

Prof. Dr. Jörg Libuda

Invited Presentations

[1] J. Libuda, M. Bäumer, H.-J. Freund, "Structural Characterization of Pt-Deposits Supported on Ordered Alumina Films", Dept. of Chemistry, Texas A&M Univ., College Station, TX, USA, 11.11.1993.

[2] J. Libuda, M. Frank, S. Stempel, M. Bäumer, H.-J. Freund, "SPA-LEED Studies on Model Catalysts", International Workshop on Determination of Surface Structure by High Resolution Diffraction, Kloster Wohldenberg, Hildesheim, 27.09.1996.

[3] J. Libuda, M. Frank, S. Stempel, M. Bäumer, A. Sandell, S. Andersson, P. A. Brühwiler, N. Mårtensson, und H.-J. Freund, "Structure and Properties of Model Catalysts: Metal Deposits on Ordered Oxide Films", Princeton University, Dept. Of Chemistry, Princeton, NJ, USA, 29.01.1997.

[4] J. Libuda, S. Stempel, M. Heemeier, M. Frank, K. Wolter, O. Seiferth, H. Kühlenbeck, M. Bäumer, H.-J. Freund, "Small Metal Particles on Oxide Surfaces: Structure and Properties", 188. WE-Hereaus Seminar, Martin-Luther-Universität Halle-Wittenberg, Wittenberg, 20.02.1998.

[5] „Reaktionskinetik an nanostrukturierten Oberflächen“, FHI-Ferrienschule „Von der Einkristall-Oberfläche zum Realkatalysator“, FHI, Berlin, 15.10.1999.

[6] J. Libuda, I. Meusel, J. Hoffmann, J. Hartmann, H.-J. Freund, "Size Dependent Reaction Kinetics on Supported Model Catalyst", Princeton University, NJ, USA, 29.09.2000.

[7] J. Libuda, I. Meusel, J. Hoffmann, J. Hartmann, H.-J. Freund, „Reaktionskinetik an Modellträgerkatalysatoren“, MPI für Metallforschung, Stuttgart, 05.12.2000.

[8] H.-J. Freund, J. Libuda, I. Meusel, J. Hoffmann, J. Hartmann, N. Nilius, N. Ernst, S. Shaikhtudinov, M. Heemeier, M. Bäumer, Th. Dellwig, H. Unterhalt, G. Rupprechter, "New Developments and Results at the Chemical Physics Department of the Fritz-Haber-Institute", COST Meeting, Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences, Krakau, Polen, 10.02. – 12.02.2001.

[9] "Reaction Kinetics under Single Scattering Conditions", 75th International Bunsen Discussion Meeting, Berlin, 12.03. -14.03.2001.

[10] J. Libuda, J. Hoffmann, I. Meusel, S. Schaueremann, J. Hartmann, H.-J. Freund, "Decomposition and Oxidation of Methanol on Alumina Supported Pd Particles", DFG Berichtskolloquium, Schwerpunktprogramm ‚Brückenschläge in der heterogenen Katalyse‘, Berlin, 21.05. - 22.05.2001.

[11] J. Libuda, and H.-J. Freund, "Single Scattering Reaction Kinetics on Supported Model Catalysts", Euroconference "Molecular Mechanisms of Heterogeneous Catalysis", San Feliu, Spanien, 23.06. - 28.06.2001.

[12] J. Libuda, J. Hoffmann, I. Meusel, S. Schaueremann, J. Hartmann, H.-J. Freund, "Reaction Kinetics on Complex Model Catalysts under Single Scattering Conditions", Gordon Research Conference on Dynamics at Surfaces, Andover,

NH, USA, 12.08. - 17.08.2001.

[13] "Molecular Beam Studies on Model Catalysts", 11. Meeting of the Fachbeirat, Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, 19.11.2001.

[14] "Molekularstrahlexperimente an Modellkatalysatoren", Universität Oldenburg, Oldenburg, 27.05.2002.

[15] "Molecular Beam Studies on Model Catalysts", NATO-Advanced Study Institute "Metal-Ligand-Interactions in Molecular, Micro-, and Macro-Systems in Complex Environments", Cetraro, Italien, 01.09. - 12.09.2002.

