GEOFFREY L. PRICE, PHD, FAICHE

Professor Emeritus Cain Department of Chemical Engineering Louisiana State University Baton Rouge, LA 70803

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Professor Emeritus Russell School of Chemical Engineering University of Tulsa 800 South Tucker Drive Tulsa, OK 74104

PROFESSIONAL INTERESTS:

Heterogeneous Catalysis Zeolites Biofuels

EDUCATION:

B.S., Chemical Engineering, Lamar University, 1975 Ph.D., Chemical Engineering, Rice University, 1979

EXPERIENCE:

2021 - current	Retired, Professor Emeritus at both TU and LSU
2014 - 2020	Wayne Banes Rumley Endowed Chair and Professor, University of Tulsa
2000 - 2014	Professor and Chair, Chemical Engineering, University of Tulsa
2000 - present	Professor Emeritus, Louisiana State University
1998 - 2000	Robert Hughes Harvey Endowed Professor, Louisiana State University
1992 - 1998	Professor, Chemical Engineering, Louisiana State University
1984 - 1992	Associate Professor, Chemical Engineering, Louisiana State University
1979 - 1984	Assistant Professor, Chemical Engineering, Louisiana State University

PROFESSIONAL SOCIETIES:

Fellow of the American Institute of Chemical Engineers American Chemical Society

PROFESSIONAL REGISTRATION:

Former Registered Professional Engineer in the State of Texas - retired 2021

HONOR SOCIETIES:

Sigma Xi Tau Beta Pi Phi Kappa Phi Omega Chi Epsilon Phi Eta Sigma

PROFESSIONAL SERVICE:

Service at University of Tulsa 2000 - present

- Department Chair, 2000 2020
- Departmental Faculty Search Committee Chair, 2007 08, 2013 14, 2016 17.
- University Writing Review Committee, 2014
- Chemical Engineering Faculty Salary Survey author and administrator, 2004 present.
- Chemical Engineering Advisory Board for Lamar University, Beaumont, TX, 2006 present
- College of Engineering and Natural Sciences Promotion and Tenure committee, 2004 07 and 2010 19, served as Chair of the Committee, 2010, 2016 and 2017.
- University of Tulsa Financial Review Committee, 2007 09
- Department of Chemical Engineering Graduate Program Advisor, 2001 2006
- Department of Chemical Engineering webpage design and maintenance, 2000 present Service at LSU 1979 2000
- LSU Campus Crusade for Christ Faculty Advisor, 2000
- AIChE Baton Rouge Section Executive Committee, 1999, 1989, 1988, 1985, 1984, 1982
- College of Engineering Promotion and Tenure Committee, 1998
- Chemical Engineering Computer Administrator, 1998 2000
- Promotion Committee, CAMD, 1998
- Chemical Engineering Shop Coordinator, 1993 1998
- Secretary, LSU College of Engineering Policy Committee, 1995 96
- Chairman, Chemical Engineering Promotion and Tenure committee, 1995 96
- College of Engineering Policy Committee, 1994 97
- AIChE Student Chapter Advisor 1979 1984, 1987 95
- International Zeolite Association Advisory Committee, 1991 1992
- AIChE Baton Rouge Section President, 1987
- AIChE Baton Rouge Section Vice-President, 1986
- LSU Faculty Senate, 1984 1987
- Chemical Engineering Department Graduate Program Director, 1984 87
- AIChE Baton Rouge Section Secretary 1983, 1984
- AIChE Student Chapter Mixer Co-host, AIChE Annual Meeting, New Orleans, 1981

AWARDS:

Grand Prize Winner, "My Favorite Crystal", American Chemical Society contest regarding reader's favorite crystal structures, September 2014

Baton Rouge, Louisiana:

Golden Apple Award, Volunteers in Public Schools, 1995

Giving Something Back, WAFB - Freeport/McMoran Community Service Award, 1996 Distinguished Partners in Education, Board of Elementary and Secondary Education of the State of Louisiana, 1997

First Christian Church, Family of the Year, 1997

Phi Kappa Phi Best Dissertation, Rice University, 1979

COMMUNITY SERVICE:

