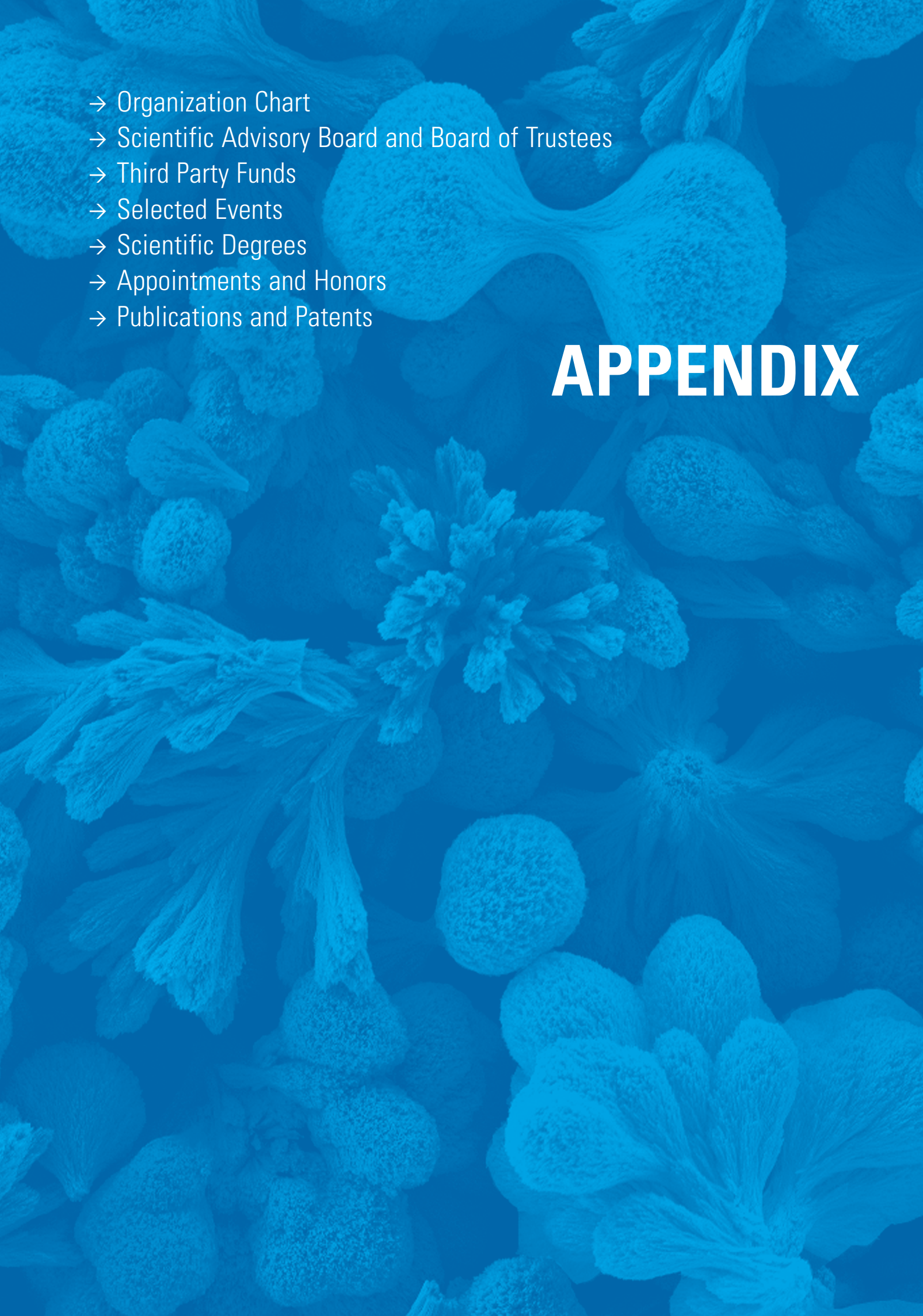


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- Organization Chart
  - Scientific Advisory Board and Board of Trustees
  - Third Party Funds
  - Selected Events
  - Scientific Degrees
  - Appointments and Honors
  - Publications and Patents

# APPENDIX

# Organigramm

## Organization Chart

### Biomaterials Director: Prof. Dr. Dr.h.c. Peter Fratzl · Personal Assistant: Kerstin Gabbe

- Biomimetic Actuation and Tissue Growth/Dr. John Dunlop
  - Plant Material Adaptation/Dr. Michaela Eder
  - Molecular Biomimetics and Magnet Biomineralization/Dr. Damien Faivre
  - Biochemical Strategies in Load-Bearing Natural Materials/ Dr. Matthew Harrington
  - Biological Chitin-Based Tools and Sensors/Dr. Yael Politi
  - Hierarchical structure of biological and biomimetic materials/Dr. Wolfgang Wagermaier
  - Mechanobiology/Dr. Richard Weinkamer
- Independent Researchers**
- Water Interactions in Complex Biological Materials/Dr. Luca Bertinetti
  - Evolutionary Perspectives on Vertebrate Hard Tissues/Dr. Mason Dean
  - Synthesis and Thermodynamic Stability of Amorphous Minerals/Dr. Wouter Habraken
  - Advanced Raman Spectroscopic Imaging of Biological Tissues/Dr. Admir Masic
  - In-Situ Mechanical Characterization of Internal Interfaces in Biomaterials/Dr. Igor Zlotnikov

### Biomolecular Systems Director: Prof. Dr. Peter H. Seeberger · Personal Assistant: Dorothee Böhme

- Carbohydrate Chemistry**
- Synthetic Vaccines/Prof. Peter H. Seeberger
  - Glycosaminoglycans/Prof. Peter H. Seeberger
  - GPI and Glycoproteins/Dr. Daniel Varón Silva
  - Automated Systems/Prof. Peter H. Seeberger
- Glycobiology**
- Glycobiology of Infection Diseases /Prof. Peter H. Seeberger
  - Glycobiology of Microbe/Host Interaction/Dr. Chakkumkal Anish
  - Polymeric Biomimetics (Emmy Noether Nachwuchsgruppe)/Dr. Laura Hartmann
  - Glycoproteomics/Dr. Daniel Kolarich
  - Glycoimmunology/Dr. Bernd Lepenies
  - Microreactors as Tools for Organic Chemistry/Prof. D. Tyler McQuade
  - Structural Glycobiology/Dr. Christoph Rademacher
  - Nanoparticles and Colloidal Polymers/Prof. Peter H. Seeberger
- Vaccine Development**
- Synthetic Carbohydrates Vaccines/Dr. Clancy L. Pereira, Prof. Peter H. Seeberger

### Colloid Chemistry Director: Prof. Dr. Dr. h.c. Markus Antonietti · Personal Assistants: Annette Pape and Carolin Nuglisch

- Heterophase Polymerization**
- Heterophase Polymerizations/Dr. Klaus Tauer
- Self-organizing Polymers**
- Bioinspired Polymers und Block Copolymers/Dr. Helmut Schlaad
  - Porous Polymers: Sustainable Synthesis and Advanced Characterization/Dr. Jens Weber
  - Biorefinery/Dr. Davide Esposito
- Mesoporous Materials and Nanoparticles**
- Sustainable Materials for Energy Storage, Catalysis and Separation Science /Dr. Maria-Magdalena Titirici  
*Since January 2013 Reader in Materials Science at the Queen Mary University of London*
  - De Novo Nanoparticles: Novel synthetic routes for nanoparticle production/Dr. Christina Giordano/Dr. Tristan Corbiere
  - Organic Energy Polymers/Dr. Filipe Vilela
- Modern Techniques of Colloid Analysis**
- Electron Microscopic Studies of Colloidal Systems and Biomaterials/Dr. Jürgen Hartmann
  - Poly(ionic liquids): Synthesis and Materials Application/Dr. Jiayin Yuan
  - Electrochemical Energy Materials/Dr. Tim-Patrick Fellingner
  - Artificial Photosynthesis/Dr. Dariya Dontsova

