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Education:

- Ph.D. Physical Chemistry, October 1992
- M.Phil. Physical Chemistry, February 1991
Columbia University, New York, NY
Research Advisor: Professor B.E. Bent (deceased)
- M.S. Chemical Engineering, October 1988
Columbia University, New York, NY
- B.S. Chemical Engineering, June 1986
University of California at Los Angeles, Los Angeles, CA
Research Advisor: Professor Y. Cohen

Experience:

Manager, Visual Design 09/15-present
U.S. Department of Energy's (DOE) Ames Laboratory, Ames, IA

Manage graphics design efforts as well as videography for the Ames Laboratory.

Co-Lead, Energy Everywhere 02/15-present
U.S. Department of Energy's (DOE) Ames Laboratory, Ames, IA

Co-lead twelve national laboratory coalition working to develop solutions to convert diverse, distributed waste feedstocks into fuel and chemicals via modular processes.

Division Director of Chemical and Biological Sciences 10/10-present
U.S. Department of Energy's (DOE) Ames Laboratory, Ames, IA

Provide Division leadership for the Ames Laboratory's research activities supported by the DOE Office Basic Energy Sciences Chemical Sciences, Geoscience and Biosciences Division and the Biological and Environmental Research Division. Responsible for all areas of management including personnel management, internal Division policies; safety; cyber security; disbursement of capital equipment funds; research budgets; and the scientific support functions. Serve as Laboratory Coordinator for Office of Science, Basic Energy Sciences, Division of Chemical Sciences, Geosciences and Biosciences.

Assistant Director for Scientific Planning 05/08-present
U.S. Department of Energy's (DOE) Ames Laboratory, Ames, IA

Manage and maintain ongoing planning efforts and played a central role in the development of a new strategic plan for the Laboratory. Oversee annual laboratory planning process. Develop science highlights for Office of Science, Basic Energy Science. Assist in the formulation of branding and marketing plans and serve as liaison between the Office of Public Affairs & Information and scientific staff on issues of image, branding and marketing. Member of Ames Laboratory's Mission Readiness team. Member of the Ames Laboratory's Executive Committee.

Acting Chief Research Officer 08/09-08/10
U.S. Department of Energy's (DOE) Ames Laboratory, Ames, IA

Represented the interests of the Laboratory at inter-laboratory meetings. Responsible for the research portfolio of the Ames Laboratory. Managed internal competitions for proposal submissions to the U.S. Department of Energy.

Scientist 5/02-07/08
Associate Scientist 10/95-5/02
U.S. Department of Energy's (DOE) Ames Laboratory, Ames, IA

Researched the structure and reactivity of complex intermetallics, growth and surface morphology of metal thin films and the reactivity of fluorocarbons and hydrocarbons at metal surfaces.

Postdoctoral Research Associate, Materials Chemistry 10/92-10/95
U.S. Department of Energy's (DOE) Ames Laboratory, Ames, IA

Investigated the reactivity of perfluoropolyethers to understand why this otherwise commercially viable class of lubricants tends to decompose upon exposure to metal, metal oxide, and metal fluoride surfaces at elevated temperatures. Researched the structure and reactivity of quasicrystal surfaces.

Graduate Research Assistant, Dept. of Chemistry 9/87-9/92
Columbia University, New York, NY

Conducted investigations of the organometallic chemistry of surfaces, including ultra-high vacuum studies of the surface reactions involved in heterogeneous catalysis and chemical vapor deposition.

Undergraduate/High School Research Supervisor Fall/Spring 1991
NSF/Columbia Undergraduate Research Program and Summer 1989/90
New York Academy of Sciences Young Scholars Program
Columbia University, New York, NY

Taught students the fundamental aspects of surface chemistry and guided them through the process of learning how to do independent research.

Teaching Assistant, Dept. of Chemistry
Columbia University, New York, NY

1/87-12/88

Taught Physical Chemistry, Honors General Chemistry, and Honors General Chemistry Laboratory.

Undergraduate Research Assistant, Dept. of Chemical Engineering
University of California at Los Angeles, Los Angeles, CA

6/85-8/86

Developed a computer model that predicts the viscosity of binary mixtures.

Membership in Scientific Organizations:

American Association for the Advancement of Science (AAAS)
American Chemical Society (ACS)
American Vacuum Society (AVS)
Association for Women In Science (AWIS)

Honors and Awards:

AAAS Fellow	2012
Review Panelist, STTR Phase II, Engineering Directorate, National Science Foundation	2011
Review Panelist, STTR Phase II, Engineering Directorate, National Science Foundation	2010
Review Panelist, STTR Phase II, Engineering Directorate, National Science Foundation	2009
Listed in Marquis Who'sWho in America	2008
Review Panelist, Engineering Directorate, National Science Foundation	2007
Iowa Board of Regents Award for Staff Excellence	2006
Iowa State University P&S Council Cytation Award	2006
Editor, ICQ9 Conference Proceedings, Special Issues of Philosophical Magazine	2006
Review Panelist, Chemistry Division, National Science Foundation	2005
Iowa State University College of Liberal Arts and Sciences Award for Professional and Scientific Staff Excellence	1999
U.S. Department of Energy Award for Outstanding Scientific Accomplishment in Materials Chemistry	1998
Graduate Assistance in Areas of National Need (GAANN) Fellowship	1991-1992
Office of Naval Research Fellowship	1988-1990
Link Foundation Fellowship, Honorable Mention	1989
Chemical Engineering Undergraduate Research Award	1986
Engineering Achievement Award for Social Welfare, UCLA	1986
Alumni Scholarship, UCLA	1982
Chancellor's Scholarship, UCLA	1982
U.S. General Accounting Office Certificate of Appreciation	1982

Funding Sources:

“AMES Lab Relationship Manager” C. J. Jenks (PI), DOE (EERE /VT /BETO) Support through the Ames Laboratory FY16, \$15 K, direct+indirect.

“SciSAP: NP: Nuclear Computational Low Energy Initiative (NUCLEI)” C. J. Jenks (PI), DOE (SC /ASCR) Support through the Ames Laboratory FY15-16, \$98 K, direct+indirect.