[16] "Nanostructured Model Catalysts: Methods - Mechanisms - Kinetics", 2nd Annual Nanoscale Science and Technology Workshop, Center for Nanotechnology and University of Seattle, Seattle, USA, 18.09. - 19.09.2002.

[17] J. Libuda, J. Hoffmann, V. Johánek, S. Schaueremann, "The Kinetics of Catalytic Processes on Model Catalysts", Vortragsserie, Workshop Chemical Physics of Model Catalysts 2002, Schloß Ringberg, Tegernsee, 29.09. - 05.10.2002.

[18] J. Libuda, N. Nilus, N. Ernst, H.-J. Freund, "Mid Term Report of the FHI Group", RTN "Oxidesurfaces", Univ. Marseille, Marseille, Frankreich, 24.11. - 25.11.2002.

[19] "Reaction Kinetics on Complex Surfaces", TU München, 16.05.2003.

[20] "Reaktionskinetik an komplexen Oberflächen", TU Wien, Österreich, 17.06.2003.

[21] "Molecular Beam Methods in Surface Science and Catalysis", IMPRS "Complex Surfaces in Materials Science", Berlin, 16.01.2004.

[22] "Model Studies in Heterogeneous Catalysis", 13. Diskussionstagung "Anorganisch-Technische Chemie" (DECHEMA), Frankfurt/Main 25./26.02.2004.

[23] "Reaction Kinetics on Model Catalysts: Molecular Beam Methods and Time-Resolved Vibrational Spectroscopy", 11th International Conference on Vibrations at Surfaces, Bar Harbor, Maine, USA 06.06 – 10.06.2004.

[24] "Nanokinetics: Reaction Kinetics on Model Catalysts", Universität Erlangen-Nürnberg, Erlangen, 08.07.2004.

[25] "Kinetics and Dynamics at Surfaces", IMPRS "Complex Surfaces in Materials Science", Berlin, 14.-15.10.2004.

[26] "Molecular Beams and Model Catalysts", Freie Universität Berlin, Berlin, 18.01.2005.

[27] "Nanokinetics: Reaction Kinetics at Complex Surfaces", Leiden University, Leiden, Niederlande 18.02.05

[28] "Nanokinetics: Approaching Microscopic Concepts in Heterogeneous Catalysis", Universität Ulm, Ulm, 01.03.05