## Managing Director (2011-2012)

Prof. Dr. Peter H. Seeberger

### Interfaces Director: Prof. Dr. Dr. h.c. Helmut M $\ddot{u}$ hlwald - Personal Assistant: Stefanie Riedel

- (Quasi) Planar Interfaces**
  - Interactions in Complex Monolayers/Dr. Gerald Brezesinski
- Fluid Interfaces**
  - Thermodynamics, Kinetics and Rheology of Interfacial Layers/Dr. Reinhard Miller
- Solid Interfaces**
  - Phase Transitions and Transport Phenomena at Solid/Air Interfaces/Dr. Hans Riegler
- Non-Planar Interfaces**
  - Functional Supramolecular Organizes/Prof. Helmut M $\ddot{u}$ hlwald
  - Active Interfaces and Coatings/Dr. Dmitry Shchukin  
*Since May 2013 Professor at the Stephenson Institute for Renewable Energy at the University Liverpool*
  - Optical Manipulation of Capsules and Films/Dr. Andre Skirtach  
*Since October 2012 Professor at the Faculty of Bioscience Engineering, Universiteit Gent*

**International Joint Laboratories** · Laboratoire Européen Associé (LEA) on Sonochemistry/Dr. Dmitry Shchukin, Prof. Helmut M $\ddot{u}$ hlwald

### Theory & Bio-Systems Director: Prof. Dr. Reinhard Lipowsky - Personal Assistant: Susann Weber

- Biophysics Lab/Dr. Rumiana Dimova
- Molecular Dynamics/Dr. Volker Knecht  
*Since November 2012 Akademischer Rat with Gerhard Stock in Biomolecular Dynamics Group, Institute of Physics, Albert Ludwigs University, Freiburg*
- Multiscale Modelling/Dr. Andrea Grafmüller
- Proteins and Membranes/Dr. Thomas Weikl
- Carbohydrates and Polysaccharides/Dr. Mark Santer
- Polymers and Polyelectrolytes/Dr. Christian Seidel
- Stochastic Processes in Complex and Biological Systems/Dr. Angelo Valleriani
- Regulation of Bio-Processes/Dr. Stephan Klumpp

#### Administration/Other Services

Head: Andreas Stockhaus  
Personal Assistant: Angelina Schneider

#### Operating Technology (Campus)

Head: Heiko Jung

#### Budgeting/Accountancy

Head: Karin Schönfeld  
Thea Dumke, Anke Klein,  
Drittmittel: Birgit Gölke, Stefanie Riedel,  
Ulrike Schell, Nadine Stolz

#### Personnel

Head: Heike Kienert  
Judith Hoyer, Janice Sommer  
Apprentice: Stefanie Ebschner

#### Procurement/Purchase

Head: Katharina Zesch  
Sylvia Ost, Anika Becke

#### Other Services

Head: Andreas Stockhaus  
Olaf Gaida, Bodo Ryschka

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Reina Schlender

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Michael Born, Christian Büttner,  
Marco Ehlert, Ingo Fiedler, Frank Seidel  
Apprentice: David Schetter

#### Public Relations

Katja Schulze

#### Library

Head: Dorothea Stscherbina  
Silke Niehaus-Weingärtner

#### Mechanic Workshop

Head: Günter Haseloff  
Marco Bott, Andreas Kretzschmar,  
Jan von Szada-Borrryszkowski

#### Electronic Workshop

Klaus Bienert, Henryk Pitas

#### Glass Blowing Workshop

Cliff Janiszewski

#### Building Services

Head: Heiko Jung  
Hagen Hannemann, Christian Mating, Dirk Nast,  
Marco Stetzmann, Thomas Vogt

#### Caretaker

Head: Olaf Gaida

## Fachbeirat Scientific Advisory Board

Name	Institution
Prof. Dr. Colin D. Bain	Department of Chemistry (University of Durham)
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Prof. Dr. Rüdiger Iden	BASF SE Aktiengesellschaft (Ludwigshafen)
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Prof. Dr. Michael Klein	Department of Chemistry (University of Pennsylvania)
Prof. Dr. Deborah Leckband	Department of Chemical & Biomolecular Engineering (The University of Illinois at Urbana Champaign)
Prof. Dr. Thisbe K. Lindhorst	Otto Diels-Institut für Organische Chemie (Christian-Albrechts- Universität zu Kiel)
Prof. Dr. Michael Schick	Department of Physics (University of Washington)
Prof. Dr. Viola Vogel	Biologisch-Orientierte Materialwissenschaften (Eidgenössische Technische Hochschule Zürich)
Prof. Dr. Stephen Weiner	Department of Structural Biology (Weizmann Institute of Science)

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Prof. Dr. Robert Seckler	Vizepräsident für Forschung und Wissenschaftlichen Nachwuchs an der Universität Potsdam

# Drittmittelprojekte

## Third Party Funds

### Öffentliche Zuwendungsgeber

Zuwendungsgeber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
BMBF	Bionik (2): Faserverbundwerkstoffe mit graduellen Matrixübergängen; Teilprojekt 1	Dr. Burgert BM	01.05.2008-30.04.2011	Albert-Ludwigs-Universität Freiburg Universität Bayreuth, Institut für Textil- und Verfahrenstechnik Denkendorf
BMBF	GoFORSYS - Potsdam-Golm BMBF - FORschungseinrichtung zur SYStembiologie, Photosynthesis and Growth: A Systems Biology-based Approach	Prof. Lipowsky Dr. Valleriani TH	01.06.2006-31.12.2011	MPI für Molekulare Pflanzenphysiologie, Potsdam
BMBF	Nanoskalige Hohlstrukturen mit eingebetteten Gastmolekülen für neue aktive Korrosionsschutz-Systeme	Dr. Shchukin GF	01.05.2007-30.04.2011	Capsulation NanoScience AG Berlin PlasmaChem GmbH, Berlin EADS Deutschland GmbH, München BASF Coatings GmbH, Münster
BMBF	Nachwuchsgruppe Glykobiotechnologie: Malaria-Untersuchung der Erythrozytheninvasion und der schweren Pathologie	Dr. Anish BS	01.04.2009-31.03.2014	
BMBF	Nachwuchsgruppe Glykobiotechnologie: Funktion der C-Typ Lektinrezeptoren (CLRs) bei der Modulation der	Dr. Lepenies BS	01.02.2009-31.12.2013	Bernhard-Nocht-Institut für Tropenmedizin, Hamburg Universität Regensburg Technische Universität München Universität Würzburg
BMBF	Verbundprojekt: Nanostrukturen zur Lichtinduzierten Wasserstoffentwicklung (H <sub>2</sub> -NanoSolar)	Prof. Antoniotti Dr. Thomas KC	01.09.2009-31.08.2012	Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (HZB), Berlin Technische Universität Darmstadt Universität Augsburg Universität Ulm (UU)
BMBF	Verbundvorhaben: Dream Reactions-Stoffliche CO <sub>2</sub> -Verwertung	Prof. Antoniotti KC	01.03.2009-29.02.2012	Bayer Technology Services GmbH, Leverkusen Technische Universität Dortmund Leibniz-Institut für Katalyse e.V. an der Universität Rostock Forschungszentrum Karlsruhe GmbH Rheinisch-Westfälische Technische Hochschule Aachen Technische Universität Darmstadt

BM – Abteilung Biomaterialien/Department of Biomaterials  
 BS – Abteilung Biomolekulare Systeme/Department of Biomolecular Systems  
 GF – Abteilung Grenzflächen/Department of Interfaces  
 KC – Abteilung Kolloidchemie/Department of Colloid Chemistry  
 TH – Abteilung Theorie & Bio-Systeme/Department of Theory & Bio-Systems

