

WESTFÄLISCHE  
WILHELMS-UNIVERSITÄT  
MÜNSTER

6th  
**MÜNSTER SYMPOSIUM**  
ON  
**COOPERATIVE EFFECTS  
IN CHEMISTRY**

**2015**  
**May 8th**

Münster,  
Germany

**Book of Abstracts**

**SFB**  
**858**



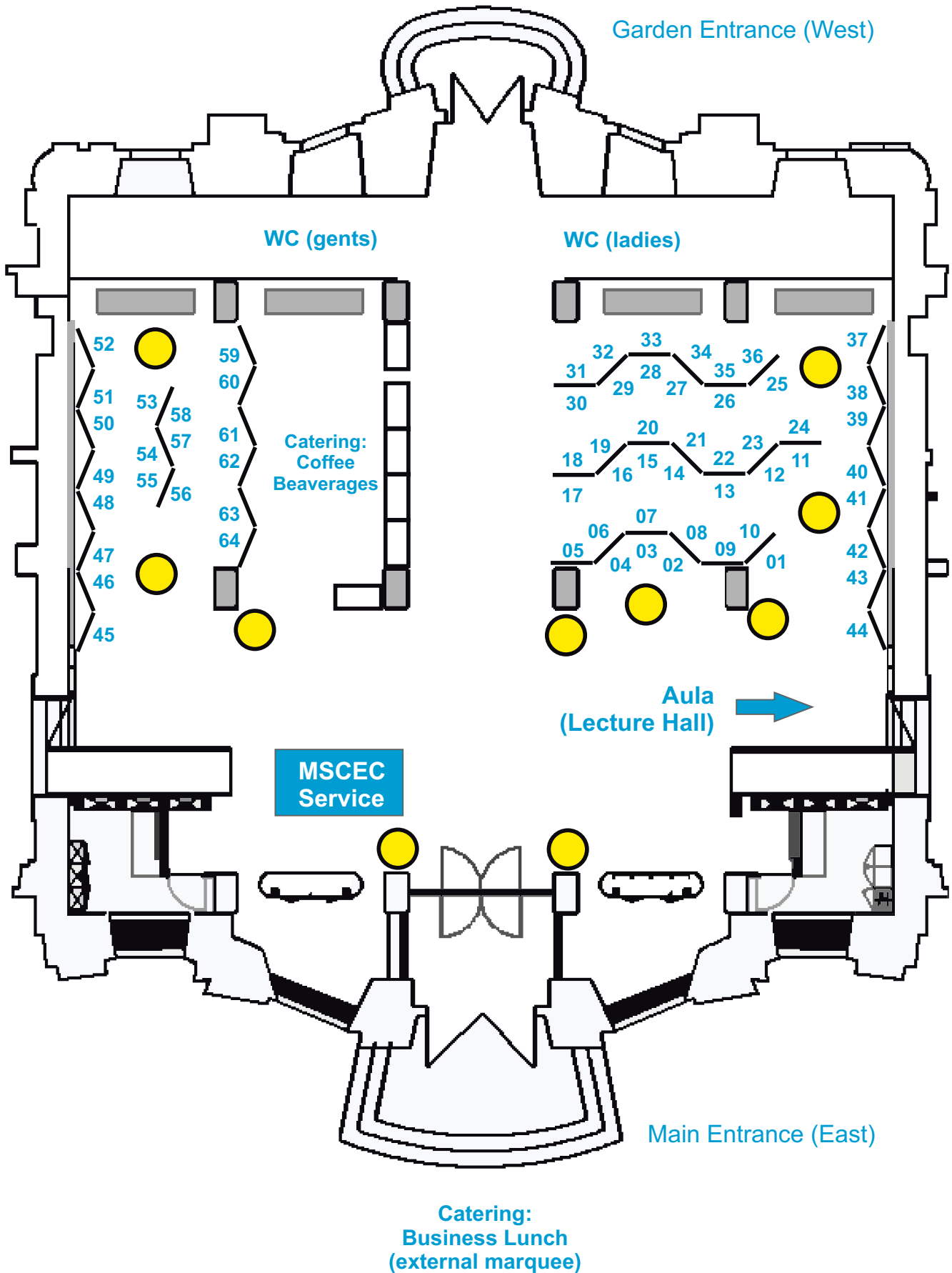


# Symposium Schedule

Friday, May 8<sup>th</sup> 2015, Aula, Schloss of the WWU Münster

- 9.55 am Opening  
**Armido Studer** Spokesperson of the SFB 858
- 10.00 am **Luisa De Cola** *Chair: Pol Besenius*  
Université de Strasbourg, FRA  
*Controlling and Imaging Self-Assembly*
- 11.00 am **Holger Braunschweig** *Chair: Fabian Dielmann*  
Julius-Maximilians-Universität Würzburg, GER  
*Single, Double, Triple, Chains:  
New Forays into Boron-Boron-Bond Formation*
- 12.00 Business Lunch
- 12.30 pm **Symposium Poster Session**
- 2.15 pm **MS\_CEC Young Researcher Awards 2015** *Chair: Frank Glorius*  
**Janina Bucher, MSc,**  
Organisch-Chemisches Institut, Ruprecht-Karls-Universität Heidelberg, GER  
**Dipl.-Chem. Sven Neudeck,**  
Institut für Anorganische Chemie, Georg-August-University Göttingen, GER
- 3.00 pm **Kendall N. Houk** *Chair: Mark P. Waller*  
University of California Los Angeles, USA  
*Computational Chemical Biology*
- 4.00 pm **Matthew J. Gaunt** *Chair: Ulrich Hennecke*  
University of Cambridge, UK  
*Palladium Catalyzed C–H Activation of Aliphatic Amines*
- 5.00 pm **MS\_CEC Poster Prize Announcements**  
Closing Remarks







# Poster Contributions

in alphabetical order (presenting author's surname)

Nr.	Authors	Institution	Title
01.	<u>Francisco Aznarez</u> , Steffen Cepa, F. Ekkehardt Hahn*	WWU Münster / SFB 858	Possible Cooperativity in the Synthesis of Ir <sup>III</sup> Complexes Bearing Chelating NH,NR-NHC/Phosphine Ligands