"Surface Properties of Quasicrystals and Complex Intermetallics" P. A. Thiel (PI) and C. J. Jenks (Co-PI), DOE Support through the Ames Laboratory FY04-FY08, \$202 K direct costs.

"Surface Chemistry of Lubrication and Corrosion" P. A. Thiel (PI) and C. J. Jenks (Co-PI), DOE Support through the Ames Laboratory FY96-FY03, \$140 K direct costs (FY 2001).

“9th International Conference on Quasicrystals” C. J. Jenks (PI), ACS Petroleum Research Fund Type SE, \$3.6 K direct (01/01/05 – 12/31/05).

“Surface and Interface Properties of Quasicrystals” with P. A. Thiel as ‘Coordinator’ and C. J. Jenks, A. I. Goldman, M. A. Van Hove, M. J. Kramer, D. Sordet, T. Lograsso, and P. Canfield as Co-PI’s, \$250 K direct per year, stemming from Department of Energy, New Initiative Proposal to the BES’ Division of Materials Science for FY96-99.

“The Science of Localized Corrosion” W. Cieslak (Proj. Coord.), C. J. Jenks (Co-PI from Ames Laboratory), T. A. Lograsso (Co-PI from Ames Laboratory), DOE – BES Center of Excellence for the Synthesis and Processing of Advanced Materials, \$60 K total costs (10/1/99-09/30/03).

“Quasicrystalline, Nanostructured, Multiphase Coatings for Reduced Friction and Wear” DOD Small Business Technology Transfer (STTR) with Spire Corporation with Ames Laboratory serving as the research institution, C. J. Jenks, overseer of work from Ames Laboratory, Ames Laboratory portion \$30 K indirect (1/31/2000-12/14/2000)

“Surface Characteristics of Hydriding Alloys,” C. J. Jenks (PI), Ames Laboratory Laboratory Directed Research and Development grant, \$18.8 K direct costs (FY97).

Professional Outreach and Mentoring Activities:

<i>Mentor</i> , Iowa State University, Graduate College Emerging Leader Academy	2015-2016
<i>Mentor</i> , Iowa State University, Emerging Leader Academy	2014-2016
<i>Mentor</i> , Iowa State University, Emerging Leader Academy	2011-2012,
<i>Co-Chair</i> , Science Night Fellows Elementary School, Ames, IA	2007-2011
<i>Volunteer</i> , Ames Laboratory /DOE High School Science Bowl	1997-2016
<i>Grand Champion Judge</i> , DOE Science and Energy Research Challenge Oak Ridge National Laboratory, Oak Ridge, TN and Argonne National Laboratory, Argonne, IL	2009-2010
<i>Judge</i> , DOE Science and Energy Research Challenge Oak Ridge National Laboratory, Oak Ridge, TN	11/08
<i>Presenter and Ames Laboratory Representative</i> , DOE Day of Science Knoxville Convention Center, Knoxville, TN	10/07
<i>Organizer</i> , Discussion entitled “Bridging the Gaps” for Undergraduates Majoring in Chemistry	3/99

Iowa State University, Ames, IA	
<u>Chairperson</u> , American Chemical Society Ames Local Section	1997-1998
<u>Committee Member</u> , Anna L. Pate Mentoring Award Committee	1994-1998
Iowa State University	
<u>Judge</u> , Iowa State University, Adventures in Supercomputing	4/96
<u>Chair-Elect</u> , American Chemical Society Ames Local Section	1996
<u>Facilitator</u> , Making Connections '95 Conference	11/95
Iowa State University	
<u>Speaker</u> , Valley High School, West Des Moines, IA.	4/94
Talk entitled "Careers in Chemistry and Chemical Engineering"	
<u>Tour Volunteer</u> , Iowa State University Program for Women in Science,	1994
<u>Judge</u> , Hawkeye Science Fair, Des Moines, IA	4/94
<u>Speaker</u> , Philadelphia Section of the ACS Graduate School Night,	11/91
Haverford, PA. Talk entitled "Life as a Graduate Student".	
<u>Graduate Student Safety Committee Chair</u> , Dept. of Chemistry	10/90-6/91
Columbia University, New York, NY	
<u>Graduate Student Council Representative</u>	10/88-10/89
Columbia University, New York, NY	
<u>Director and Volunteer</u> , Support Women in Math	10/84-6/86
University of California, Los Angeles, CA	

Conference Service:

Conference Co-Organizer, Workshop on Fundamental Science Needs to Address Waste to Chemical Conversion, Gaithersburg, MD, February 2016.

Conference Co-Organizer, Chemical Conversion via Modular Manufacturing: Distributed, Stranded, and Waste Feedstocks, St. Louis, MO, December 2015.

Session Chair, Crystal and Graphene Science Symposium, Waltham, MA September 2012.

International Advisory Board Member, 10th International Conference on Quasicrystals, Zurich, Switzerland, 2007-2008.

Conference Co-Organizer, 9th International Conference on Quasicrystals, Ames, IA, May 2005.

Session Chair, Physical Electronics Conference, Davis, CA, June 2004.

Session Chair, Materials Research Society Fall Meeting, Boston, MA, December 2003.

Student Poster and Oral Presentation Judge, ACS Midwest Regional Meeting, Columbia, MO, November 2003.

Student Poster and Oral Presentation Judge, 14th Interdisciplinary Surface Science Conference, Liverpool, United Kingdom, June 2003.

Session Co-Chair, 8th International Conference on Quasicrystals, Bangalore, India September 2002.

Special Night Session Co-Organizer, Sixth International Conference on Quasicrystals, Tokyo, Japan, May 1997.

International Steering Committee Member, Conference on New Horizons in Quasicrystals: Research and Applications, Ames, IA, August 1996.

Session Chair, Conference on New Horizons in Quasicrystals: Research and Applications, Ames, IA, August 1996.

