

留德华人化学化工学会第三十届学术年会
30th CGCA[®] Annual Conference

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Program



2018

April 19-22
Berlin, Germany

Chinese-German Chemical Association (CGCA[®])
Gemeinschaft Chinesischer Chemiker und Chemieingenieure
in Deutschland e.V. (GCCCD, VR 17428, Cologne)



Organizer

留德华人化学化工学会

Chinese-German Chemical Association
(CGCA[®])

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Chemieingenieure in Deutschland e.V.
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Co-organizer

中国驻德国使馆教育处

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China in der Bundesrepublik Deutschland



Fritz-Haber-Institut
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Institute for
Theoretical Chemistry
University of Cologne

Sponsor



Welcome

It is our great pleasure to welcome you to the 30th Annual Conference of the Chinese-German Chemical Association (CGCA[®]). This year we are very proud to have the opportunity to host the conference in Berlin.

CGCA[®] (VR 17428, Cologne), a non-profit Chinese academic organization of chemistry, chemical engineering and related fields, is composed of members who have experience of studying and working in Germany. The aim of the CGCA[®] Annual Conference is to bring together researchers, scientists and developers from universities, research institutes and industry in Germany and provide a forum for presenting and discussing recent developments in all fields related to chemistry. This year, the theme of the 30th Annual Conference is “Chemistry and Sustainable Development”. Many scientific sessions with specific topics and a poster session will be presented. In addition, the 2018 CGCA[®] Young Researchers Award and the Best Poster Award will be awarded.

We thank more than 90 scientists including Prof. Dr. Lorenz Adrian (*Technical University of Berlin, Germany*), Prof. Dr. Alexander Boeker (*Fraunhofer Institute for Applied Polymer Research, Germany*), Prof. Dr. Xuebo Chen (*Beijing Normal University, China*), Prof. Dr. Michael Dolg (*University of Cologne, Germany*), Prof. Dr. Weihai Fang (*Beijing Normal University, China*), Prof. Dr. Qingli Hao (*Nanjing University of Science and Technology, China*), Prof. Dr. Jilai Li (*Jilin University, China*), Dr. Yucang Liang (*University of Tübingen, Germany*), Prof. Dr. Yaqiu Long (*Soochow University, China*), Prof. Dr. Joachim Sauer (*Humboldt University of Berlin, Germany*), Asst. Prof. Dr. Yunhui Wang (*University of Strasbourg, France*), Dr. Gang Wei (*University of Bremen, Germany*), Prof. Dr. Martin Wolf (*Fritz Haber Institute of the Max Planck Society, Germany*), Asst. Prof. Dr. Jun Yang (*University of Hong Kong, Hong Kong, China*), Prof. Dr. Lin Zhang (*Leibniz Institute for Solid State and Materials Research - IFW Dresden, Germany*), and Prof. Dr. Yixin Zhang (*Dresden University of Technology, Germany*) who have accepted our invitation to attend the annual conference.

Special thanks go to the Education Department of the Chinese Embassy in Germany, Fritz Haber Institute of the Max Planck Society, Institute for Theoretical Chemistry at University of Cologne, and all sponsors (Deutsche Forschungsgemeinschaft (DFG), EUTECH Consulting, Springer, UNIQ10UE, Harbin Institute of Technology, Sinojobs, feelnow GmbH, Suzhou Institute of Nano-Tech and Nano-Bionics SINANO, School of Chemical Engineering at University of Chinese Academy of Sciences), as well as the steering committee and the local organizing committee without whom this annual conference would not have been possible.

We hope you enjoy the program that we have prepared. We wish you a fruitful and wonderful time at the 30th CGCA[®] Annual Conference and a pleasant stay in Berlin.

Organizing Committee

April 2018

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Dr. Yujin Tong	Chairman of Association/Chairman of Organizing Committee, Fritz Haber Institute Berlin
Dr. Rongchao Pan	Vice Deputy Chairman of Association, University of Erlangen-Nuremberg
Dr. Gang Wei	Vice Chairman of Association, University of Bremen
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Mr. Longying Qi	Technical University of Berlin
Mr. Xiaojia Zhao	Technical University of Berlin
Ms. Shaojun Wu	Technical University of Berlin
Mr. Shuyi Liu	Fritz Haber Institute Berlin

Conference Program

THURSDAY, 19TH APRIL 2018

Whole day Registration

City tour in Berlin (* for participants who have paid)

FRIDAY, 20TH APRIL 2018

09:30-11:30 Registration

11:00-11:30 Welcome snack

11:30-11:50 Opening remarks

11:50-13:50 Session 1 (Chair: Dr. Chang Ding)