02.	<u>Katharina Bartels</u> , Benjamin Schinor, Günter Haufe*	WWU Münster	Phenylcyclopropylamines as Monoamine Oxidase Inhibitors and Precursors for <sup>18</sup> F-Radiolabelling
03.	<u>Kevin Baumgärtner</u> , Frank Rominger, Michael Mastalerz*	Ruprecht-Karls-Universität Heidelberg	Oxidative Ring-Opening of Triptycenes to Highly Functionalized Fluorene Derivatives
04.	<u>Srikrishna Bera</u> , Ramesh C. Samanta, Constantin G. Daniliuc, Armido Studer*	WWU Münster	Asymmetric Synthesis of Highly Substituted $\beta$ -Lactones via Oxidative Carbene Catalysis with LiCl as Cooperative Lewis Acid
05.	<u>Luis Bering</u> , Andrey P. Antonchick*	Max-Planck-Institut für molekulare Physiologie Dortmund / TU Dortmund	Regioselective Metal-Free Cross-Coupling of Quinoline N-Oxides with Boronic Acids
06.	Benedict Kemper, Yana R. Hristova, <u>Pol Besenius</u> *	WWU Münster / SFB 858 Johannes Gutenberg- Universität Mainz	Self-Assembly of Amphiphilic, Peptidic Au(I)-Phosphane Complexes into Luminescent Micelles in Water
07.	<u>Bernd Beutel</u> , Hanna Gerwien, SuNa Kim, Christian Kuhn, Benjamin Schinor, Jian Song, Reshma Vidyadharan, Lydia M. Sorokin, Günter Haufe*	WWU Münster	Fluorinated and Non-Fluorinated Non-Hydroxamate Matrix Metalloproteinase Inhibitors
08.	<u>Janina Bucher</u> , A. Stephen K. Hashmi*	Ruprecht-Karls-Universität Heidelberg	CO Extrusion in Homogeneous Gold Catalysis
09.	<u>Matthias Dahlkamp</u> , Werner Uhl*, Ernst-Ulrich Würthwein*	WWU Münster / SFB 858	The First Aluminum-Sulfur-Based Frustrated Lewis Pair
10.	<u>Michael Deffner</u> , Florian Schulz, Carmen Herrmann*, Holger Lange*	Universität Hamburg	Plasmonic and transport properties of gold nanoparticle clusters