Tulsa, Oklahoma:

Deacon, Memorial Bible Church, Tulsa, OK, 2005 - 07

Baton Rouge, Louisiana:

President, Recycled Computers for Kids, Inc. (a non-profit community service organization)

High School for Engineering Professions (at Scotlandville High) Advisory Committee, 1994-99

Deacon, Community Bible Church, 2000

Usher, Community Bible Church, 1998 - 2000

Elder, First Christian Church of Baton Rouge, 1994 - 98

Overseer for Education, First Christian Church of Baton Rouge, 1995

Overseer for Witness, First Christian Church of Baton Rouge, 1985

Board Member, First Christian Church of Baton Rouge 1980 - 83, 1985 - 88, 1991 - 92, 1994 - 98

Deacon, First Christian Church, 1980 - 83, 1985 - 88, 1991 - 92

SHORT COURSES:

"Thermodynamics", Fundamentals of Engineering Review Short Course, 1993, 1994

"Chemical Engineering Concepts for the Non-Chemical Engineer", LSU Continuing Education, 1980 - 81, 1983

"Material and Energy Balances", Dow Chemical, Plaquemine, Louisiana, 1983

"Kinetics and Reactor Design," Dow Chemical, Plaquemine, Louisiana, 1985

INSTRUCTIONAL ACTIVITIES:

University of Tulsa Undergraduate:

Industrial Catalysis, ChE 4133

Engineering Thermodynamics, ES 3053

Heat Transfer, ES 3073

Chemical Engineering Labs I and II, ChE 4003, ChE 4013

Chemical Reactor Design, ChE 4063

Equilibrium Thermodynamics, ChE 3063

University of Tulsa Graduate:

Industrial Catalysis, ChE 6133

Chemical Reactor Design, ChE 6463

Reactor Kinetics, ChE 7033

Thermodynamics, ChE 7023

LSU Undergraduate:

Chemical Engineering Thermodynamics, ChE 3172

Heterogeneous Equilibrium, ChE 3173

Engineering Practice, ChE 3242-3250

Senior Projects, ChE 3171-3172

Engineering Measurements, ChE 4104

Chemical Reaction Engineering, ChE 4190

Introduction to Polymers, ChE 4285

Chemical Engineering Design Elective (as Catalysis), ChE 4410

Industrial Catalysis, ChE 4205

LSU Graduate:

Chemical Reactor Design Methods, ChE 7140

Catalysis, ChE 7542

Thermodynamics, ChE 7120

THESIS AND DISSERTATIONS DIRECTED:

- 1. Y.N. Shyr, Ph.D. 1983, "Studies on the Selective Oxidation Activity of Fe-Te-O Catalysts".
- 2. Stephen Brignac, M.S. 1984, "A Reactor Study of Nickel Loaded Zeolites".
- 3. Krisda Chirapongse, Ph.D. 1984, "A Kinetic Study of the Methanation Reaction over Fe-Ru Catalysts".
- 4. Charles Egedy, M.S. 1984, "The Reactions of Cyclohexane and n-Octane over Tellurium Loaded Zeolites".
- 5. Chi H. Cheng, Ph.D. 1988, "The Investigation of PtTe/Al₂O₃ and PtSb/Al₂O₃ Reforming Catalysts".
- 6. Bharat Patel, Ph.D. 1989, "Fe-Te-O Catalysts for Selective Oxidation".
- 7. Yeung H. Park, Ph.D. 1991, "The Effects of Additives on the Selective Hydrogenation of Acetylene over Pd/Al₂O₃".
- 8. R.L. Gehani, M.S. 1993, "Ga Zeolites for Propane Aromatization".
- 9. Trent F. Guidry, Ph.D. 1998, "The Conversion of Light Amines over Copper Containing Zeolites".
- 10. Amit C. Gujar, M.S. 2004, "Synthesis of SUZ-4 in the K⁺/TEA⁺ System".
- 11. Amit C. Gujar, PhD 2005, "Experimental and Theoretical Study of Lean NO_x Reduction and NO Decomposition Using SUZ-4 Zeolite".
- 12. Minwoo Kwon, M.S. 2006, "Dehydrogenation Kinetics of n-Paraffins".
- 13. Yang He, M.S. 2011, "Conversion of Ginger Oil to Gasoline Via Catalytic Cracking".
- 14. Diachuan Chen, PhD., 2011, co-advisor, "Liquid Transportation Fuels from Algal Oils".
- 15. Ji Chen, M.S., 2014, "Catalytic Cracking of Ginger Oil to Aromatics".
- 16. Sainath Srikar Illa, M.S., 2017, "Synthesis of SUZ-4 Zeolite".

