

## INVITED TALKS

### A) Invited and Plenary Talks at Conferences:

104. Falko Netzer's Birthday Bash, Schladming, January 20 – 23, 2012

'TBA'

(upcoming)

103. Fall 2012 Materials Research Society Meeting, Symposium 'Oxide Semiconductors', organized by Tim Veal, Steve Durbin, Martin Allen, and Andre Schleife

'Surfaces of Sn-Doped and Undoped  $\text{In}_2\text{O}_3$ '

(upcoming)

102. American Ceramic Society 2012, Sosman Award Symposium honoring Prof. Dawn Bonnell, Pittsburgh, PA, October 10, 2012

'TBD'

(upcoming)

101. 244<sup>th</sup> Meeting of the American Chemical Society, Philadelphia, August 19-23 2012, Symposium 'Progress in electronic and vibrational spectroscopy of catalytic materials and catalytic reactions' (Catalysis Division)

'TBA'

(upcoming)

100. *Plenary Talk*, 2012 Brazilian Meeting in Condensed Matter Physics, Aguas de Lindoia, SP Brazil, May 14 – 18

'Defects, Molecules, and Nanostructures at Metal Oxide Surfaces'

(upcoming)

99. *Keynote Talk*, German Physics Society Meeting, Berlin, Germany, March 25 – 29, 2012

'TBD'

(upcoming)

98. American Chemical Society Spring Meeting, March 25 – 29, 2012, Symposium 'Frontiers in Catalysis', Division of Physical Chemistry

"Structural, Electronic, and Adsorption Properties of the  $\text{Fe}_3\text{O}_4(001)$  Surface"

(Talk will be given by Gareth Parkinson, upcoming)

97. Workshop on Novel Materials and Superconductors, Planneralp, February 11 – 18, 2012

'TBD'

(upcoming)

96. International Workshop on Oxide Surfaces, Baqueira-Beret, Spain, January 15 – 20, 2012

"STM investigations of pure and Sn-doped  $\text{In}_2\text{O}_3$  surfaces"

(upcoming)

95. Bunsen Discussions Meeting, 'Photocatalysis', Heidelberg, October 12 – 14, 2011

"The Surfaces of a Prototypical Photocatalyst:  $\text{TiO}_2$ "

94. *Plenary Talk*, 28th European Conference on Surface Science, Wroclaw, Poland, 28 Aug – 2 Sep 2011,

"The Surface Science of Metal Oxides - Recent Progress, Current Challenges, and Future Directions"

93. Gordon Research Conference, New England University, Maine, July 27 – 22, 2011

'Structure/Function Relationships on Catalytic Crystal Surfaces', Discussion Leader, Catalysis

92. CECAM Workshop on Understanding Structure and Functions of Reducible Oxide Systems-a Challenge for Theory and Experiment, Zaragoza (Spain), June 20-23, 2011  
 “Structural, Electronic, and Adsorption Properties of the Fe<sub>3</sub>O<sub>4</sub>(001) Surface“
91. *Keynote speaker*, Joint Annual Meeting of Swiss and Austrian Physics Society, Lausanne, Switzerland, June 15 – 17, 2011  
 ‘Surface Structure and Adsorption at the Magnetite Fe<sub>3</sub>O<sub>4</sub>(001) Surface’
90. Workshop on Gas Sensors, Tübingen, June 6-7, 2011  
 “The surface structure and reactivity of transparent conducting oxides”
89. Materials Research Society Meeting, San Francisco, April 22 – 29, 2011  
 ‘Organic Molecules on TiO<sub>2</sub>’
88. *Plenary talk*, Finnish Physics Society’s Physics Days, Helsinki, Finland, March 29 – 31, 2011  
 “Surfaces and the Nanoworld: Watching with the Scanning Tunneling Microscope, and Understanding with Density Functional Theory”
87. PCSI 2011, San Diego, CA January 16 – 20, 2011  
 “Adsorption of Dye Molecules on a Rutile TiO<sub>2</sub>(110) Surface  
 (Speaker: Shaochun Li)
86. TiO<sub>2</sub>-15, Town & Country Resort in San Diego, California, November 15-18, 2010,  
 “Surface Science Studies of TiO<sub>2</sub> Anatase”  
 (Speaker: Shaochun Li)
- 84-5. DoE-EFRC Director’s Meeting, Baton Rouge, LA, November 2-3, 2010  
 ‘Designing Nanocatalysts via Atomically Controlled Metal Clusters and their Supports’  
 and: Shortcourse on Scanning Tunneling Microscopy
83. EMRS Meeting 13th-17th September 2010: Warsaw: Symposium on  
 Semiconducting Oxides  
 “The Surface Structure of Epitaxial ITO(111) and (100) Thin Films”
82. TiO<sub>2</sub> CECAM Meeting, Bremen, Germany, Sept 6 – 10, 2010  
 “Adsorption and Reactions at the Anatase (101) Surface”
81. ECOSS-27, Groningen, August 29 – Sept 3, 2010  
 “Organic Molecules on TiO<sub>2</sub> surfaces”
80. NSOS Workshop, Matri St. Michael, Tirol, Austria, June 20 – 22, 2010  
 “Surface Science Investigations of Metal Oxides: An Overview”
- 78-9. Telluride Workshop, Telluride, CO, July 26 -30, 2010  
 A. Surface Studies of TiO<sub>2</sub> Anatase”  
 B. Adsorbate-driven Metallization of the Fe<sub>3</sub>O<sub>4</sub>(100) Surface”
- \*77. NIST Workshop on EUV Optics Contamination, Gaithersburg, MD, June 2, 2009  
 “Carbon removal from EUV mirror cap layers; model studies”  
 Speaker: Chundao Wang
76. 56th International AVS Meeting, San Jose, Ca, Nov 8 – 13, 2009  
 “Metal Oxide Surfaces: Defects, Dopants, and Reactivity”
75. Summer school: Reactivity of nanoparticles for more efficient and sustainable energy production”,  
 23-28 August 2009 Sandbjerg Gods, Denmark