## BMBF

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
BMBF	Verbundprojekt: Spitzenforschung und Innovation in den neuen Ländern-Das Taschentuchlabor: Impulszentrum für Integrierte Bioanalyse (IZIB)	Prof. Seeberger BS	01.10.2009-30.09.2014	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. (FhG), München Universität Potsdam Charité-Universitätsmedizin Berlin Helmholtz-Zentrum für Infektionsforschung GmbH, Braunschweig Ruhr-Universität Bochum IDM Institut für Dünnschichttechnologie und Mikrosensorik e.V., Teltow Technische Fachhochschule Wildau MicroDiscovery GmbH, Berlin BST Bio Sensor Technologie GmbH, Berlin Congen Biotechnologie GmbH, Berlin Scienion AG, Dortmund Poly-An Gesellschaft zur Herstellung von Polymeren für spezielle Anwendungen und Analytik mbH, Berlin
BMBF	Fortführung der experimentellen und theoretischen Untersuchung zur Bildung und Deformation von Einzeltröpfchen als Modell für Schäume und Emulsionen sowie Begleitung der FASES-Experimente auf der ISS	Dr. Miller GF	01.07.2009-30.06.2011	IENI, Genua, Italien Université Aix-Marseille Université Compiègne, France Universität Complutense Madrid Universität Florenz IPF, Dresden Aristotele Universität Thessaloniki
BMBF	Verbundprojekt: Spitzenforschung und Innovationen in den neuen Ländern-Light2Hydrogen - Energie für die Zukunft - Photokatalytische Spaltung von Wasser zu Wasserstoff -TP2	Prof. Antonietti KC	01.11.2009-31.10.2014	Leibniz-Institut für Katalyse e.V. an der Universität Rostock Leibniz-Institut für Plasmaforschung und Technologie e.V. (INP), Greifswald Technische Universität Berlin Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (HZB), Berlin Fachhochschule Stralsund Universität Rostock
BMBF	Dynamik und Rheologie komplexer Oberflächenschichten und dünner flüssiger Filme	Prof. Vollhardt GF	01.06.2011-31.05.2013	
A.v.H.	Max-Planck-Forschungspreis 2008: Biological and Biomimetic Materials	Prof. Fratzl BM	01.09.2008-31.08.2013	Ludwig Boltzmann Institute of Osteology, Vienna, Austria Harvard University, Department of Chemistry and Chemical Biology, USA University of California at Santa Barbara, USA Weizmann Institute of Science, Rehovot, Israel Montanuniversität Leoben, Austria Institut National Polytechnique de Grenoble, France Department of Materials Science, Technion, Haifa, Israel

## BMBF

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
BMBF	SOHyb: Keimbildungsinduzierte Selbstorganisation zur Strukturierung organischer Hybridsolarzellen	Dr. Riegler GF	01.11.2008-30.04.2012	Helmholtz-Zentrum Berlin für Materialien und Energie GmbH Chemtec Leuna Fraunhofer-Institut für Angewandte Polymerforschung, Potsdam Justus-Liebig-Universität, Gießen
BMBF	Verbundprojekt: Molekulare Pathologie der Osteoporose (OsteoPath)	Prof. Fratzl Dr. Wagermaier BM	01.06.2010-31.05.2013	Ludwig Boltzmann Gesellschaft, Ludwig Boltzmann Institut für Osteologie, Wien
BMBF	ForMaT2: Intelligente Nanobehälter für selbstheilende Antikorrosionsbeschichtungen	Dr. Shchukin GF	01.12.2010-31.07.2013	EADS Deutschland GmbH, München Volkswagen AG, Wolfsburg Mankiewicz Gebr & Co. (GmbH & Co. KG), Hamburg BASF Coatings AG, Münster Chemetal GmbH, Frankfurt am Main Lankwitzer Lackfabrik GmbH, Berlin Ludwig Boltzmann Gesellschaft, Ludwig Boltzmann Institut für Osteologie , Wien
BMBF	Tropfen-Schäume-Emulsionen III	Dr. Miller GF	01.06.2011-30.04.2014	Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR) Raumfahrt Agentur
BMBF	WoodWisdom-Net: WOP-Wood Supply	Dr. Eder BM	01.02.2012-31.01.2015	University of Helsinki, Finnland Swedish University of Agricultural Sciences, Umea, Sweden
BMBF	Zentrales Innovationsprogramm Mittelstand (ZIM)	Dr. Lepenies BS	01.10.2011-30.09.2013	Analyticon Discovery GmbH, Potsdam, Germany

## Länder

MWFK / LASA Brandenburg GmbH	Verbundforschung Biokohle Brandenburg - Herstellung und Verwendung von Biokohle aus hydrothermalen Karbonisierung	Prof. Antonietti KC	01.02.2009-05.12.2011	Fachhochschule Eberswalde
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## EU

EU	Novel Nanocomposites for Hydrogen Storage Applications (NanoHy)	Prof. Möhwald Dr. Shchukin GF	01.01.2008-30.09.2011	Forschungszentrum Karlsruhe, Consiglio Nazionale delle Ricerche, Rom, CNRS; ParisFutureCarbon GmbH, Bayreuth Institut for energiteknikk, Norwegen National Center for Scientific Research "Demokritos", Griechenland Universität Oslo
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**EU**

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
EU	Multi-Level Protection of Materials for Vehicles by "smart" Nanocontainers (MUST)	Prof. Möhwald Dr. Shchukin GF	01.06.2008-30.09.2012	EADS Deutschland GmbH; Universidade de Aveiro, Portugal; Stiftelsen Sintef, Norwegen; Universität Paderborn; Mankiewicz Gebr.&Co. GmbH & Co KG, Hamburg; Bayer Technology Services GmbH, Leverkusen; National Center for Scientific Research "Demokritos", Griechenland; Sika Technology AG, Schweiz; Instytut Katalizy i fizykochemii Powierzchni, Polska Akademia Nauk, Krakau; Steinbeis Advanced Risk Technologies GmbH, Stuttgart; Instituto Superior Tecnico, Lissabon; Centro Richerche Fiat SCPA, Italien; RE-TURN AS, Norwegen; Varnish SRL, Italien Daimler AG, Stuttgart; Chemetall GmbH, Frankfurt/M.; Helsingin Yliopisto, Finnland; European Virtual Institute on Knowledge-based Multifunctional Materials ALSBL, Belgien
EU	Carbohydrate Multivalent Systems as tools to study Pathogen interaction with DC-Sign (Carmusys)	Prof. Seeberger BS	01.01.2009-31.12.2012	Agencia Estatal Consejo Superior De Investigaciones Cientificas (CSIC), Spain; Universita Degli Studi Di Milano (UNIMI), Italy; Centre National De La Recherche Scientifique (CNRS), France; Fundación Para La Investigación Biomédica del Hospital Universitario "Doce de Octubre", Spain; The Chancellor, Masters and Scholars of the University of Oxford, United Kingdom; Vysoka Skola Chemicko-Technologicka V Praze, Czech Republic; Vereniging Voor Christelijk Hoger Onderwijs Wetenschappelijk Onderzoek En Patientenzorg, Netherlands; Anterio Consult & research GmbH, Germany; DC4U, Netherlands; Institut National De La Sante Et De La Recherche Medicale, France; Vrije Universiteit Medisch Centrum, Niederlande; Universite Joseph Fourier Grenoble, Frankreich
EU	Probing Molecular Recognition of the Avian and Human Influenza Virus (GlycoFlup)	Prof. Seeberger BS	01.03.2009-30.09.2010	
EU	Vesicle formation driven by ESCRT (endosomal sorting complex required for Transport) (vesicle ESCoRT)	Dr. Valleriani TH	15.10.2009-14.09.2012	National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, USA