11:50-12:20 Invited_1: Prof. Joachim Sauer

Ab initio free energy calculations for adsorption and reactions in nanoporous systems

12:20-12:50 Invited_2: Prof. Weihai Fang

Quantum trajectory mean-field approach and its numerical implementation for exploring non-adiabatic effect on the mechanistic photochemistry

12:50-13:20 Invited_3: Prof. Lorenz Adrian

Microbial respiration with halogenated aromatic compounds

13:20-13:50 Invited_4: Prof. Ya-Qiu Long

Design and discovery of novel HIV-1 integrase inhibitors targeting the protein-protein interactions

13:50-14:00 Group photo

14:00-14:20 Poster session and coffee break

14:20-15:50 Parallel session 2-1 (Chair: Prof. Yixin Zhang)

14:20-14:50 Invited_5: Prof. Lin Zhang

Silicon nanomembrane for energy storage applications

14:50-15:20 Invited_6: Asst. Prof. Yunhui Wang

A brief introduction of valorization of polysaccharide based biomass

15:20-15:50 Invited_7: Dr. Yucang Liang

Synthesis, surface modification and applications of periodic mesoporous (organo)silicas: From bulk to monodisperse uniform nanostructured materials

14:25-15:40 **Parallel session 2-2 (Chair: Dr. Wenlan Liu)

14:25-14:40 Contributed_1: Dr. Changzhu Wu

Nanobiocatalysis at water-organic interface

14:40-14:55 Contributed_2: Dr. Da Wang

Membrane activity and cellular effect in vitro of novel biomimetic 4,5-dialkylated imidazolium lipids

14:55-15:10 Contributed_3: Dr. Qiushi Pan

Planar model system of the Phillips (Cr/SiO₂) catalyst based on a well-defined thin silicate film

15:10-15:25 Contributed_4: Dr. Zhu-Jun Wang

Growth dynamics, stacking sequence and interlayer coupling in fewlayer graphene revealed by in situ SEM

15:25-15:40 Contributed_5: Ms. Xiaoyuan Zhang

Fibrinogen assembly on nanostructured polybutene-1 surfaces

15:50-16:10 Coffee break

16:10-17:10 Session 3 (Chair: Prof. Lin Zhang)

16:10-16:40 Invited_8: Prof. Martin Wolf

Beyond the molecular movie: ultrafast dynamics of bands and bonds during a photo-induced phase transition

16:40-17:10 Invited_9: Prof. Qingli Hao

Doped-graphene composites for energy and environment

17:10-18:15 Session 4 (Chair: Dr. Gang Wei)

17:10-17:15 Introducing Young Researchers Award by Dr. Gang Wei

(Sequence of the talks will be determined on-site by lottery)

17:15-17:35 Young_1: Ms. Shuang Li

Two-dimensional porous carbons prepared from salts and/or silica templating methods for oxygen electrocatalysts

17:35-17:55 Young_2: Mr. Zhiyang Zhang

In-situ characterization of nanoparticle-catalyzed reactions using surface-enhanced Raman scattering

17:55-18:15 Young_3: Mr. Yu-Peng Zhou

N-heterocyclic silylenes as tools in coordination chemistry and catalysis

18:15-18:30 Talent recruitment plans in Harbin Institute of Technology

by Prof. Xiaohong Wu, Vice Dean of School of Chemistry and Chemical Engineering at Harbin Institute of Technology

18:30-19:00 Meeting break

19:00-21:00 Dinner and ceremony for Young Researchers Award (at dinner venue)

21:00-21:40 CGCA internal meeting (at dinner venue)

SATURDAY, 21ST APRIL 2018

09:00-10:30 Session 5 (Chair: Prof. Michael Dolg)

09:00-09:30 Invited_10: Prof. Alexander Boeker

Incorporation of biological functions into polymer materials: The use of protein-polymer-conjugates

09:30-10:00 Invited_11: Prof. Xuebo Chen

Energy regulation and transfer theory in visible-light photocatalysis

10:00-10:30 Invited_12: Asst. Prof. Jun Yang

Analytical MP2 energy gradients derived by low-scaling orbital-specific virtual (OSV) ansatz

10:30-10:50 Coffee break

10:50-11:00 Talent recruitment plans in School of Chemical Engineering, University of Chinese Academy of Sciences

11:00-12:30 Parallel session 6-1 (Chair: Dr. Rongchao Pan)

11:00-11:30 Invited_13: Prof. Yixin Zhang

High throughput: From drug discovery to biomaterial engineering

11:30-12:00 Invited_14: Invited_14: Dr. Gang Wei

Amyloid protein and peptide nanofibrils for biomedical applications

12:00-12:30 Invited_15: Prof. Jilai Li

Methane C-H bond activations by cluster oxides and metal carbides

11:05-12:05 **Parallel session 6-2 (Chair: Dr. Yucang Liang)