“The surfaces of Semiconducting Metal Oxides”

\*74. “Physical Chemistry of Interfaces and Nanomaterials” at the SPIE Engineering and Nanoscience Conference, San Diego, CA, August 2 – 6, 2009

“Surface Chemistry of TiO<sub>2</sub>: Rutile and Anatase”

(Speaker: Shao-Chun Li)

73. “LASPM-V” Latin American Conference on Scanning Probe Microscopy’, Vina del Mar, Chile, May 27 – 29, 2009

“STM Studies of Metal Oxide Surfaces: Structure, Defects and Water Adsorption on Titania”

72. Workshop on “Desorption Induced by Electronic Transitions – DIET XII”, Callaway Gardens, Pine Mountain GA, USA, April 19 -24, 2009

“Radiation-induced Defects and Surface Chemistry on TiO<sub>2</sub>”

71. Workshop on Functional Oxides for Renewable Energy Sciences and Technologies (FOREST), Harvard University Center for Environment (HUCE), March 5-6, 2009

“The Surfaces of TiO<sub>2</sub>: (Defect) Structure, Electronic Structure, and Adsorption”

70. 55th International AVS Meeting, Boston, MA, Oct 23, 2008

“Defects on TiO<sub>2</sub> Anatase (101) are located Subsurface” (Post-deadline talk)

69. Ted Madey Memorial Symposium, 55th International AVS Meeting, Boston, MA, Oct 23, 2008

“The surface science of oxides: starting with, and going beyond, rutile TiO<sub>2</sub>(110)”

67. Department of Energy Frontiers of Atomic-Scale Functionality Imaging Workshop, Annapolis, MD, September 28 – 29, 2008

“Imaging of Metal Oxide Surfaces – Structure, Defects, Adsorbates, and Functionality”

66. XXIX CBRAVIC (Brazilian Congress of Vacuum Applications in Industry and Science), 2008, Joinville, SC - Brazil, September, 23 to 26, 2008

“Surface Science of Metal Oxides: From Atoms to Applications”

67. NSF-EPSCoR Workshop on Ferroelectric and Multiferroic Materials and Nanostructures, U. Arkansas Fayetteville, August 18 – 19, 2008

“Surface Science of Metal Oxides”

64. GOSPEL Workshop on Surface/Adsorbed Oxygen on Metal Oxide Surfaces – Role in Gas Sensing and Catalysis, Tübingen, Germany, May 12 – 13, 2008

“STM imaging of clean and adsorbate-covered metal oxide surfaces”

63. Summer School, “Modern Concepts for Creating and Analyzing Surfaces and Nanoscale Materials”, May 12-16, 2008 at the Hotel Eden Roc, 17220 Sant Feliu de Guixols, Girona, Spain

a. “Scanning Tunneling Microscopy of Metal Oxides: What one can (and cannot) see with STM

b. “The Surfaces of Transparent Conducting Oxides”

62. Institute of Science and Technology, Vienna, Austria, Symposium: Frontiers in Materials Science, April 25/26, 2008

“Semiconducting Metal Oxides: Surfaces, Interfaces, and Nanostructures”

61. Tulane School of Science and Engineering Research Day, April 10, 2008

Outstanding Researcher Award Presentation

“Surface Science: From Atoms to Applications”

60. American Physical Society March Meeting, New Orleans, LA, March 10 – 14, 2008

“Tailoring Surface Reactivity of Metal Oxides”

