### Forschung der Chemischen Industrie

#### **Invited Speakers**



Dr. Paul Alsters DSM N.V., Heerlen, Netherlands

Present Position: Principal Scientist Chemocatalysis

Research Interests: Development of scalable catalytic break-through methods

for new or existing products (incl. materials).



Dr. Christian Funke Bayer CropScience, Monheim

Present Position: Head of Process Research Monheim

Research Interests: Process Chemistry



Dr.-Ing. Karsten Wilbrand
Shell Global Solutions (Deutschland), Hamburg

**Present Position:** Manager Innovation Alternatives

Research Interests: Future Mobility and Alternative Fuels/Drivetrains



Dr. Horst Beck Henkel Adhesive Technologies, Düsseldorf

Present Position: Head of Adhesives Research Bio-Renewables (Corp. Director)

Research Interests: Renewable Raw Materials for Adhesives



Dr. Matthias Nettekoven F. Hoffmann-La Roche Ltd, Basel, Switzerland

**Present Position:** Principal Scientist in Medicinal Chemistry

Research Interests: Lead Identification and Lead Optimization in Drug Discovery Chemistry



Dr. Andreas Fischer BASF SE, Ludwigshafen

Present Position: Vice President - Battery Materials Research

Research Interests: Electrochemistry, Batteries, Fuel Cells



# Forschung der Chemischen Industrie

Industry Research - Introduced to You.

May 12<sup>th</sup> 2016

Lecture Hall Building, Chemistry Institutes of the WWU Münster



Dr. Paul Alsters DSM N.V. Catalysis within DSM: Improving, Changing, and Enabling Chemicals Manufacture

Dr. Christian Funke Bayer CropScience Modern Agrochemicals: Innovative Solutions for Chemical Challenges

**Dr.-Ing. Karsten Wilbrand** Shell Global Solutions Shell GTL Technology - Clean Hydrocarbon Molecules Designed from Natural Gas

PhD Poster Talks WWU Münster Selected contributions on current research projects

3:30 pm Poster Session
Coffee break, discussion, snacks

4:30 pm Dr. Horst Beck Henkel Adhesive Technologies Modern Developments in Adhesive Technology F. Hoffmann-La Roche

Dr. Matthias Nettekoven Ltd

From idea to medicine
Dr. Andreas Fischer BASF SE

Innovative Battery Materials Drive Electromobility

Reception "Sektempfang"













### FoChin 2016 - Posterbeiträge aus den Arbeitsgruppen an der WWU Münster

## Dielmann · Erker · Esselen · Fernandez · Gilmour · Glorius · Hahn · Haufe · Humpf · Jose · Karst · Klempnauer · Leker Marohn · Mootz · Müller · Neugebauer · Ravoo · Rentmeister · Schönhoff · Studer · Uhl · Waller · Winter · Wünsch

| 01 | Barton, Dennis         | On the Role of Metal Atoms in On-Surface Coupling Reactions  |
|----|------------------------|--|
| 02 | Bauer, Oliver Bolle    | Quantitative bioimaging of platinum via on-line isotopic dilution-laser ablation-inductively coupled plasma-mass spectrometry (ID-LA-ICP-MS) |
| 03 | Böcker, Jana K.        | Light-activated protein splicing   |
| 04 | Böckermann, Till       | Synthesis of Novel Cyclodextrins -  19F-MRT Contrast Agents and Liquid Crystals  |
| 05 | Buß, Florenz           | Reversible carbon dioxide binding with electron-rich phosphines  |
| 06 | Bütergerds, Dörte      | pH-dependent growth behavior of polyelectrolyte multilayers  |
| 07 | Dehling, Eva           | Mapping protein-protein interactions in non-ribosomal peptide synthetases  |
| 08 | Dietrich, Dörthe       | LA-ICP-MS study to determine the distribution of cerium oxide nanoparticles after intratracheal instillation                                 |
| 09 | Focke, Christine       | Modified mycotoxins - production and metabolism studies  |
| 10 | Fritz, Eva-Corinna     | Addressable gold surfaces - From supramolecular polymer brushes to a light-responsive nanoparticle aggregation                               |
| 11 | Gouverneur, Martin     | Electrophoretic NMR – A systematic study comparing Ionic transference numbers in Ionic Liquids   |
| 12 | Haupenthal, Sabrina    | Impact of genotoxic asarone isomers on DNA damage associated signaling cascades in liver carcinoma cells                                     |
| 13 | Holland, Mareike, Dr.  | The organocatalytic Friedel-Crafts reaction of <i>N</i> -methylindole: An unusual selectivity reversal                                       |
| 14 | Honacker, Christian    | Germanium-Chlorine Bond Activation <i>via</i> Hydroalumination with HAl'Bu <sub>2</sub>  |
| 15 | Honeker, Roman         | Trifluoromethylthiolation of N-Heteroarenes and Alkenes  |
| 16 | Jakobs, Anke           | Inhihition of the transcription factor C/EBPbeta by sesquiterpene lactone Helenalinacetate   |
| 17 | Kasnatscheew, Johannes | The truth about high voltage stability of state of the art liquid electrolytes   |
| 18 | Klöcker, Hans          | Synthesis and Reactivity of 3-H-Phosphaallenes   |
| 19 | Kolbeck, Eva           | How to communicate chemistry? -<br>A Qualification Offer for PhD Students of the SFB 858   |
| 20 | Kolek, Martin          | Polymers with Redox-active Functional Groups as Cathode Material in Rechargeable Batteries   |
| 21 | Krupski, Sergei        | Unusual reaction pathways under frustrated P/B Lewis pair conditions   |
| 22 | Leifert, Dirk          | Electron Catalysis –<br>Synthesis of 2-perfluoroalkylindol-3-imines  |
|    |                        |  |