11:05-11:20 Contributed_6: Dr. Wenlan Liu

Charge affects the pi-pi stacking distance of doped P3HT thin film

11:20-11:35 Contributed_7: Ms. Jingjing Liu

Light-induced release of carbon monoxide releasing molecules

留德华人化学化工学会第三十届学术年会
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11:35-11:50 Contributed_8: Dr. Bin Zhao

Fermi resonance controlled product branching in the H+HOD reaction

11:50-12:05 Contributed_9: Mr. Yong Xu

Non-covalently assembled conductive hydrogel with modular structural motif, dynamic network and seamless interface with cells

12:30-12:50 Closing remarks, Best Poster Award, introduction of afternoon tour

12:50-14:50 Tour of Historical Research Institutes of Dahlem Region guided by Dr. Jens P. Fuerste

SUNDAY, 22ND APRIL 2018

City tour in Potsdam (* for participants who have paid)

*The registration fee including city tour is 350 Euro.

** Sessions 2-2 and 6-2 take place in the parallel session venue in Richard-Willstätter-Haus. All other sessions take place in the main venue in Harnack House unless specified.

List of Poster Presentations

- Poster_01: Ms. Lin Song *Functional characterization of wild-type and N471D strumpellin in hereditary spastic paraplegia*
- Poster_02: Prof. Xiaojun Li *The nature of structure and bonding between transition metal and mixed Si-Ge tetramers: A 20-electron superatom system*
- Poster_03: Mr. Chunxiang Guo *Synthesis of fluorophosphonium triflate salts and their application as catalyst for the synthesis of N-sulfonyl formamidines*
- Poster_04: Ms. Cou-Cong Gong *Self-assembled peptide nanostructures studied by atomic force microscopy*
- Poster_05: Mr. Delong Han *PNP pincer iron(II) hydride complexes for the dehydrogenation of hydrazine borane*
- Poster_06: Ms. Shujuan Lian *Biotransformation of hexachlorocyclohexane during anaerobic digestion of pesticide contaminated biomass tracked by compound-specific stable isotope analysis*
- Poster_07: Mr. Rui Sang *Palladium-catalyzed selective generation of CO from formic acid for carbonylation of alkenes*
- Poster_08: Ms. Meiying Cui *Y-shaped DNA-encoded combinatorial library allows code joining and dynamic recombination of fragment-based library*
- Poster_09: Mr. Si Liu *Synthesis of high activity Ru nanocatalyst during hydrogenation of arene*
- Poster_10: Dr. Siyuan Zhang *Microstructure characterization on electrodes and catalysts*
- Poster_11: Mr. Zhiyang Zhang *Catalysis by metal nanoparticles in a plug-in optofluidic platform*
- Poster_12: Mr. Xiaobin Yao *Beyond optical diffraction limitation: Tip-enhanced Raman spectroscopy*
- Poster_13: Mr. Shuhao Zhang *Synthesis of 2-Deoxy-d-ribose-5-phosphate aldolase (DERA)/PNIPAm conjugates and their self-assembly into biocatalytically active thin films*
- Poster_14: Mr. Bin Liu *Dynamics of a chain elongating reactor microbiome producing medium-chain carboxylates*
- Poster_15: Ms. Mo Lu *Watching a single molecule walk into the hotspot of a plasmonic antenna*
- Poster_16: Prof. Yanzhong Zhen *Enhanced visible-light photocatalytic activity of a novel Z scheme photocatalyst AgI/Ag/ α -MoO₃ for the degradation of thiophene*
- Poster_17: Mr. Shaoke Zhang *Pd-catalyzed cyanation of (hetero)aryl halides using biphosphine ligands*
- Poster_18: Ms. Minghui Cong *Ferrocene-based coordination polymers bearing N,O-containing ligand: Design, synthesis and structure*
- Poster_19: Dr. Yu Zhu *Post-synthesis metal-organic frameworks with open metal and free functional organic sites for extensive catalytic activities*
- Poster_20: Prof. Kedi Cai *High performance Mn₃O₄/MnO nano spherical prepared by vacuum direct current arc method as air electrode bi-functional catalyst for lithium-air battery*
- Poster_21: Prof. Peng Liu *Graphitic mesoporous carbon deriving from asphalt as support material for ORR electrocatalyst*