**EU**

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
EU	Development of carbohydrate array technology to systematically explore the functional role of glycans in healthy and diseased states (EuroGlycoArrays)	Prof. Seeberger BS	01.09.2008-31.08.2012	The University of Manchester, United Kingdom; Centre National de la Recherche Scientifique, Paris, France; Universität für Bodenkultur Wien, Austria; Eidgenössische Technische Hochschule Zürich, Switzerland; The University of Reading, United Kingdom; Deutsches Krebsforschungszentrum, Heidelberg, Germany; Stockholms Universitet, Sweden; Centre for Cooperative Research in Biomaterials -CIC biomaGUNE, San Sebastian, Spain; Universität Bayreuth, Germany; Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry, Moscow, Russia; Imperial College of Science, Technology and Medicine, London, United Kingdom; University of Zagreb, Kroatien; University of Copenhagen, Denmark; GALAB Laboratories GmbH, Geesthacht, Germany; Ludger Ltd., Abingdon, United Kingdom; National Institute for Bioprocessing Research and Training Ltd., Dublin, Ireland
EU	Biomimetic and Biomimetic Nanoparticles for Magnetic Resonance Imaging (Bio2MaN4MRI)	Prof. Fratzl Dr. Faivre BM	01.09.2011-31.08.2014	Panon Egyetem, Hungary Latvijas Universitate, Riga, Latvia Nanopet Pharma GmbH, Berlin, Germany Ludwig-Maximilian-Universität, München, Germany Ludwig Boltzmann Gesellschaft Österreichische Vereinigung zur Förderung der Wiss. Forschung Eidgenössische Technische Hochschule Zürich, Zürich, Switzerland
EU	Biomimetic Membrane Systems (BIOMIMEM)	Prof. Brezesinski GF	01.03.2011-28.02.2014	Universite Claude Bernard Lyon 1, Villeurbanne, France
EU	Nanoparticle development for molecular imaging and drug delivery (Nanomedicine/Imaging)	Prof. Seeberger BS	01.09.2011-31.08.2013	
EU	Design of Photocontrollable Polyelectrolyte-Based Nanoengineered Container Systems (PHOTOCONTROL)	Prof. Möhwald Dr. Shchukin GF	01.04.2011-30.03.2012	Instytut Katalizy i fizykochemii Powierzchni, Polska Akademia Nauk (ICSC), Krakau Belarusian State Universtiy (BSU), Minsk

**EU**

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
EU	Quantitative Glycomics and Glycoproteomics for Biomarker Discovery (Glycoproteomics)	Dr. Kolarich BS	01.09.2011-31.08.2013	
EU	Diagnostic and prognostic biomarkers for inflammatory bowel disease IBD-BIOM	Dr. Kolarich BS	01.10.2012-30.09.2016	The University of Edinburgh, UK Genos Doo ZA Vjestacenje I Analizu, Osijek, Croatia Ludger Ltd, Abingdon, UK Azienda Ospedaliero-Universitaria Careggi, Firenze, Italy IP Research Consulting Sasu, Noisy Le Grande, France Accademisch Ziekenhuis Leiden - Leids Universitair Medisch Centrum, Netherlands Faculty of Science University of Zagreb, Croatia Cedars-Sinai Medical Center, Los Angeles, USA
EU	Advances European lithium sulphur cells for automotive applications (EUROLIS)	Prof. Antonietti KC	01.10.2012-30.09.2016	Kemijski Institut, Ljubljana, Slovenia Centre National de la Recherche Scientifique, Paris, France Chalmers Tekniska Hoegskola AB, Goeteborg, Sweden Sincrotrone Trieste SCPA, Italy Center Odlicnosti Nizkoogljicne Tehnologije Zavod, Slovenia Renault s.a.s. represented by GIE REGIENOV, France Solvionic SA, Toulouse, France Fraunhofer-Gesellschaft zur Förder- ung der angewandten Forschung e.V., München, Germany SAFT SAS, Bagnolet, France Volvo Technology AB, Goeteborg, Sweden
EU	Nanocontainer-Based Active Coatings for Maritime Applications (NANOMAR)	Prof. Möhwald Dr. Shchukin GF	01.05.2012-30.04.2014	Universidade de Aveiro, Portugal A.V. Shubnikov Institute of Crys- tallography Russian Academy of Sciences, Russia Instituto de Pesquisas Tecnologicas do Estado de Sao Paulo SA, Brazil
EU	Training Network in innovative polyelectrolytes for energy and invironment (Renaissance)	Prof. Antonietti KC	01.05.2012-30.04.2016	Universidad Del Pais Vasco Eha Upv, Spain Centre National de la Recherche Scientifique, Paris, France Linkopings Universitet, Sweden Universite de Liege, Belgium Fundacion IMDEA Energia, Spain Kitozyme SA, Belgium Procter & Gamble Italia Spa, Italy

**EU**

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
EU	Hydrothermal and Ionothermal Chemistry for Sustainable Materials (HydraChem)	Prof. Antonietti KC	01.11.2008-31.10.2013	
EU	Automated Synthesis of Heparin and Chondroitin Libraries for the Preparation of Diverse Carbohydrate Arrays (Autoheparin)	Prof. Seeberger BS	01.01.2009-31.12.2013	
EU	Molecular Biomimetics and Magnets Biomineralization: Towards Swimming Nanorobots (MB <sup>2</sup> )	Dr. Faivre BM	01.01.2011 - 31.12.2016	
EU	Network for Integrated Cellular Homeostasis (NICHE)	Prof. Lipowsky Dr. Valleriani TH	01.01.2012-31.12.2016	Rijksuniversiteit Groningen, Netherlands Universität Potsdam, Germany The University Court of the University of Aberdeen, UK Agencia Estatal Consejo Superior De Investigaciones Científicas (CSIC), Madrid, Spain The Chancellor, Masters and Scholars of the University of Oxford, UK DSM Food Specialties BV, Delft, Netherlands AstraZeneca UK Limited, London, UK
EU	Extended shelf-live biopolymers for sustainable and multifunctional food packaging solutions (NanoBarrier)	Prof. Möhwald Dr. Shchukin GF	01.03.2012-28.02.2016	Stiftelsen SINTEF, Norwegen University of Maribor, Slovenien Universidade de Aveiro, Portugal Foundation of Research and Technology (FORTH) Greece ITENE - Packaging, Transport & Logistics Research Center (ITENE), Spain Innventia AB, Sweden Logoplaste Innovation LAB LDA (ILAB), Portugal Argo SA Plastic Packaging Materials (Argo), Greece Grace Davison - Materials and Packaging Technologies (Grace), France Plasmachem GmbH, Germany Prado Karton, Portugal Elastopoly Oy, Finland Borregaard Industries Limited, Norway SCA R&D Centre AB, Sweden
EU	Automated Glycosaminoglycan Synthesis to Access Defined Oligosaccharides for Diagnostic and Therapeutic Applications (GAGAUTOSYN)	Prof. Seeberger BS	01.05.2012-30.04.2013	