[29] "Supported Noble Metal Nanoparticles Under Reaction Conditions", COST

- D41 Workshop "Inorganic Oxide Surface and Interfaces", Wien, 02-04.11.06.
- [30] "Reaction Kinetics on Complex Surfaces", Elettra, Trieste, Italien, 28.03.07.
- [31] "Molecular Beam Experiments on Model Catalysts", LesHouches, Frankreich, 31.05.07.
- [32] "Reaction Mechanisms and Chemical Kinetics on Nanostructured Model Catalysts: NO_x and Oxygen Storage Processes", Chalmers University, Competence Center for Catalysis, Göteborg, Schweden, 05.12.07.
- [33] "Reaction Mechanisms and Chemical Kinetics on Nanostructured Model Catalysts", Universitat De Barcelona, Barcelona, Spanien, 18.12.07.
- [34] "Reaction Mechanisms and Chemical Kinetics on Nanostructured Model Catalysts: NO_x and Oxygen Storage Processes", Dept. of Surface and Plasma Science, Faculty of Mathematics and Physics, Charles University, Prag Tschechische Republik, 19.02.08.
- [35] J. Libuda, A. Desikusumastuti, T. Staudt, M. Happel, „A HR-PES / IRAS Study on the Interaction of NO₂ with BaO/Al₂O₃/NiAl(110)“, Marseille, Frankreich, 25.04.08
- [36] J. Libuda, G. Rupprechter, H.-J. Freund, K. M. Neyman, N. Rösch, M. Bäumer, „Methanol Synthesis and Partial Oxidation on Well-defined Supported Model Catalysts and Single Crystals“, Kolloquium SPP1091, Harnack-Haus, Berlin, 19.09.05-20.09.05.
- [37] "Nanokinetik: Konzepte für ein mikroskopisches Verständnis chemischer Kinetik und Dynamik an komplexen Grenzflächen", TU Karlsruhe, 14.11.05.
- [38] "Microscopic Concepts in Model Catalysis", Umicore AG & Co. KG, 18.11.05.
- [39] G. Rupprecher, J. Libuda, H.-J. Freund, K. M. Neyman, N. Rösch, M. Bäumer, „Partial Oxidation of Methanol on Well-defined Supported Model Catalysts“, Bunsentagung, Erlangen, 25.-27.05.06
- [40] J. Libuda, T. Schalow, B. Brandt, M. Laurin, S. Guimond, H. Kuhlenbeck, D. E. Starr, Sh. K. Shaikhutdinov, S. Schauerer, H.-J. Freund, "Supported Noble Metal Nanoparticles: Oxidation Behaviour and Catalytic activity", NanO2-Workshop, Kloster Irsee, 27.09-30.09.06.
- [41] "Heterogeneous Catalysis: Elementary Reaction Kinetics and Dynamics", IMPRS "Advanced Materials", Stuttgart, 09.10.06.
- [42] "From Ideal to Complex Materials in Model Catalysis", Werkstoffwissenschaftliches Kolloquium, Universität Erlangen-Nürnberg, 07.11.06.
- [43] "Model approaches to the microkinetics of storage processes in heterogeneous catalysis", COST D-41 Workshop, Erlangen, 12.-13.03.07.
- [44] "Reaction Kinetics on Complex Surfaces", CBI-Seminar, Erlangen, 10.05.07.
- [45] I. Panas, H. Broqvist, H. Grönbeck, A. Desikusumastuti, M. Happel, T.

Staudt, M. Laurin, J. Libuda, „NOx Storage on BaO Surfaces and Nanoparticles: Theory and Model Experiments“, COST D-41, General Workshop, Berlin, 21-23.10.07.

[46] „Catalysis in Erlangen / Model Approaches to Heterogeneous Catalysis“, A. Desikusumastuti, „An IRAS Study on NSR Model Catalysts“, Th. Staudt, „A HR-PES study on NSR model catalysts“, M. Happel, „Materials and Mechanisms of SOx Traps“, Umicore AG &Co. KG, Hanau, 05.06.08

[47] „Modelling Storage Processes in Heterogeneous Catalysis“, Ruhr-Universität Bochum, Bochum, 17.06.08

[48] J. Libuda, P.-A. Carlsson, A. Desikusumastuti, A. Görling, H. Grönbeck, M. Happel, F. Illas, M. Laurin, Y. Lykhach, K. M. Neyman, T. Staudt, F. Vines, "Modelling Storage Processes in Heterogeneous Catalysis: Adsorption and Reaction of Nitrogen Oxides and Sulfur Oxides on Oxide Surfaces and Oxide Supported Metal Nanoparticles", COST D41 Symposium, Barcelona, Spain, 16-18.10.08

[49] J. Libuda, Y. Lykhach, T. Staudt, R. Streber, M.P.A. Lorenz, A. Bayer, H.-P. Steinrück, "Growth and properties of ordered CeO₂(111) thin films on Cu(111), Mg-modified CeO₂ Films, and Pt nanoparticles on CeO₂(111)/Cu(111): Interaction with CH₄, CO₂, CH₃OH and H₂O", COST D41 Workshop, Gothenburg, Sweden, 14.-15.05.09

[50] "Model Studies in Environmental Catalysis", TU Vienna, Vienna, Austria, 27.05.2009.

[51] "Model Studies in Environmental Catalysis", Univ. Barcelona, Barcelona, Spain, 23.06.2009.

[52] "Reaction Kinetics and Dynamics: From Simple to Complex Surfaces", COST D-41 Winter School, Berlin, 24.-28.02.2009.

[53] , "Catalysis in Erlangen – Model NOx Storage Catalysts ", Umicore AG&Co.KG, Hanau, 12.02.2009.

