

Henry C. Foley

Curriculum Vitae

Current positions at the University of Missouri-Columbia and Missouri University of Science & Technology

Current Position	11/15—Present	Interim Chancellor, University of Missouri-Columbia
	02/16 – Present	Executive Vice Chancellor for Health Affairs, University of Missouri-Columbia
	07/13—Present	Professor of Chemistry; University of Missouri-Columbia Professor of Chemical & Biochemical Engineering; Missouri University of Science & Technology (Rolla, MO)

Past Positions	07/13—11/15	Executive Vice President for Academic Affairs, Research and Economic Development; University of Missouri System
	04/14—11/15	Senior Vice Chancellor, Office of Research, Graduate Studies and Economic Development; University of Missouri-Columbia

Experience

The Pennsylvania State University

01/10—	Vice President for Research, reporting to the President
07/13	Dean of the Graduate School, reporting to the Provost & Executive Vice President President of the Penn State Research Foundation (Separate 501(c)(3)), reporting to the President and The Corporation for Penn State President of the Research Park Management Corporation, Separate (501(c)(3)), reporting to the President and The Corporation for Penn State
02/10—	Executive Director and Principal Investigator, DOE-National HUB for Energy Efficient Buildings, Philadelphia
11/09—	Director, The Strategic and Global Securities Program, An ODNI Center for Academic Excellence in Intelligence Studies
07/13	
11/06—	Dean, College of Information Sciences and Technology
12/09	
05/06—	Interim Dean, College of Information Sciences and Technology
11/06	
07/04—	Associate Vice President for Research and Director of Strategic Initiatives
05/06	
07/00—	Head of Chemical Engineering and Walter L. Robb Family Endowed Chair
07/04	
11/06—	Professor of Information Sciences and Technology
07/13	
09/00—	Professor of Chemistry
07/13	
07/00—	Professor of Chemical Engineering
07/13	

University of Delaware

09/96—	Professor of Chemical Engineering
07/00	
06/99—	Visiting Scholar, Wolfram Research Inc., Champaign-Urbana, IL
07/99	
06/97—	Visiting Scientist, Reaction Engineering Group, CRD, DuPont Co
01/98	

08/91— Director, Center for Catalytic Science and Technology
06/96
09/91— Associate Professor of Chemical Engineering
09/96
06/87— Associate Director, Center for Catalytic Science and Technology
08/91
09/86— Assistant Professor of Chemical Engineering
09/91
American Cyanamid Corporation
05/85— Group Leader–Inorganic Technology
07/86
01/84— Senior Research Chemist
05/85
12/82— Research Chemist, American Cyanamid Co., Inc.
01/84
Postdoctoral Fellow
12/81— Center for Catalytic Science and Technology, Department of Chemical Engineering,
12/82 University of Delaware

Earned Degrees

Ph.D. , Chemistry, The Pennsylvania State University	1982
M.S. , Chemistry, Purdue University	1979
B.S. , <i>cum laude</i> , Chemistry, Providence College	1977

Honorary Degree

D.Sc. , Providence College	2015
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Security Clearance: Top Secret

h-index: 32, i-10 index: 86, citations: 4403

<http://scholar.google.com/citations?user=BIkGM-0AAAAJ&hl=en&oi=ao>

External Appointments

- Providence College, Board of Trustees
- Donald Danforth Plant Sciences Center, Board of Directors
- Hawthorn Foundation (2015), Chair-Elect
- Missouri Biotechnology Association, Board of Directors Executive Committee
- Hawthorn Foundation, Board of Directors
- Missouri Partnership, Board of Directors
- Regional Economic Development, Inc., Board of Directors
- Missouri Innovation Center, Board of Directors
- Missouri Technology Corporation, Board Member Designee
- Missouri Plant Science Center Joint Venter, Board Member
- University Industrial Development Partnership Member
- The Greater Philadelphia Chamber of Commerce, Board of Directors
- Centre County Industrial Development Corporation, Board Member
- Ben Franklin Technology Development Authority Board, Department of Community and Economic Development, Board Member, Commonwealth of Pennsylvania
- Ben Franklin Center for Central Pennsylvania, Board Member
- Life Sciences Greenhouse of Central Pennsylvania, Board Member
- The Technology Collaborative, Board Member, Pittsburgh Pennsylvania
- Directorate of Engineering, National Science Foundation (Fall 2003 – Spring 2006), Committee of Visitors

