany
Ion Conducting Polymer Membranes for Fuel Cells
and Batteries: Where Polymer-Chemistry Meets
Electrochemistry