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Nr.	Authors	Institution	Title
11.	<u>Abhishek Dewanji</u> , Sandip Murarka, Dennis P. Curran, Armido Studer*	WWU Münster / University of Pittsburgh	Phenyl Hydrazine as an Initiator for Base Promoted Direct Arene C-H Arylation: Replacing Transition Metal Catalysis by Electron Catalysis
12.	<u>Sven M. Elbert</u> , Frank Rominger, Michael Mastalerz*	Ruprecht-Karls-Universität Heidelberg	A Highly Porous Molecular Cube Based on a Rigid $C_{3v}$ -Symmetric Tris(salicylaldehyde)
13.	<u>Martin Elstner</u> *	Technische Universität Dresden	Chemical information processing materials
14.	<u>Tobias Gensch</u> , Suhelen Vásquez-Céspedes, Da-Gang Yu, Frank Glorius*	WWU Münster	Cobalt(III) catalyzed C–H-Cyanation, Halogenation and Allylation
15.	<u>Lynn Groß</u> , Annette U. Wurl, Alejandra Escribano, Jürgen Heck, Christian Klinke, Carmen Herrmann*	Universität Hamburg	Non-covalent functionalization of carbon nanotubes with photoswitches: Probing changes in the photoswitch's dipole moments
16.	<u>Marcel Hartmann</u> , Armido Studer*	WWU Münster	Preparation of Phenanthrenes from <i>ortho</i> -amino-biphenyls and alkynes <i>via</i> base-promoted-homolytic aromatic substitution
17.	<u>Markus Hellmund</u> , Katharina Achazi, Falko Neumann, Bala N. S. Thota, Nan Ma, Rainer Haag*	Freie Universität Berlin	Influence of charge density and size of hyperbranched polyglycerol amines during <i>in vitro</i> studies
18.	<u>Lena Hesping</u> , Anup Biswas, Constantin G. Daniliuc, Christian Mück-Lichtenfeld, Armido Studer*	WWU Münster	Stereoselective Lewis Base Catalyzed Formal 1,3-Dipolar Cycloaddition of Azomethine Imines with Mixed Anhydrides
19.	<u>Oldamur Hollóczki</u> , Barbara Kirchner*	Rheinische Friedrich- Wilhelms-Universität Bonn	Chemical absorption of carbon dioxide in imidazolium acetate ionic liquids
20.	<u>Sinaida Igde</u> , Hendrik Wöhlk, Susanna Röblitz, Marco Reidelbach, Markus Weber, Laura Hartmann*	Heinrich-Heine-Universität Düsseldorf	Identifying multivalent binding kinetics of precision Glycomacromolecules: A kinetic study using kinITC

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21.	<u>Era Kapourani</u> , Dirk Steinhilber, Torsten Rossow, Rainer Haag*	Freie Universität Berlin	Dendritic Polyglycerols for the Bioorthogonal Encapsulation of Bioactive Substrates
22.	<u>Kevin Klahr</u> , Ibrahim Yentar, Danny Schlüns, Christian Mück-Lichtenfeld, Johannes Neugebauer*	WWU Münster / SFB 858	Subsystem-DFT potential energy curves for weakly interacting systems
23.	<u>Felix Klotter</u> , Armido Studer*	WWU Münster	“From red wine to cannabis!” - Palladium-catalyzed decarboxylative $\gamma$ -arylation as general tool for divergent total synthesis
24.	<u>Kai R. Korsching</u> , Dirk Schlüter, Vladimir A. Azov*	Universität Bremen	Calix[4]arene-Monopyrrolotetra-thiafulvalene Molecular Tweezers for Recognition of Electron Deficient Guests
25.	<u>Felix Krätzschar</u> , Martin Kassel, Daniel Delony, Alexander Breder*	Georg-August-Universität Göttingen	Selenium-Catalyzed C(sp <sup>3</sup> )-H Acyloxylation of Allylated Benzoic Acids
26.	<u>Myungmo Lee</u> , Chiara Cabrele, Oliver Reiser*	Universität Regensburg	Visible Light Photoredox--catalyzed Desulfurization of Cysteine and Disulfide Compounds
27.	<u>Dirk Leifert</u> , Armido Studer*	WWU Münster	Electron as a Catalyst – Synthesis of Fluorenones, Phenanthridines and Silafluorenes
28.	<u>Linda Lempke</u> , Norbert Krause*	Technische Universität Dortmund	Allenes meet Fluorine
29.	<u>Hsuan-Hung Liao</u> , Chien-Chi Hsiao, Sadiya Raja, Iuliana Atodiresei, Magnus Rueping*	Rheinisch-Westfälische Technische Hochschule Aachen	Harvesting <i>ortho</i> -Quinone Methides as Latent Intermediates for Asymmetric Brønsted Acid Catalyzed Reactions
30.	<u>Debabrata Maity</u> , Carsten Schmuck*	Universität Duisburg-Essen	Selective Ratiometric Detection of Heparin in Plasma Using Molecular Peptide Beacon