59. Spring Meeting of the German Physical Society, Berlin, February 25 – 29, 2008  
“The surfaces of bulk semiconducting metal oxides”
58. Annual Laboratory for Surface Modification Symposium, Rutgers University, Piscataway, NJ, February 15, 2008  
Highlight Speaker, in Honor of Prof. Theodore E. Madey’s 70th Birthday  
“The surfaces of titanium dioxide: following the trail blazed by Prof. T.E. Madey”
57. 17th International Vacuum Congress (IVC-17), 13th International Conference on Surface Science (ICSS-13), International Conference on Nanoscience and Technology 2007 (ICN+T 2007), 6th Nordic Conference on Surface Science (NCSS-6), 22nd Nordic Semiconductor Meeting (NSM-22) and 4th Swedish Vacuum and Materials Science Meeting (SVM-4), July 1-6, 2007, Stockholm, Sweden  
“Surface Investigations of Oxide Surfaces: One-dimensional Growth of Pd Nanoclusters on SnO<sub>2</sub>(101)”
56. 1st GOSPEL Workshop “Low dimensional and nanostructured oxides: bridging surface science and sensor science”, June 15-17, 2007, Tübingen, Germany  
“Surface Science Investigations of (Semi-)Conducting Metal Oxides”
55. ACS National Spring Meeting, Symposium honoring Profs. Freund, Koel, Yates, and Campbell, Chicago, March 25-29, 2007  
“Surface Investigations of Semiconducting Metal Oxides”
54. Gordon Research Conference ‘Chemical Reactions at Surfaces’, Ventura, Ca, Feb 11 – 16, 2007  
Session chair and discussion leader – ‘Imaging at the nanoscale’
53. ACS National Fall Meeting, Division of Physical Chemistry, Fundamentals of Metal Oxide Catalysis Symposium, San Francisco, September 10 - 14, 2006  
“The face-dependent structure and reactivity of TiO<sub>2</sub> surfaces”
52. ACS National Fall Meeting, Colloid and Surface Science Division, Symposium on Dynamics and Reactivity of Individual Molecules/Clusters, San Francisco, September 10 – 14, 2006  
“Structure, dynamics, and clusters on metal oxide surfaces”
51. European Conference on Surface Science (ECOSS-24), Paris, France, Sept 4 – 8, 2006  
“Metal oxide surfaces: Geometric structure, defects, and molecular adsorption viewed with atomic-scale resolution”
50. Water Festival IV, Delaware Biotechnology Institute, University of Delaware, Newark, DE, Nov. 22, 2005  
“Water Adsorption on Metal Oxide Surfaces”  
(Speaker: Olga Dulub)
49. 52nd Symposium of the American Vacuum Society, Boston, MA, Oct 5 – Nov 30, 2005  
“Structure, defects, and adsorption on metal oxide surfaces”
48. Workshop on Opportunities in Nanocatalysis, Brookhaven National Laboratory, October 19 – 21, 2005  
“Surface Structure and Reactivity of Titanium Dioxide”
47. European Conference on Surface Science, ECOSS-23, Berlin, Germany, Sept. 4 – 9, 2005  
“Surface Structure and Chemistry of TiO<sub>2</sub>”  
(Speaker: Matthias Batzill)
46. ASEVA Summer School, WS-17, on Characterization and Properties of Titanium Dioxide, Avila, Spain, July 25-27, 2005

“Orientation-dependent surface properties of TiO<sub>2</sub>: the rutile (011) face”

45. 8th International Conference on the Structure of Surfaces, ICSOS-8, Munich, Germany, 18-22 July 2005.

“Structure and Stoichiometry at Metal Oxide Surfaces”

44. 89th International Bunsen Discussion Meeting, "Chemical processes at oxide surfaces: from experiment to theory", Hennesee, Germany, June 15-17, 2005

“The Adsorption of Water on Single-crystalline Metal Oxide Surfaces”

43. DoE/BES Catalysis Program Contractor’s Meeting, Rockville Maryland, May 18 – 21, 2005

“Surface Science Investigations of Titanium Dioxide: Relevant for Photocatalysis?”

42. Austrian Scientists and Scholars in North America, ACSINA 2005, Vienna, Austria, April 27 – 29, 2005

“Nanoscience and Surfaces: Watching Atoms with Scanning Tunneling Microscopy”

41. Third meeting of the Study of Matter at Extreme Conditions (SMEC), Miami Beach, April 17-21, 2005

“Surface electronic structure and interface properties of the compositional variants of SnO<sub>2</sub>(101)”  
(Presenter: Dr. Matthias Batzill)

40. American Chemical Society Meeting, San Diego, March 22, 2005

“Growth and Properties of Oxide-supported Nanoclusters”

39. Jahrestagung der Österreichischen Physikalische Gesellschaft, Linz, Austria, September 28 –30, 2004

“The surface structure of TiO<sub>2</sub>(110)-(2x1)”

38. XI Latin American Congress of Surface Science and its Applications (XI CLACSA), Pucón, Chile, December 7 - 12, 2003

"Atomic-scale Studies of Metal Oxide Surfaces"