RESEARCH EQUIPMENT AVAILABLE:

- Agilent 5975C GC-MS System, split to FID, full spectral database
- HP 5890II GC with capillary column injectors, dual FID.
- Microbalance Perkin Elmer Pyris 1, complete reagent gas control facilities, dedicated PC system.
- Catalytic Reactor System: batch recirculation reactor, glass, high vacuum facilities, online GC/MS.
- Catalytic Reactor System: multi-furnace, multi-gas inlet flow system with online residual ga analyzer, GC/MS facilities
- Zeolite Synthesis Equipment 2000 cc autoclave and 600 cc stirred autoclaves, eight 200 cc rotating autoclaves, miscellaneous drying and calcining ovens.
- Catalyst forming equipment including ball-mill, mixer, and extruder.
- Controlled Atmosphere Calcining Furnace three zone, tubular, 3" ID x 36", complete reagent gas control system, independent zone temperature controllers, digital interface with computer control software.

INDUSTRIAL CONSULTING and ADVISING ACTIVITIES:

- 1. Syntroleum Corporation, 2007-14
- 2. Phillips 66, 2012-13
- 3. Sapphire Energy, 2008-12
- 4. Sapphire Energy, San Diego, CA, Scientific Advisory Board, 2006-12
- 5. Ferro Corporation, Grant Chemical Division, 1996
- 6. LaRoche Industries, 1995, 1997
- 7. Exxon Research and Development Laboratories, Baton Rouge, LA, 1986-2000
- 8. Exxon Research and Engineering, Clinton, NJ, 1987-1990
- 9. Exxon Zeolite Conference

Invited Lecturer, The Woodlands, TX, 1987 Invited Lecturer, Baton Rouge, LA, 1989

10. Mobil Research and Development Company, Princeton, NJ, 1985

SPONSORED RESEARCH:

- 1. NSF, "A Kinetic and Solid State Study of Mixed Oxide Allylic Oxidation Catalysts Containing Tellurium", 1981-83, \$47,970.
- 2. INSTAP, "Methanation Catalysis", 1982, \$12,335.
- 3. U.O.P., "Re-Ru Alloys for the Methanation Reaction", 1982-1983, \$15,000.
- 4. LOOP, "Hydrocarbon Emissions from LOOP's Onshore Storage Facility", with A.M. Sterling (PI), \$24,988.
- 5. Mobil Foundation, "Tellurium Loaded Zeolites", 1982, \$5,000.
- 6. Exxon Foundation, "Catalytic Hydrocracking of Heavy Aromatics", with E. McLaughlin and D.P. Harrison, 1981-1982, \$25,000.
- 7. Exxon Foundation, "Catalytic Hydrocracking of Heavy Aromatics", with E. McLaughlin and