Session Chair, 41st National AVS Meeting, Denver, CO, October 1994

Committee Service:

Co-panel lead, Basic Energy Sciences Advisory Committee, Basic Research Needs for Innovation and Discovery of Transformative Experimental Tools	2016-present
Ames Laboratory Information Technology Advisory Committee Chair	2011-present
Ames Laboratory Information Technology Advisory Committee	2008-present
Ames Laboratory Director Search Committee Co-Chair	2013-2014
ISU College of Engineering Dean Search Committee Member	2012
Iowa Energy Center Director Search Committee Member	2012
ISU Institute for Transportation Fundamental Research Panel	2011
Ames Laboratory Safety Review Committee	1998-2011
ISU Learning, Research, and Collaboration in the Future— Implications for Facilities Taskforce	2011
ISU P&S Research Excellence Award Review Committee	2011
Ames Laboratory Webpage Development Committee	2008-2010
ISU Faculty and Staff Strategic Planning Task Force	2009
Ames Laboratory Environmental Management System Steering Committee	2004-2009
Ames Laboratory Director Search Committee Member	2007
Assistant Scientist Search Committee	2003
Radiation Safety Officer Search Committee	2001
Assistant Scientist Search Committee	1998
Anna L. Pate Mentoring Award Committee	1994-1998
Columbia University Chemistry Graduate Student Safety Committee (Chair)	1990-1991
Columbia University, Graduate Student Council Representative	1988-1989

Community Service:

Volunteer, Food at First	2007-present
Ames Soccer Club, Uniform Committee Chair	2005-2012
Ames Soccer Club, Spiritwear Committee Chair	2006-2008
Treasurer, Fellows Elementary Parent Teacher Organization	2006-2010
President, Eagle's Loft, Inc. Board of Directors	2003-2004
Member, Eagle's Loft, Inc. Board of Directors Member	2002-2006
Vice-President, Eagle's Loft, Inc. Board of Directors	2004-2006

Referee for the Following Journals:

Applied Surface Science, Ferroelectrics, Journal of Alloys and Compounds, Journal of the American Chemical Society, Journal of Materials Research, Journal of Non-Crystalline Solids, Journal of Physical Chemistry, Journal of Physics D, Journal of Vacuum Science and Technology, Langmuir, Philosophical Magazine, Physical Review B, Physical Review Letters, Surface and Coatings Technology, Surface Science, Zeitschrift fuer Metallkunde

Reviewer for the Following Agencies:

U.S. Civilian Research and Development Foundation, U.S. Department of Energy, National Science Foundation, Science and Technology Center in Ukraine

Publications:

122. P. A. Thiel, B. Unal, C. J. Jenks, A. I. Goldman, P. C. Canfield, T. A. Lograsso, J. W. Evans, M. Quiquandon, D. Gratias and M. A. Van Hove "A Distinctive Feature of the Surface Structure of Quasicrystals: Intrinsic and Extrinsic Heterogeneity" *Israel Journal of Chemistry*, **2011**, *51*, 1326-1339. <http://dx.doi.org/10.1002/ijch.201100148>
121. Shen, M.M., Liu, D.J., Jenks, C.J. and Thiel, P.A., "Comment on 'Sulfur-Induced Reconstruction of Ag(111) Surfaces Studied by DFT' " *Journal of Physical Chemistry C*, **2011**, *115*, 23651-23651.
120. Shen, M.M., Jenks, C.J., Evans, J.W. and Thiel, P.A., "How Sulfur Controls Nucleation of Ag Islands on Ag(111)" *Topics in Catalysis*, **2011**, *54*, 83-89.
119. Anderson, I.E., Meskers, C. and Jenks, C.J., "The Dawn of Materials Design and Processing for a Sustainable World" *International Journal of Powder Metallurgy*, **2011**, *47*, 17-22.
118. T. Duguet, B. Unal, Y. Han, J. W. Evans, J. Ledieu, C. J. Jenks, J. M. Dubois, V. Fournee and P. A. Thiel "Variation of growth morphology with chemical composition of terraces: Ag on a twofold surface of a decagonal Al-Cu-Co quasicrystal" *Physical Review B*, **2010**, *82*, 224204. <http://dx.doi.org/10.1103/PhysRevB.82.224204>
117. Shen, M.M., Jenks, C.J., Evans, J.W. and Thiel, P.A., "Rapid decay of vacancy islands at step edges on Ag(111): step orientation dependence" *Journal of Physics-Condensed Matter*, **2010**, *22*, 215002.
116. Han, Y., Unal, B., Jing, D.P., Qin, F.L., Jenks, C.J., Liu, D.J., Thiel, P.A. and Evans, J.W., "Formation and coarsening of Ag(110) bilayer islands on NiAl(110): STM analysis and atomistic lattice-gas modeling" *Physical Review B*, **2010**, *81*, 115462.
115. Jing, D.P., Unal, B., Qin, F.L., Yuen, C., Evans, J.W., Jenks, C.J., Sordellet, D.J. and Thiel, P.A., "Stranski-Krastanov-like growth of an Ag film on a metallic glass" *Thin Solid Films*, **2009**, *517*, 6486-6492.
114. Unal, B., Sato, Y., McCarty, K.F., Bartelt, N.C., Duden, T., Jenks, C.J., Schmid, A.K. and Thiel, P.A., "Work function of a quasicrystal surface: Icosahedral Al-Pd-Mn" *Journal of Vacuum Science & Technology A*, **2009**, *27*, 1249-1250.
113. Duguet, T., Unal, B., de Weerd, M.C., Ledieu, J., Ribeiro, R.A., Canfield, P.C., Deloudi, S., Steurer, W., Jenks, C.J., Dubois, J.M., Fournee, V. and Thiel, P.A., "Twofold surface of the decagonal Al-Cu-Co quasicrystal" *Physical Review B*, **2009**, *80*, 024201.
112. Shen, M.M., Liu, D.J., Jenks, C.J., Evans, J.W. and Thiel, P.A., "The effect of chalcogens (O, S) on coarsening of nanoislands on metal surfaces" *Surface Science*, **2009**, *603*, 1486-1491.
111. Unal, B., Jenks, C.J. and Thiel, P.A., "Adsorption sites on icosahedral quasicrystal surfaces: dark stars and white flowers" *Journal of Physics-Condensed Matter*, **2009**, *21*, 055009.