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31.	<u>Michal Májek</u> , Axel Jacobi von Wangelin*	Universität Regensburg	Visible-light photocatalysis with eosin Y
32.	<u>Srimanta Manna</u> , Andrey P. Antonchick*	Max-Planck-Institut für molekulare Physiologie Dortmund / TU Dortmund	Organocatalytic Oxidative Annulation of Benzamide Derivatives with Alkynes
33.	<u>Georg Manolikakes</u> *, Tamara Beisel	Goethe-Universität Frankfurt	Palladium-Catalyzed Asymmetric Three- Component Synthesis of $\alpha$ -substituted Amides and $\alpha$ -Amino Acids
34.	<u>Katharina Martinewski</u> , <u>Matthias Willeke</u> , Werner Uhl*	WWU Münster / SFB 858	Activation of isocyanates and isothiocyanates by Al- and Ga-N based active <i>Lewis</i> pairs
35.	<u>Martin Meier</u> , F. Ekkehardt Hahn*	WWU Münster / SFB 858	Polynuclear metal complexes from coordinated $\beta$ -functionalized isocyanides
36.	<u>Jan B. Metternich</u> , Ryan Gilmour*	WWU Münster	Photo-(organo)catalytic E $\rightarrow$ Z Isomerisation using (-)-Riboflavin
37.	Soumen De, Susnata Pramanik, Sudhakar Gaikwad, <u>Nikita Mittal</u> , Michael Schmittel*	Universität Siegen	Triangular Nanoswitches: A Novel Strategy for Switching, Regulation of Catalysis and Communication
38.	<u>Sandip Murarka</u> , Zhi-Jun Jia, Christian Merten, Constantin-G. Daniliuc, Andrey P. Antonchick*, Herbert Waldmann	Max-Planck-Institut für molekulare Physiologie Dortmund / TU Dortmund	Rhodium(II) Catalyzed Enantioselective Synthesis of Troponoids
39.	<u>Stefan Orggies</u> , Alexander Breder*	Georg-August-Universität Göttingen	Selenium-Catalyzed Intramolecular Oxidative C(sp <sup>2</sup> )-H Amination of Alkenes
40.	<u>Tobias Otremba</u> , Bart Jan Ravoo*	WWU Münster / SFB 858	Functionalized Peptides as Carbohydrate Receptors

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41.	<u>Felix Pape</u> , Niklas O. Thiel, Johannes F. Teichert*	Technische Universität Berlin	Z-Selective Cu-catalyzed Alkyne Semihydrogenation
42.	<u>Tatiana Casselli Penna</u> *, Luiz Felipe de Oliveira Faria, Mauro Carlos Costa Ribeiro	Rheinische Friedrich- Wilhelms-Universität Bonn	Raman spectroscopy study on the temperature and pressure effects on propylammonium nitrate
43.	<u>Vincenzo Ramella</u> , Zhiheng He, Constantin G. Daniliuc, Armido Studer*	WWU Münster / SFB 858	Diastereoselective Synthesis of Highly Substituted Indolines
44.	Debabrata Samanta, <u>Anup Rana</u> , Michael Schmittl*	Universität Siegen	Nonstatistical Dynamics in the Thermal C2-C6/Diels-Alder Cyclization of Enyne- Allenes
45.	<u>Christian Rösner</u> , U. Hennecke*	WWU Münster / SFB 858	The Homohalocyclization – Electrophilic bromine induced cyclization of cyclopropanes
46.	<u>Andreas Rühling</u> , Frank Glorius*	WWU Münster / SFB 858	Synthesis and Investigation of a novel and remarkably simple hybrid Surfactant-NHC ligand, its Gold-complex and Application in Micellar Catalysis
47.	<u>Hülya Sak</u> , Norbert Krause*	Technische Universität Dortmund	Synthesis and Application of Water Soluble $\beta$ -Cyclodextrin-NHC-Gold Complexes
48.	<u>Iris Sancho Sanz</u> , Barbara Kirchner*	Rheinische Friedrich- Wilhelms-Universität Bonn	Formation of different Frustrated Lewis pairs within Ionic Liquids
49.	<u>Alexander Schmidt</u> , Christian Radunsky, Jutta Kösters, Jens Müller*	WWU Münster / SFB 858	Stabilization of G-quadruplex DNA by metal complexes with multidentate ligands
50.	<u>Heiner Schröder</u> , Anne Creon, Tobias Schwabe*	Universität Hamburg	Reformulation of the D3(Becke-Johnson) dispersion correction without resorting to higher than C6 dispersion coefficient

