

# Forschung der Chemischen Industrie



**Dr. Doreen Schachtschabel**  
BASF SE

**Present Position:** Vice President, White Biotech R&D  
**Research Interests:** Process Development, Protein Design, (Bio)Analytics, Genome Editing, Biobased/renewable chemicals, Biotransformations



**Dr. Ulrich Scholz**  
Boehringer Ingelheim Pharma

**Present Position:** Head of Chemical Development Germany  
**Research Interests:** International Network Management, Digitalization, Chemical Synthesis of modern pharmacophoric Modalities



**Dr. Hilmar Weinmann**  
Janssen Pharmaceutica N.V.

**Present Position:** Director Discovery Process Research, Regional Head EMEA  
**Research Interests:** Drug discovery & development. New methods for organic synthesis. Medicinal Chemistry, Chemical Process R&D, Novel Modalities and Technologies.



**Dr. Stefan Gradl**  
Bayer AG

**Present Position:** Head of Immunooncology Chemistry  
**Research Interests:** Medicinal Chemistry, Oncology, Kinases, Structure-based Design, Phenotypic Screening



**Dr. Sebastian Rendler**  
Syngenta Crop Protection AG

**Present Position:** Research Portfolio Manager Insect Control  
**Research Interests:** Active ingredient research and development for Insect Control



**Dr. Eloísa Serrano**  
Boehringer Ingelheim Pharma

**Present Position:** Head of Laboratory in Process Research, Chemical Development.  
**Research Interests:** Route scouting, process development and optimization, small molecule synthesis, asymmetric synthesis



# Forschung der Chemischen Industrie

Industry Research - Introduced to You.

12:45 pm Get together - Postersession

Thursday  
May 12th 2022

Lecture Hall Building, Chemistry Institutes  
of the WWU Münster



Partners of the Event

3:15 pm

**Postersession**  
Coffee break, discussion, snacks

4:15 pm

**Dr. Stefan Gradl** Bayer AG  
Phenotypic Screening: From Hits to Clinical Candidates

**Dr. Sebastian Rendler**  
Syngenta Crop Protection AG  
Discovering the next generation of active ingredients for Insect Control

**Dr. Eloísa Serrano**  
Boehringer Ingelheim Pharma  
What to choose: Medicinal Chemistry or Chemical Development?  
A personal perspective

**Poster awards**

6:00 pm Reception



# FoChIn 2022

Poster Contributions from Research Groups at the WWU Münster

Braunschweig · Brunklaus · Cekic-Laskovic · von Delft · Esselen · Fernández · García-Mancheño · Gilmour · Glorius · Gröschel · Hayen · Heuer Humpf · Jose · Junker · Kalinin · Kalinina · Karst · Kleiner · Koch · Kümmel · Lehr · Leker · Lips · Marohn · Mootz · Müller · Næsborg · Neugebauer Nowak · Placke · Ravoo · Rentmeister · Rizzo · Schönhoff · Strassert · Studer · Vargas-Barbosa · Winter · A. Wunsch · B. Wunsch · Zeier

01	Bellotti, Peter	Photochemical intermolecular dearomative cycloaddition of bicyclic azaarenes with alkenes
02	Blicker, Luca	(-)-Isopulegol-derived $\sigma 1$ receptor antagonists
03	Boisten, Felix	Luminescent Pt(II) complexes tethered to dsDNA: Increased thermal stability and photophysical properties
04	Borecki, Daniel	<i>N,N</i> -Disubstituted 4-sulfamoylbenzoic acid derivatives as inhibitors of cytosolic phospholipase $A_2\alpha$
05	Bosse, Florian	N-Heterocyclic Carbenes as Positive Etch Resist on Gold Surfaces
06	Brake, Tobias	Investigation of Manufacturing Defects on the Graphitic Anode of a Lithium Ion Battery
07	von Bremen-Kühne, Maximilian	Bioimaging of Zn and Cd in leaves of hyperaccumulator <i>Arabidopsis halleri</i> using laser ablation-inductively coupled plasma-mass spectrometry with referencing strategies
08	Brüss, Linda	Micellar effects on photoreactions
09	Chiou, Min-Huei	Durable and rapid-cycling lithium metal batteries designed with cross-linked PTMC-based electrolytes and $\text{LiNbO}_3$ -coated NMC622
10	Coban, Deniz	Morphology Control of Multicompartment Micelles in Water: A Preliminary Work for Catalytically Active Nanoreactors
11	Del Carmen Perez, Maria	Anion-binding Photoredox Catalysis
12	Du, Leilei	Effective Stabilization of NCM622 Cathodes in Aqueous/Non-Aqueous Hybrid Electrolytes by Adding a Phosphazene Derivate
13	Dunker, Calvin	Synthesis of aminopyrazoles and pyrazoloquinazolinones as novel anticoagulants targeting thrombin
14	Frye, Nils Lennart	Radical Difunctionalization of Unactivated Alkenes to Access Aliphatic $\beta$ -Alkynylsulfonylfluorides
15	Füsser, Friederike	Fragment based design of mycobacterial thioredoxin reductase inhibitors: From a fragment screening to novel inhibitors.
16	Gercke, David	Highly crystalline post-consumer PET waste hydrolysis by surface displayed PETase using a bacterial whole-cell biocatalyst
17	Gerdemann, Andrea	Mass Spectrometry Based Metabolomic and Proteomic Analysis of Cell Cultures
18	Gutierrez Suburu, Matias Ezequiel	Phosphorescent nanomaterials for oxygen sensing in water
19	Hardt, Michael	Molecular Control of Adaptive Interfaces and Hierarchical Soft Matter
20	Hartstock, Katja	MePMe-seq: Enrichment and Identification of Methyltransferase Target Sites in RNA
21	Haupt, Viola Marleen	Using micro-scale fungal cultivation as a powerful tool for the synthesis of novel biologically active compounds
22	Heddinga, Marius	Using metal-mediated base pairs to modulate aptamer function
23	Heßling, Janis	Structure and dynamics of an ionic liquid-based electrolyte confined in porous materials
24	Heusler, Arne	Substituted Dihydropyridine Synthesis by Dearomatization of Pyridines
25	Isaak, Andreas	Structure-Activity Relationships at the Orthosteric Binding Site of P2X Receptors. Molecular Determinants for Functional Activation and Inhibition.
26	Janoszka, Nicole	Mesoporous multicompartment microparticles consisting of semi-crystalline polystyrene-block-polybutadiene-block-poly(L-lactide) (SBL) triblock terpolymers
27	Klöcker, Nils	Photocaged 5' cap analogs for optical control of mRNA translation in cells