110. Shen, M., Liu, D.-J., Jenks, C.J., Thiel, P.A. and Evans, J.W., "Accelerated coarsening of Ag adatom islands on Ag(111) due to trace amounts of S: Mass-transport mediated by Ag-S complexes" *J. Chem. Phys.*, **2009**, *130*, 094701.
109. Smerdon, J.A., Leung, L., Parle, J.K., Jenks, C.J., McGrath, R., Fournee, V. and Ledieu, J., "Formation of a quasicrystalline Pb monolayer on the 10-fold surface of the decagonal Al-Ni-Co quasicrystal" *Surf. Sci.*, **2008**, *602*, 2496-2501.
108. Samavat, F., Gladys, M.J., Jenks, C.J., Lograsso, T.A., King, B.V. and O'Connor, D.J., "Study of preferential sputtering and segregation effects on the surface composition of Al-Pd-Mn quasi-crystals" *Surface and Interface Analysis*, **2008**, *40*, 433-435.
107. Unal, B., Jenks, C.J. and Thiel, P.A., "Comparison between Experimental Surface Data and Bulk Structure Models for Quasicrystalline AlPdMn: Average Atomic Densities and Chemical Compositions" *Physical Review B*, **2008**, *77*, 195419.
106. Park, J.Y., Ogletree, D.F., Salmeron, M., Jenks, C.J., Thiel, P.A., Brenner, J. and Dubois, J.M., "Friction Anisotropy: A Unique and Intrinsic Property of Decagonal Quasicrystals" *Journal of Materials Research*, **2008**, *23*, 1488-1493.
105. Shen, M., Liu, D.-J., Jenks, C.J. and Thiel, P.A., "Novel Self-Organized Structure of a Ag-S Complex on the Ag(111) Surface below Room Temperature" *J. Phys. Chem. C*, **2008**, *112*, 4281-4290.
104. Han, Y., Unal, B., Qin, F., Jing, D., Jenks, C.J., Liu, D.-J., Thiel, P.A. and Evans, J.W., "Kinetics of Facile Bilayer Island Formation at Low temperature: Ag/NiAl(110)" *Phys. Rev. Lett.*, **2008**, *100*, 116105.
103. Qin, F., Hunt, B., Unal, B., Jing, D., Shen, M., Jenks, C.J., Gleeson, B., Sordelet, D.J. and Thiel, P.A., "Correlations between Structure and Chemical Composition on Oxidized (Pt, Ni)₃Al(111) Surfaces" *Surface Science*, **2008**, *602*, 1092-1100.
102. Qin, F., Andereg, J.W., Jenks, C.J., Gleeson, B., Sordelet, D.J., and Thiel, P.A., "X-ray Photoelectron Spectroscopy Studies of the Early-Stage Oxidation Behavior of (Pt, Ni)₃Al(111) Surfaces in Air" *Surface Science*, **2008**, *602*, 205.
101. Wearing, L.H., Smerdon, J.A., Leung, L., Dhessi, S.S., Ledieu, J., Bencok, P., Fisher, I., Jenks, C.J., and McGrath, R., "Iron Deposition on the Tenfold Surface of the Al₇₂Ni₁₁Co₁₇ Decagonal Quasicrystal" *Journal of Physics: Condensed Matter*, **2008**, *20*, 015005.
100. Li, M., Chung, P.-W., Cox, E., Jenks, C.J., Thiel, P.A., and Evans, J.W., "Exploration of Complex Multilayer Film Growth Morphologies: STM Analysis and Predictive Atomistic Modeling for Ag on Ag(111)" *Physical Review B*, **2008**, *77*, 033402.
99. Samavat, F., Gladys, M.J., Jenks, C.J., Lograsso, T.A., King, B.V., and O'Connor, D.J., "Surface Layer Self Diffusion in Icosahedral Al-Pd-Mn Quasicrystals" *Surface Science*, **2007**, *601*, 5678-5682.
98. Unal, B., Qin, F., Han, Y., Liu, D.-J., Jing, D., Layson, A.R., Jenks, C.J., Evans, J.W., and Thiel, P.A., "Scanning Tunneling Microscopy and Density Functional Theory Study of Initial Bilayer Growth of Ag Films on NiAl(110)" *Physical Review B*, **2007**, *76*, 195410.

97. Unal, B., Evans, J.W., Lograsso, T.A., Ross, A.R., Jenks, C.J., and Thiel, P.A., "Terrace-Dependent Nucleation of Small Ag Clusters on a Five-Fold Icosahedral Quasicrystal Surface" *Philosophical Magazine*, **2007**, *87*, 2995-3001.
96. Shen, M., Wen, J.-M., Jenks, C.J., Thiel, P.A., Liu, D.-J., and Evans, J.W., "Ripening of Monolayer Vacancy Pits on Metal Surfaces: Pathways, Energetics, and Size-Scaling for Ag(111) versus Ag(100)" *Physical Review B*, **2007**, 245409.
95. Unal, B., Fourneé, V., Schnitzenbaumer, K.J., Ghosh, C., Jenks, C.J., Ross, A.R., Lograsso, T.A., Evans, J.W. and Thiel, P.A., "Nucleation and Growth of Ag Islands on Fivefold Al-Pd-Mn Quasicrystal Surfaces: Dependence of Island Density on Temperature and Flux" *Physical Review B*, **2007**, 064205.
94. Qin, F., Jiang, C., Anderegg, J., Jenks, C., Gleeson, B., Sordelet, D. and Thiel, P., "Segregation of Pt at clean surfaces of (Pt, Ni)₃Al" *Surface Science*, **2007**, *601*, 376-380.
93. Qin, F., Anderegg, J., Jenks, C., Gleeson, B., Sordelet, D. and Thiel, P., "The Effect of Pt on Ni₃Al Surface Oxidation at Low-Pressures" *Surface Science*, **2007**, *601*, 146-154.
92. Park, J.Y., Ogletree, D.F., Salmeron, M., Ribeiro, M.F., Canfield, P., Jenks, C. and Thiel, P., "Tribological Properties of Quasicrystals: Effect of Aperiodic Versus Periodic Surface Order" *Physical Review B*, **2006**, *74*, 024203.
91. Pussi, K., Ferralis, N., Mihalkovic, M., Widom, M., Curtarolo, S., Gierer, M., Jenks, C.J., Canfield, P., Fisher, I.R., Diehl, R.D. "Use of Periodic Approximants in a Dynamical LEED Study of the Quasicrystalline Tenfold Surface of Decagonal Al-Ni-Co" *Physical Review B*, **2006**, *73*, 184203.
90. Ghosh, C., Liu, D.-J., Schnitzenbaumer, K., Jenks, C.J., Thiel, P.A., Evans, J.W. "Island Formation during Al Deposition on 5-fold AlCuFe Quasicrystalline Surfaces: Kinetic Monte Carlo Simulation of a Disordered-Bond-Network Lattice-Gas Model" *Surface Science*, **2006**, *600*, 2220-2230.
89. Park, J.Y., Ogletree, D.F., Salmeron, M., Ribeiro, R.A., Canfield, P.C., Jenks, C.J., Thiel, P.A. "Adhesion Properties of Decagonal Quasicrystals in Ultrahigh Vacuum" *Philosophical Magazine*, **2006**, *86*, 945-950.
88. Bastasz, R., Whaley, J.A., Lograsso, T., Jenks, C.J. "Hydrogen Interactions with Quasicrystalline Al-Pd-Mn Surfaces" *Philosophical Magazine*, **2006**, *86*, 855-862.
87. Ghosh, C., Liu, D.-J., Jenks, C., Thiel, P., Evans, J. "Modelling of the Energetics and Kinetics of Al Deposition on 5-Fold Al-Rich Quasicrystal Surfaces" *Philosophical Magazine*, **2006**, *86*, 831-840.
86. Unal, B., Lograsso, T.A., Ross, A.R., Jenks, C.J., Thiel, P.A. "Voids and Pits on Sputter-Annealed Fivefold Terraces of Icosahedral Al-Pd-Mn Quasicrystals" *Philosophical Magazine*, **2006**, *86*, 819-824.