- D.P. Harrison, 1982-1983, \$25,000.
- 8. Exxon Foundation, "Studies of Fundamental Processes in Catalysis", with E. McLaughlin and K. Dooley, 1983-1984, \$25,000.
- 9. Mobil Foundation, "Tellurium Loaded Zeolites", 1984, \$5,000.
- 10. Exxon Foundation, "Studies of Fundamental Processes in Catalysis", with K.M. Dooley (Co-PI), 1984-1985, \$25,000.
- 11. Mobil Foundation, "Tellurium Loaded Zeolites", 1985, \$5,000.
- 12. Exxon Foundation, "Studies of Fundamental Processes in Catalysis", with K.M. Dooley (Co-PI), 1985-1986, \$25,000.
- 13. Mobil Foundation, "Tellurium Loaded Zeolites", 1986, \$5,000.
- 14. Exxon Foundation, "Fundamental Processes in Catalysis", with K.M. Dooley (Co-PI), \$20,000, 1986-1987.
- 15. LEQSF, "Department Equipment Grant", with E. McLaughlin, and others in the Department of Chemical Engineering, \$365,000 (x-ray diffractometer equipment \$160,000 as Dr. Price's share), 1987.
- 16. LEQSF, "Zeolite Synthesis Laboratory", with H.E. Robson (Co-PI), \$182,000, 1987-1989.
- 17. Exxon Foundation, "Fundamental Processes in Catalysis", with K.M. Dooley (Co-PI), \$18,500, 1987-1988.
- 18. Exxon Foundation, "Isotopic Tracers in Catalysis", \$15,000, 1987-1988.
- 19. Exxon Foundation, "Fundamental Processes in Catalysis", with K.M. Dooley (Co-PI), \$15,000, 1988-1989.
- 20. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$15,000, 1989-1990.
- 21. LEQSF, "Equipment Enhancement Environmental Scanning Electron Microscope", with Greg Griffin (PI) and others, \$220,000, 1991.
- 22. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$15,000, 1990-1991.
- 23. Exxon Research and Development, "Synthesis of VPI-5 and ZSM-18", with H. Robson (Co-PI), \$11,000, 1991-1992.
- 24. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$15,000, 1991-1992.
- 25. LEQSF, "EDAX Attachment for ESEM", Greg Griffin (PI) and others, \$97,000, 1992.
- 26. LEQSF, "Laser Raman Spectrometer", F.C. Knopf (PI), K. Dooley (Co-PI), \$140,000, 1992.
- 27. DOE, "Ga Zeolites for Light Paraffin Aromatization", with K. Dooley (Co-PI), \$300,000, 1992-1995.
- 28. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$15,000, 1992-1993.
- 29. LaRoche Chemicals, "Study of Drying and Decomposition of Aeolus Papers", \$2,033, 1992-93.
- 30. LaRoche Chemicals, "Physical Analysis of Alumina Based Materials", \$8,000, 1993.
- 31. LaRoche Chemicals, "Synthesis of Mordenite, L, Y, and Omega Zeolites", \$7,000, 1994.
- 32. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$15,000, 1993-94.
- 33. LaRoche Industries, "Characterization of Alumina Based Materials", \$9,000, 1995.
- 34. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$10,000, 1994-

95.