28	Kremer, Fabienne E.	„smart for science“: Usage of Smartphones in Chemistry Education
29	Kubot, Maximilian	Organofluorophosphates as electrochemical aging products in lithium ion battery electrolytes containing film-forming additives
30	Lenoch, Arthur	Viscoelastic relaxation mechanisms in Fe(III)-poly(acrylic acid) hydrogels
31	Lipphardt, Anna	Clean, Safe and Sustainable – Hyphenated Techniques for the Comprehensive Analysis of Glycolipidic Biosurfactants based on Supercritical Fluid Chromatography
32	Maiti, Moumita	Predicting transport properties of electrolytes from local structures: A novel approach using supervised learning
33	Matern, Jonas	Controlled Supramolecular Polymerization of Chromophores and Metal Complexes
34	Moschref, Cijam	Synthesis and Reactivity of Silicon Cluster Compounds
35	Muschiol, Elisabeth	Toxicological Properties of Lithium-Ion Battery Electrolyte Additives
36	Natzmutdinova, Elina	iPEC lab: Interfacial PhotoElectroChemistry laboratory
37	Obeng-Darko, Henry	Enantioselective Synthesis of GluN2B Selective NMDA Receptor Antagonists with 3-Benzazepine Scaffold
38	Onneken, Carina	Inversion of External Asymmetric Induction by Energy Transfer Catalysis: A Strategy towards $\beta$ -Chiral Phosphonate Antipodes
39	Paetow, Lukas	Disentangling Contributions to the Ionization Potential of Liquid Water Utilizing Periodic Embedding in Subsystem DFT
40	Pasch, Tim	Two new superset split inteins for the orthogonal synthetic modification of nanobodies
41	Quach, Linda	Visible-Light-Initiated Anti-Markovnikov Hydrofunctionalization of Unactivated Alkenes
42	Quest, Michael	Reactivity of a Bicyclic Silicon(I) Ring Compound
43	Quintieri, Giada	Multicompartment Cubosomes for Catalysis Applications
44	Rizzo, Fabio	Advanced luminescent materials: From optoelectronics to bioapplications
45	Rudt, Edward	The power of trapped ion mobility spectrometry in LC-MS/MS-based phospholipid analysis
46	Ruhl, Justine	Materials by Design: At the boundary between inorganic, physical and materials chemistry
47	Scherübl, Maximilian	Radical Transformations with Arynes
48	Tian, Haijin	Enzyme cascade converting cyclohexanol into $\epsilon$ -caprolactone coupled with NADPH recycling using surface displayed alcohol dehydrogenase and cyclohexanone monooxygenase on <i>E. coli</i>
49	Wesselkämper, Jannis	Recycling Lithium-Ion Batteries: An Outlook to 2050 in Europe, China and the U.S.
50	Wienhold, Max	Coumarin Synthesis by Direct Annulation: $\beta$ -Borylacrylates as Ambiphilic C3-Synthons
51	Wünsch, Angelika	Nanoparticulate Drug Formulations: Preparation, Analytics, Application
52	Yan, Peng	From High Throughput To Data-Driven Analysis
53	Ying, Bixian	Investigate the Degradation Pathways of H2 - H3 peak in Ni-rich layered oxide by Boron-doping
54	Ziegler, Katharina	Responsive Polymer Morphologies through Arylazopyrazole Photoswitches