37. 7th International Conference on Atomically Controlled Surfaces, Interfaces and Nanostructures (ACSIN-7), Nara, Japan, 16-20 November, 2003

"Atomic-scale properties of oxide surfaces"

36. Gordon Conference on Chemical Reactions at Surfaces, Ventura, California, February 16 - 21, 2003

"Scanning Tunneling Microscopy Studies of Semiconducting Metal Oxides"

35. International Workshop on Oxide Surfaces (IWOX-III), Sapporo, Japan, January 27 - 31, 2003

"STM Studies of Tin Oxide Surfaces"

(Speaker: Matthias Batzill)

34. Chemical Physics of Nanostructured Surfaces, Workshop Schloß Ringberg/Tegernsee, Germany, Sept. 29 - Oct. 05, 2002

"Nanostructures and Surface Reactivities of TiO<sub>2</sub>"

33. Universität Bonn, Festkörpertag, 19. Juli 2002

"Polare Zinkoxidoberflaechen: Rätsel gelöst?"

32. EURESCO Conference on Fundamental Aspects of Surface Science -- Structure and Reactivity of Oxide Surfaces, Acquafredda di Maratea, Italy, 1-6 June 2002

"STM Studies of Clean and Cu-Covered ZnO Surfaces"

31. Louisiana Board of Regents, Sponsored Program Committee Meeting, Baton Rouge, LA, March 20, 2002

"Enhancing Research and Education in Nanoscale Science"

30. Frühjahrstagung der Deutschen Physikalischen Gesellschaft (Spring Meeting of the German Physical Society), Regensburg, Germany, March 11 - 15, 2002

"Struktur und Eigenschaften von TiO<sub>2</sub> Oberflächen"

29. EURESCO Conference Computer Simulation of Complex Interfaces: Out of the Vacuum into the Real World", Giens, France, Sept 7 - 12, 2001

"The Interplay between Bulk Defect Structure and Surface Reactions on Reducible Metal Oxides"

28. STM'01, Vancouver, July 16-20, 2001

"Defects and Adsorbates on Metal Oxide Surfaces"

27. American Physical Society, March Meeting, March 12 - 16, 2001, Seattle, Washington

"Growth and Fate of Ultrathin Metal Film Overlayers on TiO<sub>2</sub>(110)"

26. International Workshop on Oxide Surfaces (IWOX-2), Taos, New Mexico, January 15 - 19, 2001

"Adsorption Mechanisms and Structure on TiO<sub>2</sub> surfaces"

25. Materials Research Society Fall Meeting, Boston, December 2000

"Understanding Metal Oxide Surfaces at the Atomic Scale"

24. Louisiana Materials Science Conference, University of New Orleans, New Orleans, LA, Aug. 17-18, 2000

"Surface Science Investigations of Oxide Materials"

23. User's Meeting, Center for Advanced Microstructure and Devices, CAMD, Louisiana State University, Baton Rouge, Louisiana, April 8, 2000

"Atomic and Electronic Structure of Adsorbates of TiO<sub>2</sub>"

(Presenter: Wilhelm Hebenstreit)

22. US-Japan Seminar on Mesoscopic Processes on Surfaces, Park City, Utah, April 2-8, 2000.

"The Relationship between Bulk and Surface Properties of TiO<sub>2</sub>(110)"

21. Faraday Discussions 114, Surface Science of Metal Oxides, University College of St. Martin, Ambleside, UK, Sept. 1-3, 1999

"Oxygen-Induced Restructuring of Rutile TiO<sub>2</sub>(110): Formation Mechanism, Atomic Models, and Influence on Surface Chemistry"

20. Annual EMSL User Meeting, Pacific Northwest National Laboratory, June 21 - 24, 1999

"Surface Preparation of Metal Oxides -- Who Would've Thought Life is THAT Complicated?"

19. International Symposium on Oxide Surfaces, Elmau, Germany, January 1999

"Surface Structure and Reactivity of TiO<sub>2</sub>(110)"

18. Southeastern Section of the American Physical Society, Miami, Nov. 13-17, 1998

"The Surface Science of Metal Oxides: A Step Towards More 'Realistic' Model Systems"

17. American Vacuum Society Meeting, Baltimore, November 1998

"Strong-metal Support Interaction: The Ultimate Experiment"

Speaker: Wilhelm Hebenstreit

Post-deadline paper

16. American Vacuum Society Meeting, Baltimore, November 1998

Coadsorption Studies with Water: a Small Step Toward Understanding the Surface Chemical and Photochemical Properties of TiO<sub>2</sub>

(M. A. Henderson (presenter), W.S. Epling, C.H.F. Peden, U. Diebold)

15. 33rd Midwest Regional Meeting of the American Chemical Society, Wichita, Kansas, November 4 - 7, 1998

"Lessons from Atomic-Scale Investigations of Oxide Surfaces: Surface Defects, Adsorption Models, and Surface Restructuring"