## DFG

DFG	Biomechanics and Biology of Musculoskeletal Regeneration - From Functional Assessment to Guided Tissue Formation; The micro-mechanical and structural properties of callus tissue during bone healing	Prof. Fratzl Dr. Manjubala BM	01.01.2007-31.12.2011	Charité - Universitätsmedizin Berlin Freie Universität Berlin; Max-Planck-Institut für molekulare Genetik; Deutsches Rheuma-Forschungszentrum Berlin; Helmholtz-Gemeinschaft Deutscher Forschungszentren; Institut für Polymerforschung GKSS-Forschungszentrums Geesthacht GmbH, Teltow; Zuse Institut Berlin
DFG	Biomechanics and Biology of Musculoskeletal Regeneration - From Functional Assessment to Guided Tissue Formation; Mechano-biology of bone healing and regeneration	Dr. Weinkamer BM	01.01.2007-31.12.2011	Charité - Universitätsmedizin Berlin Freie Universität Berlin; Max-Planck-Institut für molekulare Genetik; Deutsches Rheuma-Forschungszentrum Berlin; Helmholtz-Gemeinschaft Deutscher Forschungszentren; Institut für Polymerforschung GKSS-Forschungszentrums Geesthacht GmbH, Teltow; Zuse Institut Berlin
DFG	SFB Teilprojekt B08	Prof. Seeberger Dr. Lepenies BS	01.01.2012 - 31.12.2013	FU Berlin
DFG	Fluide Grenzflächen	Dr. Miller GF	01.05.2010-30.04.2013	
DFG	Synthesis and properties of glycopolyptide bio-hybrid materials Theme: Novel Polymer Synthesis and New Supramolecular Polymer Assemblies	Dr. Schlaad KC	20.10.2010	
DFG	„Einfluss von Proteinen auf die Schaumbildung und Schaumstabilität“	Dr. Miller GF	01.06.2011 -	
DFG	SPP 1568 - Schwerpunktprogramm: "Design and Generic Principles of Self-Healing Materials"	Dr. Harrington BM	01.07.2011-	
DFG	SPP Schwerpunktprogramm: "Generation of multi-functional inorganic materials by molecular bionics"	Dr. Faivre BM	14.12.2011	
DFG	Deutsch-Israelische Projektkooperation	Prof. Fratzl BM	01.01.2012 - 31.12.2016	
DFG	„Hygroskopische Eigenschaften von natürlichen Oligosacchariden“	Dr. Grafmüller TH	01.11.2012 -	
DFG	Forschergruppe "Ribosome Dynamics in Regulation of Speed and Accuracy of Translation"	Prof. Lipowsky TH	01.07.2012 -	

**DFG**

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
DFG	gemeinsames DFG/NSF-Programm "Materials World Network"	Dr. Politi BM	01.12.2012-	
DFG	Charakterisierung von Grenzflächen zwischen zwei Flüssigkeiten unter hoch-dynamischen Bedingungen	Dr. Miller GF	01.08.2009-31.07.2011	
DFG	Structural and morphological characterization of ceramide-1-phosphate model membran	Dr. Brezesinski GF	20.09.2007-31.10.2012	
DFG	Dynamics of Interfaces between Drops with Miscible Liquids	Dr. Riegler GF	01.09.2008-31.08.2011	
DFG	Intelligent release systems for anticorrosion self-healing coatings (Deutsch-Russisches Kooperationsprojekt)	Prof. Möhwald GF	17.07.2008-16.07.2011	Dr. V.V. Volkov, Shubnikov Institute of Crystallography, RAN, Moscow
DFG	Generation of nanoparticles with tunable surface wettability and surface functionality to cross hydrophilic/hydrophobic interfaces of biological barriers	Prof. Möhwald Dr. Wang GF	01.07.2009-30.06.2011	
DFG	Thermodynamisch stabile Pickering-Emulsionen	Dr. Wüstneck GF	01.09.2009-31.08.2011	
DFG	Thermodynamisch stabile Pickering-Emulsionen	Dr. Wüstneck GF	01.09.2011-31.08.2013	
DFG	Multiscale Smart Coatings with Sustained Anti-corrosive Action – SmartCoat	Prof. Möhwald Dr. Shchukin GF	01.09.2012-31.08.2015	TU Berlin, Germany National Institute for Materials Science (NIMS), Japan Institute for Micromanufacturing, Louisiana Tech University, USA Kazan Federal University, Russia
DFG	Biometric Materials Research: Functionality by Hierarchical Structuring of Materials	Prof. Fratzl  Prof. Fratzl  Dr. Aichmayer Dr. Zaslansky  Dr. Faivre  Dr. Burgert  Dr. Schlaad Dr. Tauer  Dr. Cölfen BM	01.05.2009-	(MPI KOLL ist Koordinator, 7 Teilprojekte am Institut) Institut National Polytechnique; E.N.S.E.E.G./ L.T.P.C.M. Grenoble Foundry Institute of RWTH Aachen Department of Materials Engineering, Technical University Berlin Evolutionary Biomaterials Group, MPI für Metallforschung, Stuttgart Department of Materials Science and Engineering, University Erlangen-Nürnberg Dept. Of Microstructure Physics and Metal Forming, MPI Eisenforschung Düsseldorf Plant Biomechanics Group, Botanic Garden, University of Freiburg

**DFG**

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
DFG	"Chemoselektive Reaktionen für die Synthese und Anwendung funktionaler Proteine"	Dr. Silva BS	01.11.2012 -	
DFG	Emmy-Noether-Programm, 1. Förderabschnitt	Dr. Hartmann BS	04.08.2009-03.08.2012	
DFG	Emmy-Noether-Programm, 2. Förderabschnitt	Dr. Hartmann BS	04.08.2012-03.08.2013	
DFG	Emmy-Noether-Programm, 1. Förderabschnitt	Dr. Rademacher BS	01.06.2012-31.05.2015	
DFG	Gottfried Wilhelm Leibniz-Programm	Prof. Fratzl Dr. Dunlop Dr. Wagermaier BM	01.09.2010-31.08.2017 01.09.2010-31.12.2011 01.01.2011-31.12.2012	2 Subprojekte am Institut
DFG	Exzellenzcluster UniCat: Unifying Concepts in Catalysis	Prof. Antonietti KC	01.01.2011-31.12.2015	Technische Universität Berlin Humboldt-Universität Berlin Freie Universität Berlin Universität Potsdam Fritz-Haber-Institut der Max-Planck-Gesellschaft Berlin

**Unteraufträge/Weiterleitungen and deutsche Forschungseinrichtungen**

BMBF/ Universität Potsdam	GoForsys Potsdam-Golm BMBF-Forschungs- einrichtung zur Systembiologie. Photosynthesis and Growth: A Systems Biology based Approach	Prof. Lipowsky TH	01.01.2007-31.12.2011	Universität Potsdam MPI für molekulare Pflanzenphysiologie
OOO 'Delta XXI Vek', Saratov	Training in nanotechnology and material science (interface phenomena)	Prof. Brezesinski GF	01.10.2010-31.12.2011	Universität Saratov, Russland
FU Berlin	Initiative: CSI-Center for Supramolecular Interactions	Dr. Hartmann BS	01.08.2011-31.07.2012	Freie Universität Berlin
FU Berlin	Biodistribution and Anti-inflammatory Efficacy of Glycosylated Gold Nanoparticles - NanoScale	Dr. Kennedy BS	01.01.2012-31.10.2012	Freie Universität Berlin