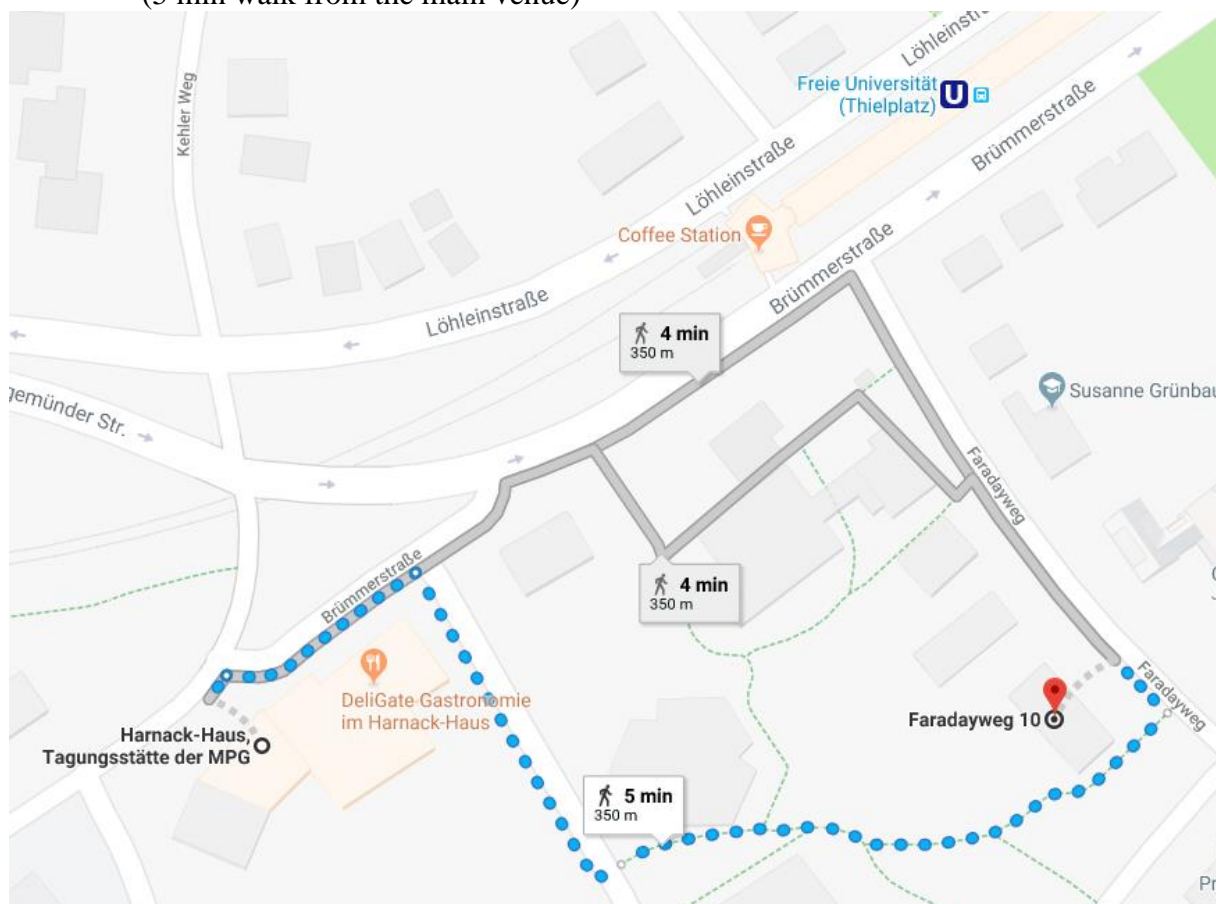
Venue

Main venue (all sessions except sessions 2-2 and 6-2)

Harnack House of the Max Planck Society, Ihnestraße 16-20, 14195 Berlin

Parallel session venue (sessions 2-2 and 6-2)

Richard-Willstätter-Haus, Faradayweg 10, 14195 Berlin
(5 min walk from the main venue)



Walking route from the main venue to parallel session venue (showing U-Bahn station nearby)

Dinner venue (19:00-21:00 on Friday, 20th April 2018)

Restaurant of the main venue Harnack House of the Max Planck Society, Ihnestraße 16-20, 14195 Berlin

Reimbursement

a. Required documents for reimbursement:

1. Original receipts/invoices with signatures from reimbursement applicants and all accompanying persons. Online train tickets must have validation stamps from conductors. Receipts without a formal print-out invoice should have the signature from the vendor. In case of loss of original invoices, bank account transfer records should be provided.
2. Filled and signed forms for reimbursement. Please note that the name of reimbursement applicant must be identical to the name of the bank account holder in the reimbursement form and to the name that appears in the receipts/invoices submitted for reimbursement. Due to the different resources of funding for the annual conference, please keep all original bills and tickets and wait for further news for reimbursement.

b. For enquiries please contact:

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Program prepared by

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Cover photo by

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For more information about CGCA[®] Annual Conference, please visit

<http://www.cgca.de/annual2018/>