85. Park, J.Y., Ogletree, D.F., Salmeron, M., Ribeiro, R.A., Canfield, P.C., Jenks, C.J., Thiel, P.A. "Atomic Scale Coexistence of Periodic and Quasiperiodic Order in a 2-Fold Al-Ni-Co Decagonal Quasicrystal Surface" *Physical Review B*, **2005**, 72, 220201.
84. Park, J.Y., Sacha, G.M., Enachescu, M., Ogletree, D.F., Ribeiro, R.A., Canfield, P.C., Jenks, C.J., Thiel, P.A., Saenz, J.J., Salmeron, M. "Sensing Dipole Fields at Atomic Steps with Combined Scanning Tunneling and Force Microscopy" *Physical Review Letters*, **2005**, 95, 136802.
83. Park, J.Y., Ogletree, D.F., Salmeron, M., Ribeiro, R.A., Canfield, P.C., Jenks, C.J., Thiel, P.A. "High Frictional Anisotropy of Periodic and Aperiodic Directions on a Quasicrystal Surface" *Science (Washington, DC, United States)*, **2005**, 309, 1354-1356.
82. Unal, B., Lograsso, T.A., Ross, A., Jenks, C.J., Thiel, P.A. "Terrace Selection during Equilibration at an Icosahedral Quasicrystal Surface" *Physical Review B*, **2005**, 71, 165411.
81. Park, J.Y., Ogletree, D.F., Salmeron, M., Ribeiro, R.A., Canfield, P.C., Jenks, C.J., Thiel, P.A. "Elastic and Inelastic Deformations of Ethylene-Passivated Tenfold Decagonal Al-Ni-Co Quasicrystal Surfaces" *Physical Review B*, **2005**, 71, 149901.
80. Park, J.Y., Ogletree, D.F., Salmeron, M., Ribeiro, R.A., Canfield, P.C., Jenks, C.J., Thiel, P.A. "Elastic and Inelastic Deformations of Ethylene-Passivated Tenfold Decagonal Al-Ni-Co Quasicrystal Surfaces" *Physical Review B*, **2005**, 71, 144203.
79. Cox, E., Li, M., Chung, P.-W., Ghosh, C., Rahman, T.S., Jenks, C.J., Evans, J.W., Thiel, P.A. "Temperature dependence of island growth shapes during submonolayer deposition of Ag on Ag(111)" *Physical Review B*, **2005**, 71, 115414.
78. Ferralis, N., Diehl, R.D., Pussi, K., Lindroos, M., Fisher, I., Jenks, C.J. "Low-energy electron diffraction study of Xe adsorption on the ten-fold decagonal Al-Ni-Co quasicrystal surface" *Physical Review B*, **2004**, 69, 075410.
77. Park, J.Y., Ogletree, D.F., Salmeron, M., Jenks, C.J., Thiel, P.A. "Friction and Adhesion Properties of Clean and Oxidized Al-Ni-Co Decagonal Quasicrystals: a UHV Atomic Force Microscopy / Scanning Tunneling Microscopy Study" *Tribology Letters*, **2004**, 17, 629-636.
76. Cox, E.J., Ledieu, J., Dhanak, V.R., Barrett, S.D., Jenks, C.J., Fisher, I., McGrath, R. "An STM and SXPS Study of the Interaction of C₆₀ with the Ten-fold Surface of the Al₇₂Ni₁₁Co₁₇ Quasicrystal" *Surface Science*, **2004**, 566-568, 1200-1205.
75. Ferralis, N., Pussi, K., Cox, E.J., Gierer, M., Ledieu, J., Fisher, I.R., Jenks, C.J., Lindroos, M., McGrath, R., Diehl, R.D. "Structure of the Tenfold *d*-Al-Ni-Co Quasicrystal Surface" *Physical Review B*, **2004**, 69, 153404.
74. Jenks, C.J., Bastasz, R. "Probing the Surface Structure of Quasicrystals via Angle-Resolved Low-Energy Ion Scattering" *Progress in Surface Science*, **2004**, 75, 147-160.
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Invited Talks:

Jenks, C.J. and Holladay, J.E. "Intersections with Modular Manufacturing"; Invited talk at Waste-to-Energy Roadmap Review, Golden, CO, June 2016

Jenks, C.J. and Holladay, J.E. "Energy Everywhere: Clean Energy for Modular Manufacturing"; Invited talk at National Laboratory Big Ideas Summit, Arlington, VA, April 2016.

Jenks, C.J. "Overview of the Ames Laboratory"; Invited talk at Pacific Northwest National Laboratory, Richmond, WA, June 2015.