## Supranationale Einrichtungen

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
ESA/ESTEC	FASES - Fundamental and applied studies of emulsion stability	Dr. Miller GF	01.10.2003-31.07.2013	IENI, Genua, Italien Universität Aix-Marseille Universität Compiègne, France Universität Complutense Madrid Universität Florenz; IPF, Dresden CNR - Consiglio Nazionale delle Ricerche, Italien; Eni S.p.A., Italien Aristotele Universität Thessaloniki
ESA/ESTEC	Topical Team: Foam and Emulsion Technologies- Concerted Action Team (FETCAT)	Dr. Miller GF	01.10.2003-31.12.2013	CNR, Genua, Italien Universität Florence, Italien Universität Marseille, Frankreich Universität Compiègne, Frankreich Murmansk State Technical University, Russland; Aristotele Universität Thessaloniki, Griechenland Universität Stockholm, Schweden EniTecnologie, Milano, Italien University College Dublin, Irland Nestlé Research Center, Lausanne, Schweiz; Wageningen University, Niederlande; University of Manchester Institute of Science and Technology, Großbritannien Institute of Food Research, Norwich, Großbritannien; Norwegian University of Science and Technology, Trondheim, Norwegen St. Petersburg State University, Russland; Université d'Orsay et CNRS, Frankreich; Université de Marne La Vallée, Frankreich Unilever, Großbritannien Norsk Hydro ASA, Norwegen IPF, Dresden
NATO	Nato-Collobarotive Linkage Grant, as coordinator, for the project "Smart Textile Materials with Inherent Remote Identification Ability"	Prof. Möhwald Dr. Shchukin GF	29.06.2009-28.06.2011	St. Petersburg State University of Technology, Russland
<b>Stiftungen</b>				
Körper-Stiftung	Körper-Preis 2007	Prof. Seeberger BS	01.01.09.2007-	Universität München Internationale Universität Bremen
VW-Stiftung	Formation of bi-functional coatings on metals based on self-locating nano- and microcontainers	Dr. Shchukin GF	01.08.2008-31.07.2011	Universität Paderborn Fraunhofer Institut für Schicht- und Oberflächentechnik, Braunschweig
GIF-German Israeli Foundation	Gene manipulation of amorphous biomineralogy	Dr. Aichmayer BM	01.01.2009-31.12.2011	Ben Gurion University, Israel
GIF-German Israeli Foundation	Exponential Amplification of Diagnostic Signals	Prof. Seeberger BS	01.01.2011 - 31.12.2013	Tel Aviv University

## Ausländische Forschungsfinanzierer

Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
Schweizer Nationalfonds	The Role of Glycosylphosphatidylinositol Oligosaccharides in Malaria	Prof. Seeberger BS	01.01.2009-30.05.2011	
Schweiz. Eid- genossenschaft (Labor Spiez)	Impact of microreactors on the Chemical Weapons Convention's Chemistry-Screening of some basis key-reactions	Prof. Seeberger BS	01.01.2010-31.03.2011	
<b>Industrie</b>				
Beiersdorf AG	Glycomics der Haut	Prof. Seeberger BS	01.12.2009-31.01.2011	
AstraZeneca UK Unlimeted	Synthetic Organic Chemistry in Continuous Flow	Prof. Seeberger BS	01.12.2009-30.11.2011	
Merck	HPLC-Collaboration Agreement	Prof. Seeberger BS	07.10.2010-06.10.2011	
Ancora Pharma	GPI	Dr. Lepenies BS	01.03.2011-29.02.2012	
JSR Corporation	Visiting Scientist Agreement	Prof. Antonietti KC	01.10.2011-30.09.2013	
Lam Research AG	Investigations on the Fundamental of Marangoni Convection with a Focus on it's Application for Wafer Surfaces Cleaning Process	Dr. Riegler GF	01.12.2011-30.11.2013	LAM Research AG, Austria



Zuwendungs- geber	Thema	Projektleiter	Bewilligungszeitraum	Zusammenarbeit mit
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### Sonstige deutsche Forschungsfinanzierer

DAAD	Projektbezogener Personenaustausch mit Portugal	Dr. Shchukin GF	2011 und 2012	Universidade de Aveiro, Portugal
DAAD	Projektbezogener Personenaustausch mit Portugal	Dr. Titirici KC	2011 und 2012	University of Evora (Portugal)
DAAD	Projektbezogener Personenaustausch mit Frankreich (PROCOPE)	Dr. Dimova TH	2011 und 2012	Université de Bordeaux 1, Pessac, France
DAAD	Projektbezogener Personenaustausch mit Argentinien	Dr. Wagermaier BM	2012 und 2013	Institute of Materials Science and Technology (INTEMA), University of Mar del Plata–National Research Council (CONICET), J. B. Justo 4302, 7600 Mar del Plata, Argentina

# Ausgewählte Veranstaltungen

## Selected Events

- **10.-12. March 2011 The 5th Glycan Forum in Berlin**  
Harnack-Haus, Berlin
- **22.-23. June 2011 Trends in Colloid & Interface Science TICl**  
MPI of Colloids and Interfaces
- **24. Juni 2011 Alumni Meeting**  
MPI of Colloids and Interfaces
- **4.-9. September 2011 European Colloid and Interface Society ECIS 2011**  
Technical University Berlin
- **10. September 2011 Open Day**  
MPI of Colloids and Interfaces
- **11. November 2011 Max-Planck-Tag**
- **19.-21. March 2012 6th Glycan Forum in Berlin**  
Harnack-Haus, Berlin
- **02.-04. April 2012 Meeting of the Scientific Advisory Board**  
MPI of Colloids and Interfaces
- **26. April 2012 GirlsDay 2012**  
MPI of Colloids and Interfaces
- **8. June 2012 Alumni Meeting**
- **18.-20. June 2012 The 509th Wilhelm and Else Heraeus-Seminar on Physics of the Extracellular Matrix**
- **21. June 2012 Kick off Meeting – IMPRS on Multiscale Bio-Systems**
- **19.-21. September 2012 Biomembrane Days in Potsdam**  
On the occasion of Wolfgang Helfrich's 80th birthday
- **12. October 2012 1st Biomolecular Systems Day**
- **24.-26. October 2012 Minerva Symposium – The Biophysics of Cells and Tissues**

# Wissenschaftliche Abschlüsse

## Scientific Degrees

### Diploma Theses

#### **Department of Biomaterials:**

Reinecke, A.: Exploring Molecular Gradients in Byssal Threads of Mytilus Mussels. Universität Potsdam (2011).

#### **Department of Biomolecular Systems:**

Hütter, J.: Functional characterization of various murine antigen-presenting cell subsets and evaluation of their utility for C-type lectin receptor-mediated targeting. Freie Universität Berlin (2011).

Lewandowski, A.: Glycoproteomics investigation of seminal fluid from oligoasthenoteratozoospermia (OAT) patients. Technische Universität Berlin (2011).

#### **Department of Interfaces**

Keller, J.: SyntWechselwirkungen des antimikrobiellen Peptids NK-2 mit Lipid Mono- und Bischen. Universität Potsdam. (2012).

### Master Theses

#### **Department of Biomolecular Systems:**

Matthies, S.: Synthesis of Sialic Acids via the Macrophomate Synthase-Catalyzed Pyruvate Aldol Reaction. Freie Universität Berlin (2011).

Kozakowski, M.: Synthese von Glykan - GPI Strukturen. Freie Universität Berlin (2011).

Alagesan, K.: Novel methods for monosaccharide identification and quantitation based on Liquid Chromatography-Electrospray Ionisation (LC-ESI) ion trap mass spectrometry. University of Oulu, Finland (2012).

Michel, D.: Synthesis of Peptide- and Glycopeptidethioesters for Semisynthesis of the Prion Protein. Freie Universität Berlin (2012).

Grube, M.: Synthese von galaktosyl-verzweigten Strukturen des Glycosylphosphatidylinositols (GPI) von Trypanosoma brucei. Technische Universität Clausthal (2012).

Oetter, K.-M.: Changes in Antigen-Specific IgG Fc N-Glycosylation upon Vaccination. A Comparison of Mice and Men using LC-ESI-MS/MS. Freie Universität Berlin (2012).

Sinaida, L.: The Two Protecting Group-Approach for the Solid Phase Synthesis of Sequence-Defined Oligomers. Freie Universität Berlin (2012).

Vorreiter, F.: Skin cancer glycomics. Beuth Hochschule Berlin (2012).

Wamhoff, E.: Structure-based in silico design and synthesis of mannose-based ligands for human Langerin. Universität Lübeck (2012).

#### **Department of Colloid Chemistry**

Höhne, P.: Zum Einfluss der Gasphase auf die Emulsionspolymerisation von Styrol. Universität Potsdam (2011).