- 35. DOE, "Solid-State Ion-Exchanged Zeolites for Hydrocarbon Conversion Reactions", with K.M. Dooley (Co-PI), \$89,500, 1995.
- 36. Handler's International, "Physical Analysis of Carbon-Based Materials", \$10,000, 1995-96.
- 37. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$10,000, 1995-96.
- 38. LaRoche Chemicals, "Mechanism of Metal Acetate Decomposition on Alumina", \$10,000, 1996.
- 39. Ferro Corporation, "Olefin Metathesis on Group 6b Metals: Survey of Catalytic Activity", with K.M. Dooley (Co-PI), \$10,000, 1996.
- 40. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$10,000, 1996-97.
- 41. MGK Co., "Catalyst Development and Reactor Study for Ketone Production", with K.M. Dooley (PI), \$25,000, 1997.
- 42. NSF, "Amine Conversion on Cu Zeolites Prepared by Solid-State Ion-Exchange", \$140,000, 1997-1999.
- 43. Exxon Foundation, "Zeolites and Zeolite Catalysis", with K.M. Dooley (Co-PI), \$10,000, 1997-98.
- 44. LESQF, "Enhanced Capabilities in Advanced Material Analysis and Processing", Co-PI with K.M. Dooley (PI) and F.C. Knopf (Co-PI), \$100,270, 1998.
- 45. Exxon Chemical Company, "Catalyst Evaluation and Development for Heterogeneous Carbonylation Reactions", with K. Dooley (Co-PI), \$85K, 1999-2000.
- 46. NSF "GOALI: High Stability Copper Zeolites for Lean NO_x Automotive Catalysts", with R. Blint and B. Cho (General Motors), \$125K, 2000-02.
- 47. General Motors, "Automotive Catalysts", with R. Blint and B. Cho, \$50K, 2000-02.
- 48. BP/Amoco, "Combustion Research", with F. Manning, \$2,000, 2001-02.
- 49. General Motors, "Automotive Catalysts", \$5K, 2002.
- 50. ConocoPhillips, "Graduate Fellowship in Catalysis", \$20,000, 2004-05
- 51. Homeland Security, "Designing Inherently Safe SCADA Systems for the Oil and Gas Industry", with S. Shenoi (PI), M. Papa, and F. Manning, \$479,607, 2005-07.
- 52. ConocoPhillips, "Graduate Fellowship in Catalysis", \$20,000, 2005-06
- 53. Syntroleum, "Dehydrogenation Kinetics of n-Paraffins", with K. Wisecarver, \$230,000, 2006.
- 54. ConocoPhillips, "Graduate Fellowship in Catalysis", \$20,000, 2006-07.
- 55. Sapphire Energy, "Catalytic Conversion of Bio-Synthesized Terpenes to Gasoline and Diesel", with D. Crunkleton (PI), \$73,600, 2007-08.
- 56. ConocoPhillips, "Graduate Fellowship in Catalysis", \$20,000, 2007-08.
- 57. Sapphire Energy, "Supplemental Funding Catalytic Conversion of Bio-Synthesized Terpenes to Gasoline and Diesel", with D. Crunkleton (PI), \$97,000, 2007-08.
- 58. Sapphire Energy, "Macroscopic Catalytic Conversion of Hydrocarbons Produced by Genetically Modified Algae to Fuels", with Dan Crunkleton (PI), \$224,111, 2008-09.
- 59. Sapphire Energy, "Supplement Macroscopic Catalytic Conversion of Hydrocarbons Produced by Genetically Modified Algae to Fuels", with Dan Crunkleton (PI), \$20,000, 2008-09.
- 60. Sapphire Energy, "Development of Biofuels from Algal Oils", with Noah Tracy (PI) and Dan Crunkleton (co-PI), \$67,500, 2009.

- 61. Sapphire Energy, "Construction of Medium-Scale Reactors for Conversion of Algal Oils to Fuel", with D. Crunkleton (PI), and N. Tracy, \$75,000, 2008-09.
- 62. Sapphire Energy, "Macroscopic Catalytic Conversion of Hydrocarbons Produced by Genetically Modified Algae to Fuels", with Dan Crunkleton (PI), \$201,809, 2009-10.
- 63. Sapphire Energy, "Macroscopic Catalytic Conversion Algae Oils to Fuels", with Dan Crunkleton (PI), \$110,000, 2010-11.
- 64. DOE, "Green Fuels from Algae", with Dan Crunkleton (co-PI), \$729,000, 2010-11.
- 65. Sapphire Energy, "Macroscopic Catalytic Conversion Algae Oils to Fuels", with Dan Crunkleton (PI) \$55,000 (2011).

LECTURES AND PROCEEDINGS:

- 1. G.L. Price,"Tellurium Loaded Zeolites", Monsanto Company in Texas City, Texas, 1979.
- 2. J.W. Hightower (speaker) and G.L. Price, "Dehydrocyclization of Small n-Paraffins Over Tellurium Zeolites", Sixth U.S./U.S.S.R. Joint Symposium on Chemical Catalysis, Cherry Hill, NJ, 1979.
- 3. G.L. Price and J.W. Hightower (speaker), "Dehydrocyclization of n-Paraffins over Te-NaX Zeolite Catalysts", Proceedings of the Seventh International Congress on Catalysis, Tokyo, Japan (1980).
- 4. G.L. Price (speaker), and J.W. Hightower, "Tellurium Loaded Zeolite Dehydrocyclization Catalysts, New Evidence on the Active Site", Proceedings of the AIChE Annual Meeting, Chicago, Illinois (1980).
- 5. G.L. Price (speaker), and C. Egedy, "The Cyclohexane Reaction over Tellurium Loaded Zeolites", Proceedings of the AIChE National Meeting, Atlanta, March (1984).
- 6. J.W. Hightower (speaker) and G.L. Price, "Isotopic Tracers in Catalysis: Aromatics from n-Paraffins over Te-NaX Zeolites", Symposium on New Surface Science in Catalysis, ACS Meeting, August 26-31, 1984.
- 7. G.L. Price, "Tellurium Loaded Zeolites", Gordon Research Conference, New London, New Hampshire (1985).
- 8. G.L. Price (speaker), and Y.N. Shyr, "Iron-Tellurium Mixed Oxides for Selective Oxidation", Proceedings of the AIChE Annual Meeting, paper #80b, Chicago (1985).
- 9. G.L. Price, "Iron-Tellurium Mixed Oxides for Selective Oxidation", University of Tulsa, 1986.
- 10. G.L. Price, "Zeolite Based Reforming Catalysts", Southwest Catalysis Society, Houston, TX, 1987.
- 11. G.L. Price (speaker) and C.H. Cheng, "Deuterium Exchange on Platinum Supported on BaKL Zeolite, comparison with Te/NaX and Pt/Al₂O₃", Proceedings of the AIChE Annual Meeting, paper #17c, New York, NY (1987).
- 12. G.L. Price, "Zeolite Based Reforming Catalysts", Georgia Tech, Atlanta, Ga, 1988.
- 13. G.L. Price, "Zeolite Based Reforming Catalysts", University of Houston, Houston, TX, 1988.
- 14. C.H. Cheng (speaker) and G.L. Price, "Te and Sb Modifiers for Pt/Al₂O₃ Reforming Catalysts", Proceedings of the AIChE National Meeting, Houston, TX, 1989.
- 15. E. Iglesia (speaker), J. Baumgartner, G.L. Price, K.D. Rose, and J.L. Robbins, "Dehydrocyclization of 1-13C n-Heptane on Tellurium and Platinum Loaded Zeolites", Proceedings of the North American Catalysis Society Meeting, Dearborn, MI (1989).