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51.	<u>Suranjan Shil</u> , Carmen Herrmann*	Universität Hamburg	Magnetic crossover through oxidation
52.	<u>Narayan Sinha</u> , F. Ekkehardt Hahn*	WWU Münster / SFB 858	Single-Step Synthesis of an Organometallic Molecular Square Featuring only M–C Bonds
53.	<u>Nafiseh Soltanmohammadi</u> , Pavel Lulchev, Dagmar Klostermeier*	WWU Münster / SFB 858	Identification of DNA binding sites, assigning domain function and domain interactions in the catalytic cycle of reverse gyrase
54.	<u>Klaus Speck</u> , Konstantin Karaghiosoff, Thomas Magauer*	Ludwig-Maximilians-Universität München	Sequential O–H/C–H Bond Insertion of Phenols Initiated by the Gold(I)-Catalyzed Cyclization of 1-Bromo-1,5-enynes
55.	<u>Torben Steenbock</u> , Alejandra Escribano, Sarah Puhl, Jürgen Heck, Carmen Herrmann*	Universität Hamburg	Communication of spins in different systems: A first-principles study
56.	<u>Kim F. Taupitz</u> , <u>Lisa J. Kost</u> , Henning D. Mootz*	WWU Münster / SFB 858	Photoinducible crosslinking as a tool for mapping specific interactions in multi protein complexes
57.	<u>Christian Thiehoff</u> , Mareike C. Holland, Constantin Daniliuc, Kendall N. Houk*, Ryan Gilmour*	WWU Münster / SFB 858	Can Acyclic Conformational Control be Achieved <i>via</i> a Sulfur-Fluorine Gauche Effect?
58.	<u>Dirk Ulbrich</u> , Constantin Daniliuc, Günter Haufe*	WWU Münster	Synthesis of Protected $\alpha$ -Fluoro- $\alpha$ -Amino Acids
59.	<u>Anna Ulmer</u> , Tanja Gulder*	Technische Universität München	Metal-free Halogen-Triggered Synthesis of New Structural Key Motifs
60.	<u>Jan P. Unsleber</u> , Thomas Dresselhaus, Johannes Neugebauer*	WWU Münster / SFB 858	Towards Accurate Wavefunction-in-DFT Embedding for Transition Metal Catalysts

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61.	<u>Emy van Aert</u> , Thuur van Onzen, Luc Brunsveld*	Technische Universiteit Eindhoven	Fluorescent amphiphiles incorporated in liposomes and a pH-dependent system concept for imaging
62.	<u>B. Alexander Voigt</u> , Carmen Herrmann*	Universität Hamburg	Influence of exact exchange on the diradical character
63.	<u>Kerstin Wallraven</u> , Adrian Glas, David Bier, Gernot Hahne, Christoph Rademacher, Christian Ottmann, Tom N. Gossmann*	Max-Planck-Institut für molekulare Physiologie Dortmund / TU Dortmund	Introduction of hydrophobic crosslinks into peptides to constrain irregular secondary structures
64.	<u>Anja Wiegand</u> , Norbert Krause*	Technische Universität Dortmund	Synthesis of Propargylamines using Carbohydrate-Containing NHC-Gold-Complexes