14. 1997 Pacific Northwest AVS Symposium

September 15-19, 1997, Troutdale, Oregon

"Scanning Tunneling Microscopy of TiO<sub>2</sub>(110): Surface Defects and Adsorption of Chlorine"

13. German Physical Society, Fachtagung Festkörperphysik, Münster, Germany, March 17-21, 1997

"Atomic-Scale Pattern formed through Cr-induced Strain Relaxation of Pt(111)"

Post-deadline Paper

12. Symposium on Metal-Ceramic Interfaces, TMS Fall Meeting, Cincinnati, Oct 7-10, 1996

"What can we learn from Surface Science? An atomistic view on metal-oxide surfaces and interfaces"

11. Muddy Quantum Fest, April 1996 Baton Rouge, LA

"An atomic-scale view on surfaces: What can we learn"

(Speaker: J.F. Anderson)

10. Southeastern Section Meeting of the American Physical Society, November 1995, Tallahassee,

"Atomic-Scale Investigations and Modifications of Metal Oxide Surfaces"

9. Society of Engineering Science, 32nd Annual Technical Meeting, Oct. 1995, New Orleans, LA

"Investigating the First Few Atomic Layers of A Solid: Surfaces, Interfaces and Technology"

8. Materials Research Society, Fall Meeting, November 1994, Boston, MA

"Growth and Characterization of Metal Films on Metal Oxide Surfaces"

7. European Conference on Surface Science, Sept. 1994, Leipzig, Germany

"Ultrathin Metal Films on Metal Oxides"

6. Symposium on Surface Science, March 1994, Les Arcs, Savoie, France

"Growth of Ultrathin Transition Metal Films on a Reducible Metal Oxide Surface",

5. AVS Symposium on "The Physics and Chemistry of Metal/Oxide Interfaces",

September 23, 1992, Rutgers, New Jersey, USA

"Ultrathin Metal Overlayers on TiO<sub>2</sub>(110)"

4. International Conference on Sputtering, Sput '92

August 30 - September 4, 1992, Copenhagen, Denmark

"The Influence of Sputter-Created Defects on the Reactivity of TiO<sub>2</sub>(110)"

3. 5th International Workshop on Desorption Induced By Electronic Transitions,

April 1 - 4, 1992, Taos, New Mexico, USA

"Electron Stimulated Desorption of Ammonia on TiO<sub>2</sub>(110): The Influence of Substrate Defect Structure on ESD"

2. Symposium on Surface Science,

Feb. 11 -15, 1991, Obertraun, Austria

"Electronic Effects During Sputtering of Metals and Insulators"

1. 8th International Workshop on Inelastic Ion Surface Collisions, Sept. 17 - 21, 1990, Wiener Neustadt,

Austria "Interaction of Very Low Energy Rare Gas Ions with Surfaces: Sputtering and Secondary Ion Production from Insulators and Metals"

## **B) Lectures, Seminars, and Colloquia at Universities and Research Institutions:**

101. Colloquium, Nanoscience Institute, University of Modena, Modena, Italy, November 6, 2012  
'TBA'  
(upcoming)
100. Physics Colloquium, U. of Groningen, Netherlands, March 1, 2012  
'Defects, Molecules, and Nanostructures at Metal Oxide Surfaces'  
(upcoming)
99. Round Table Discussion with Physics Students, 24. January 2012  
"Oberflächenphysik: das Tor zur weiten Welt (und der Weg zurück nach Wien)"
98. KFU/TU Physics Colloquium, Graz, November 29, 2012  
'Metal Oxide Surfaces Viewed at the Atomic Scale'
97. Seminar, U. Erlangen, May 5, 2011  
'An Atomic-Scale View of Metal Oxide Surfaces'
96. Kolloquium, CPG Society, Universität Wien, February 22, 2020  
'Organic Molecules At Oxide Surfaces'
95. Kolloquium, Gesellschaft Österreichischer Chemiker, University of Innsbruck, Austria, January 10, 2011  
"Surface Science Investigations of Metal Oxides"
94. Seminar, Charles University in Prague, Czech Republic, December 14, 2010  
'The surfaces of Sn-doped  $\text{In}_2\text{O}_3$  (111) and (100)'
93. Physics Colloquium, University of Linz, Austria, December 9, 2010  
'Organic Molecules on Oxide surfaces'  
(upcoming)
92. University of Leoben, Austria, December 7, 2010  
'Organic Molecules on Oxide surfaces'
91. Max-Planck Institut für Festkörperforschung, Dept Prof. J. Maier, Stuttgart, May 11, 2010  
"Surface Processes at Oxides, Resolved with STM, and Explained with DFT"
90. Institute of Solid State Physics, TU Vienna, Austria, April 20, 2010  
"Surface Science Investigations of Metal Oxides: Applications, Fundamentals, and Insights"
89. Seminar, University of Darmstadt, Germany, March 18, 2010  
"The Surfaces of Epitaxial ITO(100) and (111) Films"
88. Seminar, University of Tübingen, Tübingen, Germany, March 16, 2010  
"The Surfaces of Epitaxial ITO(100) and (111) Films"
87. Project Report, Intel Corp., Hillsboro, Oregon, December 10, 2009  
"Formation and remediation of model C layers on oxide surfaces"
86. University of Florida, Gainesville, Fl, October 7, 2009  
"Atomic-Scale Investigations of Metal Oxide Surfaces"