- 16. E. Iglesia (speaker), G.L. Price, and J. Baumgartner, "Dehydrocyclization of 1-13C n-Heptane on Tellurium Loaded Zeolites", AIChE National Meeting, Philadelphia, PA, August (1989).
- 17. B.M. Patel (speaker) and G.L. Price, "Iron-Tellurium-Selenium Mixed Oxide Catalysts for the Oxidative Dehydrogenation of 1-Butene to 1,3-Butadiene", Proceedings of the AIChE Annual Meeting, paper #51f, San Francisco, CA (1989).
- 18. V. Kanazirev (speaker), K. Dooley, and G.L. Price, "Preparation of Ga-Doped Zeolite Catalysts via Solid State Interaction Between Ga₂O₃ and HZSM-5 Zeolite Induced by Hydrogen", 1991 International Symposium on Zeolite Chemistry and Catalysis, Prague, Czechoslovakia.
- 19. G.L. Price, "Ga Zeolites for Light Paraffin Aromatization", Southwest Catalysis Society, April 1992.
- 20. K. Dooley (speaker), C. Chang, V. Kanazirev, and G. Price, "Pretreatment Effects on Active State and Aromatization Activity of Ga/ZSM-5 Catalysts", Tenth International Congress on Catalysis, Budapest, Hungary, 1992.
- 21. G.L. Price (speaker) and V. Kanazirev, "n-Propylamine Desorption from GaMFI", Proceedings of the AIChE National Meeting, Houston, TX, 1993.
- 22. G.L. Price (speaker), "Ga Zeolites for Light Paraffin Aromatization", Ninth DOE/BES Heterogeneous Catalysis and Surface Chemistry Meeting, Milwaukee, WI, May 1994.
- 23. K.M. Dooley (speaker), T.F. Guidry, V.I. Hart, L. Butler, V. Kanazirev, and G.L. Price, "Control of Intrazeolite Ga and In Cation Content and its Effects on Alkane Dehydrogenations in Pentasils", Southwest Catalysis Society Fall Symposium, Nov. 4, 1994.
- 24. K.M. Dooley (speaker), T.F. Guidry, V.I. Hart, L. Butler, V. Kanazirev, and G.L. Price, "Control of Intrazeolite Ga and In Cation Content and its Effects on Alkane Dehydrogenations in Pentasils", 14th North American Catalysis Society Meeting, Snowbird, Utah, June, 1995.
- 25. G.L. Price (speaker) and V. Kanazirev, "The Effect of Oxygen on the Thermal Activation of Zeolites", Proceedings of the AIChE Annual Meeting, paper #59ag, Miami Beach, FL, November, 1995.
- 26. G.L. Price (speaker) and V. Kanazirev, "Reductive Solid-State Ion-Exchange of CuO with H-MFI", Proceedings of the AIChE Annual Meeting, paper #82g, Miami Beach, FL, November, 1995.
- 27. G.L. Price, "Reductive Solid-State Ion-Exchange of Zeolites", Engelhard Corporation, Beachwood, OH, January, 1996.
- 28. G.L. Price, "Reductive Solid-State Ion-Exchange of Zeolites", University of Missouri Rolla, April, 1996.
- 29. G.L. Price, "Reductive Solid-State Ion-Exchange of Zeolites: Discovery, Characterization, and Catalysis", Virginia Polytechnic Institute, March, 1998.
- 30. T.F. Guidry and G.L. Price, "The Selective Dehydrogenation and Dimerization of Amines over Cu Containing MFI Zeolites", Poster # 18, 17th Conference on Catalysis of Organic Reactions, New Orleans, LA, March, 1998.
- 31. T.F. Guidry (speaker) and G.L. Price, "The Conversion of 1-Propanamine over Copper-Containing Zeolites Prepared by Aqueous and Vapor Ion-Exchange", Southwest Catalysis Society Fall meeting, Tulane University, New Orleans, LA, October, 1998.
- 32. G.L. Price, "Analysis of Deuterium in Hydrocarbons", Virginia Polytechnic Institute, Feb. 25, 1999.