Jenks, C.J. and Holladay, J.E. "Chemical Conversions for Sustainable Energy"; Invited talk at National Laboratory Big Ideas Summit, Arlington, VA, April 2015.

Jenks, C.J. "Mesoscale Concepts for Design and Behavior in Heterogeneous Catalysis"; Invited talk at the Mesoscale Chemistry Workshop, organized by the Chemical Sciences Roundtable of the National Research Council of the National Academies, November 2014.

Jenks, C.J. "Quasicrystalline Materials: Structure and Stability"; Invited talk at the Crystal and Graphene Science Symposium 2012, Waltham, MA, September 2012.

Jenks, C.J. "Overview of the Ames Laboratory"; Invited talk at the Institute for Transportation, Iowa State University, Ames, IA, February 2012.

Jenks, C.J. "Sulfur Acceleration of Mass Transport on silver Surfaces"; Invited talk at the Fifth San Luis Symposium on Surfaces, Interfaces and Catalysis in Sao Pedro, Brazil, April 2010.

Jenks, C.J. "Surface Science of Complex Intermetallics"; Invited talk at the School for Students prior to the Fifth San Luis Symposium on Surfaces, Interfaces and Catalysis, Sao Pedro, Brazil, April 2010.

Jenks, C.J. "Quasicrystal Surfaces: Stability, Structure, and Chemistry"; Invited talk at the 10th International Conference on Quasicrystals, Zürich, Switzerland, July 2008.

Jenks, C.J. "Quasicrystals: Perspectives of their Surfaces"; Invited talk at the Department of Physics, University of Liverpool, Liverpool, United Kingdom, November 2007.

Jenks, C.J. "Effects of Complex Order on Thin Film Growth"; Invited talk at Daresbury Laboratory, Warrington, UK, November 2007.

Jenks, C.J. "Unlocking the Mysteries of Surfaces with Complex Order"; Invited talk at the CNRS, Ecole des Mines, Nancy, France, November 2007.

Jenks, C.J. "Insights into the Surfaces of Quasicrystals"; Invited talk at the Department of Chemistry, National Sun Yat-Sen University, Kaohsiung, Taiwan, May 2004.

Jenks, C.J. "Structural Transitions between Crystalline and Quasicrystalline Phases – Insights from Surface Studies"; Invited talk at the Third International Workshop on Quasicrystals, Taipei, Taiwan, May 2004.

Jenks, C.J. "Aperiodicity in a Periodic World"; Invited talk at the Department of Chemistry, Iowa State University, April 2004.

Jenks, C.J. "Aperiodicity in a Periodic World"; Invited talk at the ACS Midwest Regional Meeting, Columbia, MO, November 2003.

Jenks, C.J. "Surfaces of Quasicrystals"; Invited talk at Aperiodic 2003, Belo Horizonte, Brazil, September 2003.

Jenks, C.J. "Insight into the Surface Structure of Quasicrystalline Al-Pd-Mn"; Invited talk at the 2nd United Kingdom Workshop on Quasicrystal Surfaces, Liverpool, United Kingdom, June 2003.

Jenks, C.J. "Improving our Understanding of Quasicrystals via Surface Studies"; Invited talk at Sandia National Laboratories, Livermore, CA, March 2003.

Jenks, C.J. "Quasicrystalline Materials"; Invited talk at Iowa State University, Department of Materials Science and Engineering, Ames, IA, November 2001.

Jenks, C.J. "Unlocking the Mysteries of the Surfaces of Quasicrystals"; Invited talk at Iowa State University, Department of Physics, Ames, IA, April 2001.

Goldman, A.I.; Jenks, C.J., Thiel, P.A. "Surface Characteristics of Quasicrystalline Materials"; Invited talk at the MRS Fall Meeting 98, Boston, MA, December 1998; paper LL7.7.

Jenks, C.J. "A Surface Scientist's Prospective of Quasicrystals"; Invited Talk at Clemson University, Clemson, SC, December 1999.

Jenks, C.J. "Surface Characteristics of Aluminum-Based Quasicrystalline Materials"; Invited talk at the University of Fribourg, Fribourg, Switzerland, September 1997.

Jenks, C.J. "Surface Characteristics of Aluminum-Based Quasicrystalline Materials"; Invited talk at Ecole des Mines, CNRS, Nancy, France, September 1997.

Jenks, C.J.; Shen, Z.; Chang, S.-L.; Pinhero, P. J.; Thiel, P. A. "Surface Properties of Quasicrystals"; Invited talk at the 213th ACS National Meeting, San Francisco, CA, April 1997; paper COLL 247.

Jenks, C. J. "Surface Reactivity of Quasicrystalline Materials"; Invited talk at the APS Meeting, Kansas City, MO, March 1997; paper S7.03.

Jenks, C. J. "Surface Oxidation of Al-Pd-Mn and Al-Cu-Fe Quasicrystals"; Invited talk at the New Horizons in Quasicrystals: Research and Applications Conference, Ames, IA, August 1996.

Jenks, C.J. "Fluorocarbons and Hydrocarbons - A View from the Surface"; Invited talk at Iowa State University, Ames, IA, February 1994.

Jenks, C.J.; Paul, A.; Lin, J.-L.; Chiang, C. M.; Bent, B.E.; Bernstein, N.; Zaera, F. "The Surface Chemistry of Alkylcopper Complexes"; Invited talk at the University of Iowa, Iowa City, IA, February 1993.

Jenks, C.J.; Paul, A.; Lin, J.-L.; Bent, B.E.; Bernstein, N.; Zaera, F. "The Surface Chemistry of Alkylcopper Complexes"; Invited talk at Iowa State University, Ames, IA, November 1992.

Contributed Presentations:

Jenks, C.J. "Ames Laboratory – Opportunities for Partnerships" DOE EPSCOR Meeting, Oak Ridge, TN, July 2008.

Jenks, C.J. "Elucidating the Chemical Nature and Local Atomic Structure of Quasicrystalline Surfaces"; Poster presentation at Quasicrystals – The Silver Jubilee, Tel Aviv, Israel, October 2007.