[54] "Structure, Reactivity, and Kinetics on Simple and Nanostructured Oxide Surfaces: Modelling Oxide-Based Storage Catalysts", Computer Simulation of Oxides, Workshop, Trinity College, Dublin, Ireland, 08.09. – 12.09.2009.

[55] J. Libuda, K.M. Neyman, "Clean and Pt-Modified Ceria Films and Nanoparticles: Growth – Structure - Reactivity", COST D41 Symposium, Paris, France, 22.10. -24.10.09

[56] "Ceria-Based Model Catalysts: Structure, Metal-Oxide Interactions, Spill-Over, and Reactivity Toward Hydrocarbons and CO₂", Ceria 2010 Workshop, Modena, Italy, 23.06. – 25.06.10

[57] "Model Systems in Catalysis", Universität Graz, Österreich, 13.05.10[1] J. Libuda, K.M. Neyman, Y. Lykhach, N. Luckas, F. Vifies, T. Staudt, N. Tsud, T. Skala, M.P.A. Lorenz, R. Streber, A. Bayer, C. Papp, K.C. Prince, A. Migani, A. Bruix, S.T. Bromley, H.-P. Steinrück, V. Matolin, A. Görling, G.N. Vayssilov, F. Illas "Chemistry of Pure and Pt-loaded Ceria Surfaces: Experiment and Theory", COST D41 Symposium, Turino, Italy, 07.10.-09.10.10

[58] "Model Approaches to Nanomaterials in Catalysis", New Horizons in

Nanotechnology, RusNanoForum, Moscow, Russia, 01.11 – 03.11.10

[59] “Ionic Liquid Surface Science and Catalysis”, University of Barcelona, Barcelona, Spain, 18.04.11

[60] “Ionic Liquid Surface Science and Catalysis”, Charles University, Prague, Czech Republic, 02.05.11

[61] “Modelling Spillover Processes on Reducible Oxides”, ZCAM Structure and Functions of Reducible Oxides, Zaragoza, Spain, 20. – 23.06.11

[62] EAM Symposium Wildbad Kreuth, “Ionic Liquid Interfaces in Catalysis“, 22.11. – 06.11.09

[63] , “Methane, Ethylene, and Carbon Dioxide Activations and Conversion over Ceria-Based Model Catalysts”, COST D41 Workshop, München, 18.03. – 19.03.10

[64] “Understanding Ionic Liquid Interfaces in Catalysis”, EUCHEMS 2010 Conference on Molten Salts and Ionic Liquids, Bamberg, 15.03.10

[65] “New Concepts in Hydrogen Storage Technology”, 1st Joint Surface Science and Model Catalysis Workshop Prague-Erlangen, Prague, 12.10 – 14.10.11

[66] “New Concepts in Hydrogen Technology”, AvH Kolleg Science Globalization and Human Development, Goa, Indien, 11.11 – 13.11.11

[67] “Model Studies in Heterogeneous Catalysis and Energy Technology”, National Chemical Laboratory, Puna, Indien, 15.11.11

[68] “Model Systems in Catalysis”, Ruhr-Universität Bochum, Bochum, 17.06.10

[69] „Nanoscale Effects in Catalysis: New Insights from Model Studies“, 3rd EUCHEMS Congress, Nürnberg, 30.08. – 03.09.10

[70] Model Catalysis: “From Old Ideas to New Concepts”, FIESTAE Frontiers in Interface Science – Theory and Experiment, Berlin, 29.06 – 01.07.11

[71] “Model Studies via liquid organic carriers: a microscopic view in Heterogeneous Catalysis and Energy Technology”, invited, Kolloquium, Universitat de Barcelona, Spain, 26.06.2012.

[72] “Model Studies in Heterogeneous Catalysis and Energy Technology”, invited, 11th Pannonian International Symposium on Catalysis, Obergurgl, Austria, 03.-07.09.2012.

[73] “Model Systems in Heterogeneous Catalysis and Energy Technology, Model Methods in Heterogeneous Catalysis, Fritz-Haber-Institute of the Max-Planck-Society, 13.01.2012.