85. Loyola University of New Orleans, New Orleans, LA, February 2, 2009  
“Investigating Surfaces with Scanning Tunneling Microscopy – Atom by Atom and Molecule by Molecule”
84. Project Report, Intel Corp., Hillsboro, Oregon, November 27, 2008  
“Adsorption of strongly adsorbing organics on TiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> surfaces”
83. Seminar, IFW Dresden, Dresden, Germany, June 17, 2008  
“Surfaces of Metal Oxides”
82. Colloquium, Forschungszentrum Rossendorf, Dresden, Germany, June 16, 2008  
“Surfaces of Oxide Materials: Linking Atomic-Scale Science with Applications”
81. Seminar, Institut für Allgemeine Physik, TU Wien, Vienna, Austria, May 15, 2008  
“Oberflächeneigenschaften oxidischer Materialien”
80. Project Report, Intel Corp., Hillsboro, Oregon, November 27, 2007  
“Adsorption and radiation effects on TiO<sub>2</sub> surfaces”
79. Seminar, Sandia National Laboratories, Albuquerque, New Mexico, August 15, 2007  
“Nanostructures on TiO<sub>2</sub> Surfaces”
78. Seminar, Max-Planck Institut für Metallphysik, Stuttgart, Germany, June 15, 2007  
“Surface Science Investigations of Semiconducting Metal Oxides”
77. Colloquium, Department of Physics, Louisiana State University, Baton Rouge, LA, Nov 9, 2006  
“Surface Investigations of Metal Oxides”
76. Seminar, Department of Physics, University of New Orleans, New Orleans, LA, Nov 8, 2006  
“Surface Investigations of Metal Oxides”
75. Colloquium, Department of Physics, University of South Alabama, Mobile, AL, Nov 2, 2006  
“Surface Investigations of Metal Oxides”
74. Seminar, Department of Applied Science, UC Davis, Davis, CA, March 21, 2006  
“An Atomic-Scale View of Transition Metal Oxide Surfaces”
73. Seminar, Michigan State University, Lansing, Michigan, March 3, 2006  
“An Atomic-Scale View of Transition Metal Oxides”
72. Colloquium, Department of Physics and Astronomy, Rutgers, The State University of New Jersey, December 2005  
“Atomic Structure and Dynamics at Oxide Surfaces”
71. Department of Chemistry, University of Illinois at Chicago, December 12, 2005  
“Oxides, Defects, and Surface Reactivity: What Can We Learn from Atomic-Scale Studies?”
70. Seminar, Center for Functional Nanomaterials, Brookhaven National Laboratory, December 7, 2005  
“An Atomic-Scale View of Transition Metal Oxides”
69. Department of Materials Science and Engineering, Rutgers, The State University of New Jersey, November 29, 2005  
“An Atomic-Scale View of Transition Metal Oxide Surfaces”
68. Seminar, Department of Applied Physics, Columbia University, New York, November 18, 2005  
“An Atomic-Scale View of Transition Metal Oxide Surfaces”