| 23 | Lied, Fabian             | Employing Pd-catalyzed C-H Arylation in Multicomponent-Multicatalyst Reactions (MC)*R: Domino Synthesis of Dihydrobenzoquinolines                             |
|----|--------------------------|---|
| 24 | Matern, Julian C. J.     | Chemical protein modification and other biotechnological applications: Understanding a highly optimized intein  |
| 25 | Meier, Martin            | Heteronuclear metal complexes from coordinated ß-functionalized isocyanides   |
| 26 | Metternich, Jan Benedikt | One Photocatalyst, <i>n</i> Activation Modes Strategy for Cascade Catalysis: Emulating Coumarin Biosynthesis with (-)-Riboflavin                              |
| 27 | Müller, Sebastian Lars   | Novel GluN2A selective ligands:<br>Concept, synthesis, and biological evaluation  |
| 28 | Muttach, Fabian          | A biocatalytic cascade reaction for versatile one-pot modification of RNA   |
| 29 | Nienberg, Christian      | Development of screening assays for human protein kinase CK2 using the advantages of Click Chemistry  |
| 30 | Özgün, Thomas            | Frustrated Lewis Pairs: A New Kinetic Approach  |
| 31 | Ramella, Vincenzo        | Palladium-Catalyzed Difunctionalization of Indoles and Benzofurans  |
| 32 | Rödle, Alexander         | Self-Assembly of functional $\boldsymbol{\pi}\text{-conjugated}$ materials  |
| 33 | Rottkord, Ulrike         | Structure-activity studies with synthesized derivatives in comparison to the nephrotoxic mycotoxin Ochratoxin A – hints for understanding the mode of action? |
| 34 | Rühling, Andreas         | Modular bidentate hybrid NHC-thioether ligands for the stabilization of palladium nanoparticles in various solvents   |
| 35 | Schmidt, Alexander       | The influence of square-planar Pt and Pd complexes on G-quadruplex DNA  |
| 36 | Schüürmann, Jan          | NADPH Cofactor Regeneration with Surface Displayed Dehydrogenases   |
| 37 | Segler, Marwin           | Modeling Chemical Reasoning to Predict and Invent Reactions   |
| 38 | Simon, Hauke             | Using machine learning to identify business opportunities from online content   |
| 39 | Sinha, Narayan           | Synthesis of Nanometer-Sized Cylinder-Like Assemblies Featuring Tris-NHC Ligands and Their Postsynthetic Modifications via Photochemical [2+2] Cycloaddition  |
| 40 | Theiler, Stefanie        | A new naphthalene derived building block for the pharmacokinetic optimization of PET-tracers  |
| 41 | Türkyilmaz, Fatma        | TEMPO Radical Addition to Conjugated Boryldienes  |
| 42 | Uebel, Thomas            | Development of a long-term cytotoxicity in vitro cell model using naturally occurring alkenylbenzenes   |
| 43 | van Kempen, Johannes     | New chiral building blocks for the synthesis and structural assignment of Asitrilobin A, an Annonaceae acetogenin, potent anti-cancer agent                   |
| 44 | Wiemers-Meyer, Simon     | Reconsideration of Lithium-Ion Battery Electrolyte Stability - Quantification of Degradation Products by a Novel NMR Spectroscopy Method                      |
|    |                          |   |