Jenks, C.J., Lograsso, T.A., Whaley, J., Bastasz, R. "Hydrogen Interactions with Quasicrystalline Al-Pd-Mn Surfaces", Oral presentation at the 52nd AVS Meeting, Boston, MA, October 2005.

Jenks, C.J. "Hydrogen Interactions with Quasicrystalline Al-Pd-Mn Surfaces", Oral presentation at the 64th Annual Physical Electronics Conference, Davis, CA, June 2004.

Jenks, C.J., Ross, A.R., Lograsso, T.A., Whaley, J.A., Bastasz, R. "Surface Transformations of Quasicrystalline Al-Pd-Mn"; Poster presentation at the Materials Research Society meeting, Boston, MA, December 2003.

Jenks, C.J., Bjergaard, J., Thiel, P.A., Canfield, P., Steurer, W. "Connecting Conventional Order with Unconventional Order"; Poster presentation at the 14th Interdisciplinary Surface Science Conference, Liverpool, United Kingdom, June 2003.

Jenks, C.J., Thiel, P.A., Ross, A.R., Lograsso, T.A., Whaley, J.A., Bastasz, R. "Structural Analysis of Quasicrystalline Al-Pd-Mn using Angle-Resolved Low Energy Ion Scattering"; Oral Presentation at the 49th National AVS Meeting, Denver, CO, November 2002.

Jenks, C.J., Bjergaard, J., Thiel, P.A., Canfield, P., Cervellino, A., Steurer, W. "Linking Aperiodic and Periodic Atomic Arrangements"; Oral presentation at the 8th International Conference on Quasicrystals, Bangalore, India, September 2002.

Jenks, C.J., Thiel, P.A., Ross, A.R., Lograsso, T.A., Whaley, J.A., Bastasz, R. "Surface Studies of Quasicrystalline Al-Pd-Mn by Angle-Resolved Low Energy Ion Scattering"; Poster presentation at the 8th International Conference on Quasicrystals, Bangalore, India, September 2002.

Jenks, C.J., Thiel, P.A., Ross, A.R., Lograsso, T.A., Whaley, J.A., Bastasz, B. "Angle-Resolved Low Energy Ion Scattering Studies of Quasicrystalline Al-Pd-Mn Single Grains"; Oral presentation of the 7th International Conference on the Structure of Surfaces, Newcastle, NSW, Australia, July 2002.

Jenks, C.J., Bjergaard, J., Thiel, P.A., Canfield, P., Cervellino, A., Steurer, W. "Linking Aperiodic and Periodic Atomic Arrangements"; Oral presentation at the Great Lakes Regional Meeting of the American Chemical Society, Minneapolis, MN, June 2002.

Jenks, C.J., Bjerggard, J., Thiel, P.A., Canfield, P., Cervellino, A., Steurer, W. "Accessing the Role of Net Planes in Decagonal Al-Ni-Co"; Oral presentation at the 48th National AVS Meeting, San Francisco, CA, November 2001.

Jenks, C.J., Whaley, J.A., Bastasz, B. "Ion Scattering Studies of Quasicrystalline Al-Pd-Mn"; Oral presentation at the Midwest Regional Meeting of the American Chemical Society, Lincoln, NE, October 2001.

Wehner, B.I., Jenks, C.J., Ross, A.R., Lograsso, T.A., Thiel, P.A. "Reactivity of Quasicrystalline Surfaces"; Poster presentation of the Gordon Conference on Surface Reactivity, Ventura, CA, February, 2001.

Jenks, C.J., Bloomer, T.E., Anderegg, J.W., Fournée, V., Kramer, M.J., Burnett, J.W., Delaney, D.W., Ross, A.R., Lograsso, T.A., Besser, M.F., Sordelet, D.J., Thiel, P.A. "Preparation of Al-Based Quasicrystalline Materials for Ultrahigh Vacuum Surface Studies"; Oral presentation at the 219th National ACS Meeting, San Francisco, CA, March 2000.

Jenks, C.J., Thiel, P.A., Whaley, J.A., Bastasz, R. "Low-Energy He⁺ Scattering from i-Al-Pd-Mn"; Oral presentation at the APS March Meeting, Minneapolis, MN, March 2000.

Jenks, C.J., Bloomer, T.E., Kramer, M.J., Burnett, J.W., Delaney, D.W., Lograsso, T.A., Besser, M.F., Sordelet, D.J., Thiel, P.A. "Effect of Sputtering Gas on Cleaning Al-Based Intermetallics and the Determination of Surface Compositions based on Auger Analysis"; Oral presentation at the 46th National AVS Meeting, Seattle, WA, October 1999; paper AS-ThM5.

Riley, S.J., Kerns, K.P., Jenks, C.J., Sordelet, D.J., Thiel, P.A. "The Search for Magic Number Clusters in Laser-Vaporized i-Al-Pd-Mn"; Poster Presentation at the 7th International Conference on Quasicrystals, Stuttgart, Germany, September 1999.

Jenks, C.J., Bloomer, T.E., Kramer, M.J., Burnett, J.W., Delaney, D.W., Lograsso, T.A., Besser, M.F., Sordelet, D.J., Thiel, P.A. "Ultrahigh Vacuum Preparation of Clean i-Al-Pd-Mn: Effect of Sputtering Gas and Auger Sensitivity Factors on Surface Composition"; Poster Presentation at the 7th International Conference on Quasicrystals, Stuttgart, Germany, September 1999.

Spurr, N.A., Johnson, D.S., Sordelet, D.J., Lograsso, T.A., Jenks, C.J., Thiel, P.A. "Localized Corrosion Studies of Novel Al-Based Materials"; Oral Presentation at the Synthesis and Processing Workshop on Localized Corrosion of Aluminum, Chicago, IL, March 1999.

Jenks, C.J.; Thiel, P. A. "Surface Chemistry of a Quasicrystalline Al-Pd-Mn Alloy"; Poster presentation at the GDR-SPQK Joint Colloquium on Quasicrystals in Strasbourg Conference, Strasbourg, France, April 1998.

Jenks, C. J.; Pinhero, P.J.; Anderegg, J. W.; Thiel, P. A. "Surface Reactivity Studies of an AlPdMn Alloy"; Oral presentation at the 44nd National AVS Meeting, San Jose, CA, October 1997; paper SS2-ThA5.