67. Condensed Matter Seminar, Department of Physics, University of Maryland, November 17, 2005  
"Surface Investigations of Pure and Doped Transition Metal Oxides"
66. Seminar, Department of Chemistry, Princeton University, Princeton, NJ, November 8, 2005  
"An Atomic-Scale View of Transition Metal Oxide Surfaces"
65. Department of Physics, Loyola University, New Orleans, LA, February 24, 2005  
"Scanning Tunneling Microscopy on Metal Oxide Surfaces"
64. Medtronic Corp. Minnesota, MN, October 5, 2004  
"Oxide films (semiconducting/dielectrics) from surface science perspective"
63. Florida International University, Miami, FL, February 13, 2004  
"Scanning Tunneling Microscopy on Metal Oxide Surfaces"
62. University of Tokyo, Tokyo, Japan, November 21, 2003  
"Atomic-Scale Investigations of Semiconducting Metal Oxides"
61. Xavier University of Louisiana, October 16, 2003  
"How About Seeing Atoms? Scanning Tunneling Microscopy on Metal Oxide Surfaces"
60. Iowa State University, Physical Chemistry Seminar Series, September 26, 2003  
"Metal Oxide Surfaces Studied at the Atomic Scale"
59. Technische Universität München, Fakultät für Chemie, Garching, Germany, June 30, 2003  
"Oberflächenuntersuchungen an Oxiden und geträgerten Clustern"
58. Technische Universität Wien, Institut für Materialchemie, Vienna, Austria, June 13, 2003  
"Rastertunnelmikroskopie an halbleitenden oxidischen Oberflächen"
57. Technische Universität Wien, Institut für Festkörperphysik, Vienna, Austria, May 27, 2003  
"Charakterisierung und Wachstum von neuen elektronischen Materialien"
56. Southeastern University of Louisiana, Hammond, LA, March 14, 2003  
"What is a polar surface, why should it not be there, and how come it's there anyway?"
55. University of California, Santa Barbara, February 21, 2003  
"Nanostructures and Surfaces of  $\text{TiO}_2$ "
54. Seminar, National Institute of Standards and Technology (NIST), Gaithersburg, Maryland, February 7, 2003  
"Polar ZnO surfaces -- Puzzle Solved, Halfway!"
53. Colloquium, Karl-Franzens Universität and Technische Universität Graz, December 10, 2002  
"Nanostrukturen und Oberflächen auf Titandioxid"
52. Humboldt Universität zu Berlin, December 2, 2002  
"Oberflächenstruktur und Wachstum auf ZnO"
51. Aarhus University, November 26, 2002  
"Surface Structures and Growth on ZnO"
50. Insitut für Physikalische Chemie, Universität Bochum, Germany, Nov. 18, 2002  
" $\text{TiO}_2$  -- Struktur(en) und Reaktivität"
49. Institute of Ion Beam Physics and Materials Research, Forschungszentrum Rossendorf, Germany,  
Nov.13, 2002

"Oberflächen von oxidischen Materialien"

48. Freie Universität Berlin, November 12, 2002

"STM Untersuchungen niedrigindizierter ZnO - Oberflächen"

47. University of Ulm, Germany, July 23, 2002

"Titanium Dioxide -- Surface Structure, Chemistry, and Modifications"

46. Fritz-Haber-Institut der Max Planck Gesellschaft, Berlin, June 2002

"Polar ZnO Surfaces: Morphology, Stabilization Mechanisms, and Cluster Growth"

45. Institut für Materialphysik, Universität Wien, May 29, 2002

"Polare ZnO Oberflächen: Oberflächenmorphologie und Stabilisierungsmechanismen"

44. Universität Osnabrück, April 29, 2002

"Rastertunnelmikroskopie an oxidischen Oberflächen"

43. Universität Konstanz, Germany, May 2, 2002

"Oberflächen und Grenzflächen oxidischer Materialien"

42. University of Louisiana at Lafayette, February 27, 2002

"Surface Science Investigations of Metal Oxides"

41. University of South Carolina, Columbia, South Carolina, February 1, 2002

"Surface Investigations of Single Crystalline Oxide Materials"

40. Universite Fribourg, Fribourg, Switzerland, November 21, 2001

"Struktur und Reaktivität von Oxidischen Oberflächen"

39. Technische Universität München, October 22, 2001

"Oberflächenphysik an oxidischen Materialien"

38. Loyola University, New Orleans

"Looking at Atoms at Surfaces"

October 8, 2001

37. Universiteit Leiden

"Electronegative Adsorbates on TiO<sub>2</sub>(110): Adsorption Mechanisms and Structures"

May 2001

36. Universiteit Amsterdam

"Surface and Interface Processes on Metal Oxides: The Known, the New, and the Unexpected"

May 2001

35. Florida State University, Tallahassee, FL, March 2, 2001

"Adsorption of molecules on surfaces: Why oxides are different"

34. University of Houston, Texas, December 2000

"Gas adsorption on an Oxide Surface"

33. Solid State Seminar at Yale University, New Haven, CT, Dec. 1, 2000

"Gas adsorption on a reducible metal oxide surface: Why the bulk matters"

32. Seminar at Technische Universiteit Eindhoven, Netherlands, May 17, 2000

"The adsorption of chlorine and sulfur on TiO<sub>2</sub>(110)"