[74] “Model Studies in Heterogeneous Catalysis and Energy Technology”, German-Russian Conference on Fundamentals and Applications of Nanoscience, FU-Berlin, 19.-22.2012.

[75] “Model Studies in Heterogeneous Catalysis and Energy Technology“, Physikalisch-Chemisches Kolloquium, Universität Giessen, Physikalisch-Chemischen Kolloquium, 24.05.2012.

- [76] "Design of Thin-Film Nanocatalysts for On-Chip Fuel-Cell Technology: Model Catalysis", invited, chipCAT Kick-Off Workshop, Prague, Czech Republic, 20.-21.01.2012.
- [77] "Model Studies in Heterogeneous Catalysis and Energy Technology – Hydrogen Production and Storage", invited, ICC Satellite Workshop In Situ Spectroscopy and Model Catalysis, Kloster Andechs, Andechs, 07.07.2012
- [78] "Model Studies in Heterogeneous Catalysis and Energy Technology", invited, Clariant AG, Heufeld, 30.01.2013.
- [79] "Design of Thin-Film Nanocatalysts for On-Chip Fuel-Cell Technology: Model Catalysis", invited, chipCAT Meeting, Trieste, Italy, 24.-25.06.2013.
- [80] "Liquid Organic Hydrogen Carriers", invited, 1st Catalysis Summit, Ebbs, Austria, 27.-29.09.2013.
- [81] "Model Catalysis in Energy Conversion and Storage", invited, PCAM Summer School, Como, Italy, 09-13.10.2013.
- [82] "Model Studies in Heterogeneous Catalysis, Energy Technology, and Materials Science", invited, Hungarian Academy of Sciences, Budapest, Hungary, 01.10.2013.
- [83] "Model Studies in Heterogeneous Catalysis, Energy Technology, and Materials Science", invited, Universität Leipzig, 04.02.2013.
- [84] "Model Studies in Heterogeneous Catalysis, Energy Technology, and Materials Science", invited, University Szeged, Hungary, 03.10.2013.
- [85] "Model Studies in Heterogeneous Catalysis, Energy Technology, and Materials Science", invited, Universität Bielefeld, 04.07.2013.
- [86] "Model Studies in Heterogeneous Catalysis, Energy Technology, and Materials Science", invited, Universität Heidelberg, 16.07.2013.
- [87] "Reducible Oxide Nanomaterials – Knowledge-Driven Design of Low-Temperature Synthesis Routes", invited, SPP1708 Kolloquium Dresden, 27.-28.11.2013.
- [88] "Design of Thin-Film Nanocatalysts for On-Chip Fuel-Cell Technology: Model Catalysis", invited, chipCAT Meeting, Barcelona, Spain, 31.01.2014.
- [89] "Thin-film catalysts for fuel cell technology: model catalytic studies", Charles University Prague, Czech Republic, 22.05.2014.
- [90] "Model studies in heterogeneous catalysis and energy technology", Technical University Vienna, Austria, 11.06.2014.
- [91] „Reducible oxide nanomaterials: knowledge-driven design of low-temperature synthesis routes“, SPP 1708 Kickoff Meeting, Universität Dresden, Dresden, 08.07.2014.
- [82] "Vibrational spectroscopy at interfaces", COST Training School "Advanced methods for energy materials characterization", Hanse Wissenschaftskolleg, Delmenhorst, 09-12.09.2014.