Jenks, C.J.; Shen, Z.; Pinhero, P.J.; Van Hove, M.A.; Gierer, M.; Delaney, D.W.; Lograsso, T.A.; Goldman, A.I.; Thiel, P.A., "Structural Characterization of Al-Based Quasicrystal Surfaces"; Poster presentation at Aperiodic '97 Conference, Alpe d'Huez, France, August 1997.

Shen, Z.; Pinhero, P.J.; Lograsso, T.A.; Delaney, D.W.; Lograsso, T.; Jenks, C.J.; Thiel, P. A. "Surface Structure of 5-fold Icosahedral Al-Cu-Fe"; Oral presentation at the Sixth International Conference on Quasicrystals, Tokyo, Japan, May 1997.

Shen, Z.; Jenks, C.; Goldman, A.; Delaney, D.; Lograsso, T.; Thiel, P. A. "Structural Transitions at the Surfaces of Al-Based Quasicrystals"; Poster presentation at the Sixth International Conference on Quasicrystals, Tokyo, Japan, May 1997.

Jenks, C. J.; Chang, S.-L.; Anderegg, J. W.; Lynch, D. W.; Thiel, P. A. "Surface Investigations of an AlPdMn Quasicrystal and a Related Crystalline Alloy"; Oral presentation at the 43rd National AVS Meeting, Philadelphia, PA, October 1996; paper SS-MoA4.

Jenks, C. J. "Oxidation of Quasicrystals"; Oral presentation at the 1996 DOE/BES Corrosion Contractors Meeting, Argonne, IL, September 1996.

Jenks, C. J. "Preparation of Well-Defined Samples of Al-Pd-Mn Quasicrystals for Ultra-High Vacuum Surface Studies"; Poster presentation at the New Horizons in Quasicrystals: Research and Applications Conference, Ames, IA, August 1996.

Jenks, C. J. "X-Ray Photoelectron Spectra of an Al-Pd-Mn Quasicrystal and a Related Crystalline Alloy"; Poster presentation at the New Horizons in Quasicrystals: Research and Applications Conference, Ames, IA, August 1996.

Thiel, P.A.; Goldman, A.I.; Van Hove, M.A.; Jenks, C.J.; Sordelet, D.J.; Kramer, M.J.; Lograsso, T.A.; Tringedes, M.C. "Surface and Interface Properties of Quasicrystals"; Poster presentation at the 10th DOE/BES Heterogeneous Catalysis & Surface Chemistry Meeting, Lake Conroe, TX, May 1996.

Jenks, C.J.; Rishi, S.; Thiel, P.A. "Reactivity of a Fluorinated Surface Toward the Decomposition of a Perfluoropolyether Analog"; Poster presentation at the 42nd National AVS Meeting, Minneapolis, MN, October 1995; paper SS-TuP14.

Thiel, P.A.; Chang, S.-L.; Zhang, C.-M.; Jenks, C.J.; Anderegg, J.W. "Surface Oxidation of an Al-Pd-Mn Quasicrystal"; Oral presentation at the 15th Annual Tennessee Valley Chapter-AVS Symposium, Oak Ridge, TN, May 1995.

Chin, W.-B.; Jenks, C.J.; Chang, S.-L.; Zhang, C.-M.; Thiel, P.A. "Structural Studies of Quasicrystals"; Oral presentation at the 41st National AVS Meeting, Denver, CO, October 1994; paper SS2-MoM7.

Jenks, C.J.; Trahanovsky, K. "Careers in Chemistry and Chemical Engineering"; Oral presentation at Valley High School, West Des Moines, IA, April 1994.

Jenks, C.J.; Jacobson, J.A.; Thiel, P.A. "Interactions of Perfluoropolyethers with Nickel and Nickel Oxide Surfaces"; Oral presentation at the 207th ACS National Meeting, San Diego, CA, March 1994; paper COLL 232.

Jenks, C.J.; Jacobson, J.A.; Thiel, P.A. "Studies of the Interaction of a Fluorinated Ether on Ni(100) and O/Ni(100)"; Poster presentation at the 40th National AVS Meeting, Orlando, FL, November 1993; paper SS-MoP15.

Jenks, C. J.; Bent, B.E.; Bernstein, N.; Zaera, F. "Formation, Bonding, and Reactions of C₂ Species on Cu(110)"; Oral presentation at the 39th National AVS Meeting, Chicago, IL, November 1992; paper SS-ThM9.

Jenks, C.J.; Lin, J.-L.; Paul, A.; Chiang, C.-M.; Bent, B.E. "Thermal Decomposition of Alkyl Halides on Copper Surfaces"; Poster presentation at the Exxon Frontiers of Science Workshop on Catalysis and Catalytic Processes, Annandale, NJ, November 1991.

Jenks, C.J.; Gilbert, A. "Life as a Graduate Student"; Oral presentation at the Philadelphia Section of the ACS Graduate School Night, Haverford, PA, November 1991.

Jenks, C.J.; Lin, J.-L.; Paul, A.; Bent, B.E. "Surface Chemistry of C₁-H Activation on Copper"; Poster presentation at the Northeastern Regional Graduate Physical Chemistry Poster Session, New York, NY, October 1991.

Jenks, C.J.; Lin, J.-L.; Paul, A.; Bent, B.E. "Surface Chemistry of C₁-H Activation on Copper"; Poster presentation at the 1991 Gordon Conference on Catalysis, New London, NH, June 1991.

Jenks, C.J.; Paul, A.; Bent, B.E. "Thermal Desorption Kinetics of 'Unimolecular' Surface Reactions"; Poster presentation at the Chemistry at Surfaces Conference, Irvine, CA, October 1990.

Jenks, C.J.; Chiang, C.-M.; Paul, A.; Smoliar, L.A.; Bent, B.E. "Reactions of Alkyl Intermediates on Copper Surfaces"; Oral presentation at the 199th ACS National Meeting, Boston, MA, April 1990; paper PETR 35.

Kakalik (Jenks), C.J.; Cohen, Y. "A Group Contribution Model for the Prediction of Binary Liquid Viscosities"; Oral presentation at the AIChE Student Symposium, Los Angeles, CA, March 1986.