31. Colloquium at Technische Universiteit Eindhoven, Netherlands, May 18, 2000  
"Growth and Characterization of Nanostructures"
30. Colloquium at Ludwigs-Maximilians University, Munich, May 24, 2000  
"Struktur und Oberflächeneigenschaften von Titandioxid"
29. Colloquium at the University of Ulm, Ulm, Germany, June 8, 1999  
"Oberflächenstrukturen und Adsorptionsvorgänge auf Titandioxid"
28. Seminar the University of Houston, April 2, 1999  
"Surface Structure(s) and Reactivity of the TiO<sub>2</sub>(110) Surface"
27. Seminar at Rice University, Houston, April 1, 1999  
"Surface Structure(s) and Reactivity of the TiO<sub>2</sub>(110) Surface"
26. Colloquium at the Technische Universität Graz, Austria, March 25, 1999  
"Wachstum und Charakterisierung von Nanostrukturen"
25. Seminar at Dept. of Physics, Tulane University, New Orleans, LA, Nov. 1998  
"The Surface Science of Metal Oxides"
24. Seminar at the University of New Orleans, New Orleans, La, October 1998  
"Looking at the Atomic Structure of Oxide Surfaces"
23. Seminar at Fritz-Haber Institut, Berlin, Germany, June 11, 1998  
"Scanning Tunneling Microscopy Studies of TiO<sub>2</sub>(110)"
22. Seminar at Universität Clausthal, Germany, June 10, 1998  
"The TiO<sub>2</sub>(110) Surface"
21. Seminar at Max-Planck Institut für Strömungsforschung, Göttingen, Germany, June 9, 1998  
"Ultrathin Chromium and Chromium Oxide Films on Pt(111)"
20. Colloquium at Universität Würzburg, June 8, 1998  
"Growth of Ultrathin Chromium and Chromium Oxide Films"
19. Colloquium at Institut für Allgemeine Physik, Technische Universität Wien, Vienna, Austria, June 4, 1998  
"Interface Phenomena on Oxide Surfaces"
18. Seminar at University of Osnabrück, May 27, 1998  
"Ultrathin Film Growth on Pt(111): Interface Phases and Self-Organized Structures"
17. Colloquium at Universität Bremen, Germany, May 26, 1998  
"Reconstructions, Adsorption and Film Growth on TiO<sub>2</sub>(110) surfaces"
16. Seminar at Rutgers, The State University of New Jersey  
Dec. 8, 1997  
"Scanning Tunneling Microscopy of TiO<sub>2</sub>(110): Point defects, Reconstructions, and the Adsorption of Chlorine"
15. Seminar at the Pacific Northwest Laboratory, Richland, WA  
Sept 23, 1997  
"Surface Defects and Chemistry on TiO<sub>2</sub>(110) Probed with Scanning Tunneling Microscopy"
14. Seminar at the University of Washington, Seattle, WA  
Sept 12, 1997  
"Scanning Tunneling Microscopy of Oxides: Challenges, Puzzles, and Insights"

13. Seminar at Institut für Allgemeine Physik, Technische Universität Wien  
May 27, 1997  
"Oberflächenphysikalische Untersuchung von oxidischen Oberflächen"
  
12. Seminar at the Karl-Franzens Universität Graz  
May 14, 1997  
"Growth of ultrathin metal and metal oxide films: a comparison"
  
11. Seminar at the University of New Orleans, New Orleans, La  
November 6, 1996  
"Ultrathin Film Growth Studies"
  
10. Seminar at Pacific Northwest Laboratories, Richland, WA  
January 8, 1996  
"Atomic Scale Investigation and Modification of Metal Oxide Surfaces"
  
9. Seminar at the University of Washington, Seattle, WA  
January 5, 1996  
"The Electronic Structure of Metal Oxide Surfaces Probed by Resonant Photoemission and Scanning Tunneling Microscopy"
  
8. Seminar at the Department of Chemical Engineering, Tulane University, New Orleans, Louisiana, Sept. 19, 1994  
"Metal Films on Metal Oxide Surfaces"
  
7. Seminar at the Department of Physics and Astronomy, Tulane University, New Orleans, Louisiana, March 11, 1993  
"Ultrathin Metal Overlayers on Oxide Surfaces: Growth, Structure and Interface Formation"
  
6. Seminar at the National Institute of Standards, Gaithersburg, Maryland  
Feb. 3, 1993  
"Ultrathin Metal Films on TiO<sub>2</sub>(110): Growth, Structure and Surface Reactivity"
  
5. Seminar at the University of Odense,  
Oct. 20, 1992, Odense, Denmark  
"Interaction of molecules with stoichiometric and non-stoichiometric TiO<sub>2</sub> surfaces"
  
4. Seminar at the University of Osnabrück  
Oct. 19, 1992, Osnabrück, Germany  
"Adsorption und elektronenstimulierte Desorption von Molekülen auf Titandioxidoberflächen"
  
3. Seminar at Institut für Allgemeine Physik, Technische Universität Wien,  
Feb. 4, 1992  
"Metallische und Molekulare Adsorbate auf einer Oxidoberfläche"
  
2. Seminar in Rutgers, The State University of New Jersey, Piscataway, N. J., U.S.A.  
June 15, 1990,  
"Interaction of Very Low Energy Rare Gas Ions with CO/Ni(111)"
  
1. Seminar at the Institut für Allgemeine Physik, Technische Universität Wien, Vienna, Austria  
May 6, 1990  
"Ioneninduzierte Desorption von niederenergetischen Edelgasionen mit CO/Ni(111)"

**C) Contributed Talks and Poster Presentations by Diebold group: >160 (list available upon request)**