- [93] "Complex interfaces in materials science", Universität Köln, 09.02.2015.
- [94] "Complex interfaces in materials science", Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, 02.10.2014.
- [95] "Model studies in heterogeneous catalysis and energy technology", Catalysis Summit, Kufstein, Austria, 25.-27.09.2014
- [96] "Electrochemical In-situ IR Spectroscopy on Pt Electrodes: Single Crystals, Metallic Thin -Films, Pt nanoparticles, and Pt-Doped CeO₂", COST CM1104 Symposium, University of Barcelona, Spain, 12.-14.11.2014
- [97] "Model catalytic studies on fuel cell catalysts", University of Barcelona, Spain, 11.-12.12.2014.
- [98] "Oxide-based electrocatalysts for fuel cell applications: surface science, model catalysis, spectroelectrochemistry", International FOXSI Symposium, Vienna, Austria, 11.-13.05.2015
- [99] "Model catalytic studies on ceria-based fuel cell catalysts", International chipCAT Symposium, University of Dijon, France, 08.-10.06.2015
- [100] "Model systems for ionic liquid-modified catalysis", Catalysis Summit, Filzmoos, Austria, 26-29.09.2015.
- [101] "Model catalysis in energy technology: from surface science to spectroelectrochemistry", ETH Zürich, Paul-Scherrer-Institut Villingen, Switzerland, 07.10.2015.
- [102] "Metal nanoparticles on ceria: metal oxide interaction, stability, and charge transfer", University of Poznan, Poland, 26.-27.11.2015.
- [103] "Model catalytic studies on ceria-based fuel cell catalysts", CZELO, Brussels, Belgium, 03.-04.12.2015.
- [104] "Ionic liquid model catalysis & in-situ spectroscopy", Clariant AG, Heufeld, 11.06.2015.
- [105] „Ceria-based catalysts in low temperature fuel cells: surface science – model catalysis - spectroelectrochemistry“, MCE Workshop 2015, Schloss Rauischholzhausen, Universität Giessen, 27.-30.07.2015.
- [106] „Model catalytic studies of liquid organic hydrogen carriers“, BESSY User Meeting, Berlin, 10.12.2015.
- [107] "Oxide materials in energy science: understanding functionality for emerging technologies", COST General Meeting "Emerging Energy Technologies", Universität Osnabrück, 06.-08.04.2016.
- [108] "Energy storage in strained organic molecules: model studies from surface science to electrochemistry", chipCAT Workshop, Les Menuires, France, 21.-25.03.2016.
- [109] "Complex model interfaces in energy-related catalysis and electrocatalysis", University of Leiden, Netherlands, 27.04.2016.
- [110] "Model catalytic studies on ceria-based fuel cell catalysts", Charles

University Prague, Czech Republic, 09.-10.05.2016.

[111] „Model catalytic studies of liquid organic hydrogen carriers“, DESY, Hamburg, 07.06.2016.

[112] „Complex model interfaces in energy-related catalysis, energy-related materials science and electrocatalysis“, Ludwig-Maximilians-Universität München, 01.06.2016.

[113] “Model catalysis with ionic liquid-modified materials”, EUCHEMS 2016, Vienna, Austria, 05.-07.07.2016

[114] “Model studies in energy-related catalysis and electrocatalysis”, ECOSS 2016, Grenoble, France , 31.08-01.09.2016.

[115] “Complex model catalysts: The interplay between experiment and theory”, Symposium Nanostructures in Catalysis, Barcelona, Spain, 30.09.2016.

[116] “Model studies in electrocatalysis: out of the vacuum – into the liquid”, Catalysis Summit, Filzmoos, Austria, 23-25.09.2016.

[117] “Model interfaces in energy-related catalysts”, electrocatalysis, and materials science”, 2nd International Symposium on Energy Chemistry and Materials, Hefei, China, 27.-29.09. 2016.

[118] “Water on cobalt oxide surfaces”, Fritz-Haber-Institut der Max-Planck-Gesellschaft Berlin, 21.12.2016.

[119] “Model Interfaces in Energy and Materials Science”, Bundesanstalt für Materialforschung, 18.1.2017.

[120] “Functional molecular overlayers on atomically-defined oxide surfaces and nanoparticles”, 25.1.2017

[121] "Model Studies in Energy-Related Catalysis: From Ultrahigh Vacuum to Electrochemical Conditions", Gordon Research Conference Chemical Reactions on Surfaces, Lucca, Italia, 5-10.2.2017.

[122] “Oxide model interfaces from ultrahigh vacuum conditions to liquid environments”, DPG-Frühjahrstagung 2017, Dresden, 19.-24.3.2017.

[124] “Model electrocatalysis: spectroelectrochemistry with complex model systems prepared in ultrahigh vacuum”, International FOXSI Conference, Vienna, Austria, 15.-17.5.2017.