- 33. G.L. Price, "Reductive Solid-State Ion-Exchange of Zeolites: Discovery, Characterization, and Catalysis", Exxon Research and Development, September 1999.
- 34. G.L. Price and T. F. Guidry, "Solid-State Preparation of Copper Zeolites", 1999 AIChE Annual Meeting, paper # 281d, Dallas, TX, Nov. 5, 1999.
- 35. G.L. Price, "Protons and Cations in Zeolites: Characterization by Adsorption of Amines", General Motors Research and Development Center, March, 2000.
- 36. G.L. Price, "Reductive Solid-State Ion-Exchange of Zeolites: Discovery, Characterization, and Catalysis", Oklahoma State University, November, 2000.
- 37. A. Subbiah, B.K. Cho (speaker), R.J. Blint, G.L. Price, and J.E. Yie, "NO_x Reduction over Metal-Ion Exchanged Novel Zeolite under Lean Conditions: Activity and Hydrothermal Stability", paper # 342h, AIChE Annual Meeting, Reno, NV, November (2001).
- 38. G. L. Price, "Reductive Solid-State Ion-Exchange of Zeolites: Discovery, Characterization, and Applications", UOP Research and Development Invitational Lecture Series, February 28, 2002.
- 39. G. L. Price, "Reductive Solid-State Ion-Exchange of Zeolites: Discovery, Characterization, and Applications", University of Oklahoma, Department of Chemical Engineering Seminar Series, Sept. 19, 2002.
- 40. G. L. Price, "Discovery of Reductive Solid State Ion-Exchange of Zeolites and Spinoff Applications", Bartlesville, OK AIChE Section Meeting, March 20, 2003.
- 41. Gujar, Amit (poster presenter); Moye, Amol; Teeters, Dale; Roberts, Kenneth; Price, Geoffrey, "Spectroscopic investigation of the SUZ-4 zeolite", Abstracts, 59th Southwest Regional Meeting of the American Chemical Society, Oklahoma City, OK, United States, October 25-28 (2003).
- 42. Amit Gujar (speaker), P. A. Coghill, and G. L. Price, "Adsorption-Desorption Studies on SUZ-4 Zeolite", 78th Annual Meeting of the SW and Rocky Mountain Division of the American Assoc. of the Adv. of Science, April, 2003.
- 43. G.L. Price, "Solid State Ion Exchange of Zeolites", COLL 172, The 227th ACS National Meeting, Anaheim, CA, March 28-April 1, 2004.
- 44. G.L. Price, "Chemical Engineering Faculty Salary Survey", AIChE Annual Meeting, Austin, TX, November, 2004.
- 45. G.L. Price, "Chemical Engineering Faculty Salary Survey", AIChE Annual Meeting, Cincinnati, OH, November, 2005.
- 46. G.L. Price, "Chemical Engineering Faculty Salary Survey", AIChE Annual Meeting, San Francisco, CA, November, 2006.
- 47. G.L. Price, "A Carberry Catalytic Reactor System: Construction, Commissioning, and Catalytic Reactions", Oklahoma State University seminar series, December, 2006.
- 48. G.L. Price, "Reductive Solid-State Ion-Exchange (RSSIE) of Zeolites: Discovery, Characterization, and Applications", ACS Pentasectional Meeting, paper # 17, March, 2007.
- 49. G.L. Price, "Chemical Engineering Faculty Salary Survey", AIChE Annual Meeting, Salt Lake City, Utah, November, 2007.
- 50. G.L. Price, "Chemical Engineering Faculty Salary Survey", AIChE Annual Meeting, Philadelphia, PA, November, 2008.
- 51. G. L. Price, Panel Moderator for session "Alternative Energy Sources; Potential, Transmission Costs, Hurdles; What Must be Done", in Oklahoma: The New Energy Frontier, Transforming

- current and potential Oklahoma energy resources into sustainable economic growth, Reed Conference Center, Midwest City, February 25, 2009.
- 52. G. L. Price, R. Stratton, J. Henshaw, and D. Crunkleton, Sustainable Energy Panel Discussion, AAAS-SWARM Division 84th Annual Meeting, March 29, 2009.
- 53. Daichuan Chen (speaker), Noah Tracy, Daniel Crunkleton and Geoffrey Price, "Catalytic Conversion of Algae Oil over Different Catalysts", AAAS-SWARM Division 84th Annual Meeting, March 29, 2009.
- 54. N. Tracy (poster presenter), D. Chen, D. Crunkleton, and G. Price, "Catalytic Conversion of Phytol to Gasoline", Fulbright Commission, Brazil: 1st Brazil-US Biofuels Short Course, Sao Paulo, Brazil, August, 2009.
- 55. G.L. Price, "Chemical Engineering Faculty Salary Survey", AIChE Annual Meeting, Nashville, TN, November, 2009.
- 56. Baukal, C.; Colannino, J.; Bussman, W.; and Price, G., "Industry Instructors for a Specialized Elective Course", AC 2010-67, ASEE Annual Conference, Louisville, KY (2010).
- 57. G.L. Price, "Chemical Engineering Faculty Salary Survey", AIChE Annual Meeting, Salt Lake City, Utah, November, 2010.
- 58. Baukal, C.; Price, G.; Matsson, J.; Bussman, W.; and Olson, S.; "Industry Adjuncts: Lessons Learned", AC 2248, ASEE Annual Conference, Vancouver, British Columbia (2011).
- 59. G. L. Price, "Development of Green Fuels from Algae", Executives of Tulsa meeting, Southern Hills Marriot, Sept. 9, 2011.
- 60. G.L. Price, "Chemical Engineering Faculty Salary Survey", AIChE Annual Meeting, Minneapolis, MN, October, 2011.
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