Jeong, S.: Biomass derived N-Doped Porous Carbon Materials. Universität Potsdam (2011).

Yazdankbakhsh, F.: Mesoporous Melamine Formaldehyde Resin of Ab/Absorption Applications. Universität Potsdam. (2012).

#### **Department of Interfaces**

Pinchasik, B.: Gradient Polymer Coatings for Induced Motion of Microcapsules. HU Berlin (2012).

### PhD Theses

#### **Department of Biomaterials:**

Krauß, S.: Characterization of the relations between structure and deformation behavior in deer antler and turtle shell. Universität Potsdam (2011).

Prass, J.: Verformung hexagonal geordneter, mesoporöser Materialien durch die Wechselwirkung mit Fluiden. Untersuchungen mittels Kleinwinkelröntgenbeugung. Universität Potsdam (2011).

Schenk, S.: On the Structure of Bio-Inspired Calcite-Polymer Hybrid Crystals. Universität Potsdam (2011).

**Department of Biomolecular Systems:**

- Esposito, D.: Automated Solid-Phase Oligosaccharide Synthesis of Conjugation-Ready Glycans. ETH Zürich (2011).
- Guo, X.: I. Synthetic Bacterial Lipopolysaccharide Core Structures as Vaccine Candidates against Chlamydia trachomatis and Yersinia pestis. II. Synthesis of a Fungal Galectin Epitope Trisaccharide and the HNK-1 Epitope Trisaccharide. ETH Zürich (2011).
- Laurino, P.: Photochemical Transformations in Continuous Flow Devices. ETH Zürich (2011).
- Tsai, Y.-H.: A General and Convergent Strategy for Synthesis of Glycosylphosphatidylinositols. Freie Universität Berlin (2012).

**Department of Colloid Chemistry:**

- Brummelhuis, N. ten: Self-Assembly of Cross-Linked Polymer Micelles into Complex Higher-Order Aggregates. Universität Potsdam (2011).
- Chen, X.: Neuartige Synthese magnetischer Nanostrukturen: Metallcarbide und Metallnitride der Übergangsmetalle Fe/Co/Ni. Universität Potsdam (2011).
- Fellinger, T.-P.: Hydrothermal and Ionothermal Carbon Structures: From carbon negative materials to energy applications. Universität Potsdam (2011).
- Kopetzki, D.: Exploring Hydrothermal Reactions - From Prebiotic Synthesis to Green Chemistry. Universität Potsdam (2011).
- Krapner, A.: Neuartige Synthese magnetischer Nanostrukturen: Metallcarbide und Metallnitride der Übergangsmetalle Fe/Co/Ni. Universität Potsdam (2011).
- Kubo, S.: Nanostructured Carbohydrate-Derived Carbonaceous Materials. Universität Potsdam (2011).
- Lange, C.: Mineral deposition and maturation during bone development. Universität Potsdam (2011).
- Popović, J.: Novel lithium iron phosphate materials for lithium-ion batteries. Universität Potsdam (2011).
- Tan, I. S.: Toward Greener Stationary Phases: Thermoresponsive and Carbonaceous Chromatographic Supports. Universität Potsdam (2011).
- Unterlass, M.: From Monomer Salts and their Tectonic Crystals to Aromatic Polyimides - Development of neoteric synthesis routes. Universität Potsdam (2011).
- Valverde Serrano, C.: Self-assembly behavior in hydrophilic block copolymers. Universität Potsdam (2011).
- Weber, N.: Die Synthese schizomorpher Copolymer-Latexteilchen. Universität Potsdam (2011).
- Zhao, L.: Sustainable Approaches towards Novel Nitrogen-Doped Carbonaceous Structures. Universität Potsdam (2011).
- Su, F.: Graphitic Carbon Nitride as a Metal-Free Catalyst for Photosynthesis, Amine Oxidation and Base-Mediated Reactions. Universität Potsdam (2012).
- Falco, C.: Sustainable Biomass-Derived Hydrothermal Carbons for Energy Applications. Universität Potsdam (2012).
- Jeromenok, J.: Polymers from the Natural Product Betulin; A Microstructural Investigation. Universität Potsdam (2012).
- Milke, B.: Synthese von Metallnitrid- und Metalloxinitridnanopartikeln für energierelevante Anwendungen. Universität Potsdam (2012).
- Wilke, A.: Synthese und Charakterisierung von mesoporösen Polymernetzwerken. Universität Potsdam (2012).
- Wohlgemuth, S.: Functional Nanostructured Hydrothermal Carbons for Sustainable Technologies: Heteroatom Doping and Superheated Vapor. Universität Potsdam (2012).

### ***Department of Interfaces***

- Berg, J.: Size-dependent Wetting Behavior of Organic Molecules on Solid Surfaces. Universität Potsdam (2011).
- Dittrich, M.: Physical-Chemical Characterization of New Lipids Designed for Non-Viral Gene Transfection. Universität Potsdam (2011).
- Fix, D.: Non-invasive in-situ observation of pitting corrosion on aluminum. Universität Potsdam (2011).
- Früh, J.: Structural Change of Polyelectrolyte Multilayers under Mechanical Stress. Universität Potsdam (2011).
- Haase, M.: Modification of Nanoparticle-Surfaces for Emulsion Stabilization and Encapsulation of Active Molecules for Anti-Corrosive Coatings (2011).
- Kohler, D.: Asymmetric Particles for Pulmonary Drug Delivery. Universität des Saarlandes (2011).
- Wegerich, F.: Engineered human cytochrome c: Investigation of superoxide and protein-protein interaction and application in bioelectronic systems. Universität Potsdam (2011).
- Borisova, D.: Feedback active coatings based on mesoporous silica containers. Universität Potsdam (2012).
- Hörnke, M.: Beta-Sheet Formation of Amyloidogenic Model Peptides at Hydrophobic-Hydrophilic Interfaces. Universität Potsdam (2012).
- Karpitschka, S.: Thin liquid films with compositional gradients: Sessile drop noncoalescence and other effects. Universität Potsdam (2012).
- Latnikova, A.: Polymeric capsules for self-healing anticorrosion coatings. Universität Potsdam (2012).
- Madaboosi Srinivasan, N.: Engineering hyaluronic acid / poly L-lysine films as a platform for controlling cell behavior. Universität Potsdam (2012).
- Music, N.: Thermodynamics, kinetics and rheology of surfactant adsorption layers at water/oil interfaces. Universität Potsdam (2012).
- Schneider, J.: Characterisation of Single- and Multibubble Cavitation through Analysis of Molecular, Atomic and Ionic Line Emissions. Universität Potsdam (2012).
- Weber, C.: Nucleation at nano-structured substrates. TU Berlin (2012).

### ***Department of Theory & Bio-Systems***

- Bierbaum, V.: Chemomechanical coupling and motor cycles of the molecular motor myosin V. Universität Potsdam (2011).
- Deuster v., Carola: Simulations on several scales: Studies on protein-ligand binding kinetics and on the antimicrobial peptide NK-2. Universität Potsdam (2011).
- Kittner, M.: Folding and Aggregation of Amyloid Peptides. Universität Potsdam (2011).
- Berger, Florian: Impact of translation kinetics on protein folding and ribosome traffic. Universität Potsdam (2012).
- Bezlyepkina, Natalya: Domain formation in model lipid membranes induced by electrofusion of giant vesicles. Universität Potsdam (2012).
- Deneke, C.: Theory of mRNA degradation. Universität Potsdam (2012).
- Keller, P.: Mathematical Modeling of Molecular Motors. Universität Potsdam (2012).
- Patarai, S.: Partitioning of cytochrome c in multicomponent lipid membranes. TU Berlin (2012).
- Rouhiparkouhi, T.: Adhesion-induced phase behavior of multi-component membranes. TU Berlin (2012).
- Wehle, W.: Entwicklung und Untersuchung eines atomistischen Modells des Glykosylphosphatidylinositol-Ankers. Universität Potsdam (2012).