[125] “Oxide model interfaces from ultrahigh vacuum conditions to liquid environments”, University of Buenos Aires, Buenos Aires, Argentina, 5.6.2017.

[126] “Model studies in Energy-Related Catalysis and Electrocatalysis”, INTEC, Santa Fe, Argentinien, 8.6.2017.

[127] “Model Studies in Energy-Related Catalysis and Electrocatalysis”, The 95th Lecture, Catalysis Forum, State Key Laboratory of Catalysis, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, China, 31.7.2017.

[128] “Oxide model interfaces from ultrahigh vacuum conditions to liquid environments”, Shanghai Tech University, Shanghai, China, 2.8.2017.

[129] "Electrifying Model Catalysis", Catalysis Summit, Filzmoos, Austria, 21-23.09.2017.

[130] "Spectroelectrochemistry with complex model systems prepared in ultrahigh vacuum", Universität Ulm, 24.10.17.

[132] "Model catalysis with ionic-liquid modified materials", 655. WE-Heraeus-Seminar, Bad Honnef, 03.-06.12.2017.

[131] "Model electrocatalysis: spectroelectrochemistry with complex model systems prepared in ultrahigh vacuum", 4th International Workshop on Ambient Pressure X-ray Photoelectron Spectroscopy (APXPS2017), Shanghai, China, 11-13.12.2017.

[132] "Oxide model interfaces from ultrahigh vacuum conditions to liquid environments", XI International Workshop on Oxide Surface, Sierra Nevada, Spain, 22.-26.1.2018.

[133] "Electrifying Model Catalysis", IMPRS Workshop 2018 "From Models to Reality", Schliss Ringberg am Tegernsee, 19-23.02.2018.

[134] "Model studies in energy-related catalysis and electrocatalysis", 255th ACS National Meeting, New Orleans, LA, USA, 18.-22.03.2018.

[135] "Electrifying model catalysis", Harvard University, Boston, MA, USA, 23.03.2018.

[136] "Metal Support Interactions Studied on Ceria Based Model Catalysts: From Ultrahigh Vacuum to Spectroelectrochemistry", 3rd Fundamentals and Applications of Cerium Dioxide in Catalysis", Barcelona, Spain, 25-27.06.2018.

[137] "Vibrational spectroscopy in surface science, interface science and catalysis", VI San Luis School on Surfaces, Interfaces and Catalysis, Santa Fe, Argentina, 02.-05.06.2018

[138] "Model studies in heterogeneous catalysis and electrocatalysis", VI San Luis Conference on Surfaces, Interfaces and Catalysis, Santa Fe, Argentina, 06.-08.06.2018.

[139] "Cobalt oxide based model catalysts: from surface science to electrochemistry", Aarhus University, Denmark, 19.06.2018.

[140] "Linkers groups on oxide surfaces in UHV and at the solid/liquid interface", IUVSTA-86-ASEVA-27 Workshop Nanoscale Oxide Systems in Physics and Chemistry, Avila, Spain, 02.-05.07.2018.

[140] "Vibrational Spectroscopy for Materials Characterization", Summer School SFB 986, Bad Bevensen, 09.-13.07.2018.

[141] "Vibrational Spectroscopy in Energy Related Catalysis and Electrocatalysis", SurfCat Summer School "The Science of Sustainable Fuels and Chemicals", DTU, Gilleleje, Denmark, 05.08.-10.08.2018.

[142] "Energy Storage in Strained Organic Molecules: From Surface Science to Electrochemistry and Photoelectrochemistry", Catalysis Summit, Filzmoos, Austria, 20-23.09.2017.

[143] "Model Systems in Catalysis and Energy Science: From Surface Science to Electrochemistry", 10th Brazilian/German Workshop on Applied Surface Science, Bad Dürkheim, 23.09-28.09.2018.

[144] "Electrifying Model Catalysis", Fritz-Haber-Institut der Max-Planck-Gesellschaft, Workshop, Schloss Ringberg, 1.10-5.10.2018.

[145] "Model Catalysis with Oxide Based Materials: From Surface Science to Electrochemistry", 10th Singapore International Chemical Conference (SICC-10), Singapore, 16.-19.12.2018.