# Personalien

## Appointments and Honors

### Habilitations

#### *Department of Biomaterials*

Weinkamer, R.: Processes in Living Bone and the Resulting Structural Changes - Computational Studies. Humboldt-Universität zu Berlin (2012).

#### *Department of Theory & Bio-Systems*

Dimova, R.: Probing the Membrane Nanoregime with Optical Microscopy. Universität Potsdam (2011).

### 2011

#### **Ehrungen/Mitgliedschaften/Honorarprofessuren**

#### **Honors/Memberships/Honorary Professorships**

Prof. Dr. Markus Antonietti: Director of the Department of Colloid Chemistry received an honorary doctorate from Stockholm University.

Prof. Dr. Markus Antonietti: Director of the Department of Colloid Chemistry received the Victor Grignard-Georg Wittig Prize of the "Gesellschaft Deutscher Chemiker (GDCh)" and "Societe Chimique de France (SCF)"

Dr. Cristina Giordano: Group Leader in the Department of Colloid Chemistry has been awarded the Richard-Zsigmondy-Scholarship for her excellent scientific qualification.

Prof. Dr. Peter H. Seeberger: Director of the Department of Biomolecular Systems is awarded the Roy L. Whistler Award 2012

### 2012

Prof. Dr. Peter Fratzl: Director of the Department of Biomaterials has been elected Fellow of the Materials Research Society (MRS).

Prof. Dr. Helmuth Möhwald: Director of the Department of Interfaces has been elected to become a member of the Academia Europaea (The Academy of Europe).

Daniel Kopetzki: Postdoctoral Student in the Department of Biomolecular Systems has been awarded the "Brandenburgischer Nachwuchswissenschaftlerpreis" 2012

### 2011

#### **Ruf an eine Universität**

#### **Appointments**

Dr. habil. Ingo Burgert: Group Leader in the Department of Biomaterials accepted a position as Full Professor of Wood-Based Materials at the ETH Zürich.

### 2012

Dr. Andre Skirtach: Group Leader in the Department of Interfaces accepted a position as professor at the University Gent.

Dr. Dmitry Shchukin: Group Leader in the Department of Interfaces accepted a position as Professor at the Stephenson Institute for Renewable Energy at the University of Liverpool

Dr. Maria-Magdalena Titirici: Group Leader in the Department of Colloid Chemistry accepted a position as Reader in Materials Science at the Queen Mary University London

# Wissenschaftliche Veröffentlichungen

## Publications

### Biomaterials 2011

- Andert, J., E. Wessen, G. Borjesson and S. Hallin: Temporal changes in abundance and composition of ammonia-oxidizing bacterial and archaeal communities in a drained peat soil in relation to N<sub>2</sub>O emissions. In: *Journal of Soils and Sediments* 11, 8, 1399-1407 (2011).
- Baumgartner, J. and D. Faivre: Magnetite biomineralization in bacteria. In: *Molecular Biomineralization: Aquatic Organisms Forming Extraordinary Materials*. (Eds.) Müller, W. E. G. Bacterial in progress in molecular and subcellular biology 52. Springer, Heidelberg (2011) 3-27.
- Blunck, U. and P. Zaslansky: Enamel Margin Integrity of Class I One-bottle All-in-one Adhesive-based Restorations. In: *Journal of Adhesive Dentistry* 13, 1, 23-29 (2011).
- Bratashov, D. N., A. Masic, A. M. Yashchenok, M. F. Bedard, O. A. Inozemtseva, D. A. Gorin, T. Basova, T. K. Sievers, G. B. Sukhorukov, M. Winterhalter, H. Möhwald and A. G. Skirtach: Raman imaging and photodegradation study of phthalocyanine containing microcapsules and coated particles. In: *Journal of Raman Spectroscopy* 42, 10, 1901-1907 (2011).
- Burgert, I. and J. W. C. Dunlop: Micromechanics of cell walls. In: *Mechanical Integration of Plant Cells and Plants*. (Eds.) Wojtaszek, P. Springer, Berlin (2011) 27-52.
- Charilaou, M., K. K. Sahu, D. Faivre, A. Fischer, I. Garcia-Rubio and A. U. Gehring: Evolution of magnetic anisotropy and thermal stability during nanocrystal-chain growth. In: *Applied Physics Letters* 99, 18, Seq. No.: 182504 (2011).
- Claeson, K. M. and M. N. Dean: Cartilaginous fish skeletal anatomy. In: *Encyclopedia of fish physiology: from genome to environment*. (Eds.) Farrell, A. P. Academic Press, San Diego (2011) 419-427.
- Clarke, D. R. and P. Fratzl: Annual Review of Materials Research. Materials science of biological systems. *Annual Reviews*, Palo Alto (2011) 448 S.p.
- Cornelius, T. W., D. Carbone, V. L. R. Jacques, T. U. Schulli and T. H. Metzger: Three-dimensional diffraction mapping by tuning the X-ray energy. In: *Journal of Synchrotron Radiation* 18, 413-417 (2011).
- Dean, M. N.: Cartilaginous fish skeletal tissues. In: *Encyclopedia of fish physiology: from genome to environment*. (Eds.) Farrell, A. P. Academic Press, San Diego (2011) 428-433.
- Fernandes, F. M., I. Manjubala and E. Ruiz-Hitzky: Gelatin renaturation and the interfacial role of fillers in bionanocomposites. In: *Physical Chemistry Chemical Physics* 13, 11, 4901-4910 (2011).
- Fischer, A., M. Schmitz, B. Aichmayer, P. Fratzl and D. Faivre: Structural purity of magnetite nanoparticles in magnetotactic bacteria. In: *Journal of the Royal Society Interface* 8, 60, 1011-1018 (2011).
- Dunlop, J. W. C., R. Weinkamer and P. Fratzl: Artful interfaces within biological materials. In: *Materials Today* 14, 3, 70-78 (2011).
- Gilow, C., E. Zolotoyabko, O. Paris, P. Fratzl and B. Aichmayer: Nanostructure of Biogenic Calcite Crystals: A View by Small-Angle X-Ray Scattering. *Crystal Growth & Design* 11, 6, 2054-2058 (2011).
- Graf, P., A. Mantion, A. Haase, A. F. Thünemann, A. Masic, W. Meier, A. Luch and A. Taubert: Silicification of Peptide-Coated Silver Nanoparticles-A Biomimetic Soft Chemistry Approach toward Chiral Hybrid Core-Shell Materials. In: *ACS Nano* 5, 2, 820-833 (2011).
- Haase, A., H. F. Arlinghaus, J. Tentschert, H. Jungnickel, P. Graf, A. Mantion, F. Draude, S. Galla, J. Plendl, M. E. Goetz, A. Masic, W. Meier, A. F. Thünemann, A. Taubert and A. Luch: Application of Laser Postionization Secondary Neutral Mass Spectrometry/Time-of-Flight Secondary Ion Mass Spectrometry in Nanotoxicology: Visualization of Nanosilver in Human Macrophages and Cellular Responses. In: *ACS Nano* 5, 4, 3059-3068 (2011).
- Haase, A., J. Tentschert, H. Jungnickel, P. Graf, A. Mantion, F. Draude, J. Plendl, M. E. Goetz, A. Galla, A. Masic, A. F. Thünemann, A. Taubert, H. F. Arlinghaus and A. Luch: Toxicity of silver nanoparticles in human macrophages: uptake, intracellular distribution and cellular responses. In: *Journal of Physics: Conference Series* 304, Seq. No.: 012030 (2011).
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