Recognition

Academy of Science-St. Louis, Science Leadership Award - 2016
Fellow – St. Louis Academy of Science – Elected 2016
Fellow - American Institute of Chemical Engineers – Elected 2016
Fellow – American Association for the Advancement of Science – Elected November 2014
Fellow – National Academy of Inventors – Elected December 2013
Fellow – American Chemical Society, Industrial and Engineering Chemistry Division – Elected Fall 2013
Cosmos Club Member, Washington D.C., December 2012
Distinguished Lecturer in Chemical Engineering, The University of Utah, February 2004
Walter L. Robb Chair of Chemical Engineering, The Pennsylvania State University, July 2000
Philadelphia Catalysis Club Annual Award, Philadelphia Catalysis Club, May 2000
New York Metropolitan Catalysis Society, *Excellence in Catalysis Award*, May 2000
Du Pont Lecture in Reaction Engineering, Engineering Foundation, Banff 1997
Ernest W. Thiele Lectureship in Chemical Engineering, University of Notre Dame, 1995
Leo C. Friend Award, IEC Division, American Chemical Society, 1995
Research Innovation Recognition Award, 1994-1995, Union Carbide Corporation
Presidential Young Investigator Award, National Science Foundation, 1987

Service

Community-at-Large

Engineering Advisory Committee, The National Science Foundation (Fall 2015 – Spring 2017)
Committee of Visitors, Directorate of Engineering, The National Science Foundation (Fall 2003 – Spring 2006)
Chair, Committee of Visitors, Chemical and Transport Systems, Directorate of Engineering, The National Science Foundation (Fall 2005 – Spring 2006)
Reviewer, Career Awards Review Panel, Kinetics and Catalysis Program, The National Science Foundation (March 2005)
Research Program Review Committee, Brookhaven National Laboratory, The Department of Energy (Spring 2004)
Participant and Speaker, Biorenewables Workshop, The National Science Foundation (March 2004)
Participant and Speaker, Nanotechnology and Energy Workshop, The Department of Energy and the National Science Foundation (March 2003)
Committee of Visitors, Chemical and Thermal Systems Division, The National Science Foundation (Spring 2003)
Participant and Speaker, Catalysis and Nanotechnology Workshop, The National Science Foundation (July 2003)
Participant, Hydrogen Storage Workshop, Department of Energy, Argonne National Laboratory (August, 2002)
Reviewer, Nanomanufacturing Proposal Review Committee, The National Science Foundation (March 2002)
Participant and Speaker, Nanomanufacturing and Processing Workshop, The National Science Foundation and European Community (January 2002)
Reviewer, Career Awards Review Panel, Kinetics and Catalysis Program, The National Science Foundation (March 2001)

The Pennsylvania State University

Chair, Academic Leadership Council – Summer 2010 – July 2011
President, Penn State Research Foundation – January 2010 – present
University Facilities Naming Advisory Committee – Summer 2009 – June 2010
Online Steering Committee, Fall 2008 – present
PA Prosperity Partnerships Steering Committee – Fall 2008 - present
Information Resources, Technologies and Services Task Force, Spring 2008 - present
University Health Sciences Council, Fall 2007 – present
Dean's Advisory Committee, Huck Institutes of the Life Sciences, Fall 2007 – present
Penn State Institute for Energy and the Environment, Spring 2007 – present
Co-Convener, University Strategic Task Force on Energy, Winter-Summer 2006
Director, University Strategic Initiative in Homeland Security and Defense, Fall 2004 – Fall 2006
Patent Review Committee, Summer 2004 – Fall 2006

University Research Committee, Summer 2004 – Fall 2006
Associate Dean for Research in Arts and Architecture Search Committee, Spring 2005
Chair, Nanoscale Science and Technology Committee, Spring 2004
Materials Research Institute Advisory Board, Spring 2001 – present
SAMCOM, Fall 2000 – present
Schreyer Honors College Advisor (15 Honors Advisees), Fall 2000 – present
Chemistry Department Head Search Committee, Winter 2003 – Spring 2004
Nanofabrication Laboratory Expansion Committee, Fall 2002 – Spring 2004
Director of the Life Sciences Consortium Search Committee, Fall 2002
Internal Bioengineering Review and Planning Committee, Spring 2002
Nanofabrication Users Committee, 2002
Engineering Science and Mechanics Head Search Committee 2001
Engineering Science and Mechanics Head Search Committee 2000

University of Delaware

College of Engineering Promotion and Tenure Committee, 1999-2000
Intellectual Property Administrator Search Committee, 1999
Faculty Search Committee, Department of Chemical Engineering, 1998
Director, CCST, 1991–1996
Associate Direct CCST, 187-1991
ChE Graduate Curriculum Revision Committee, 1995-1996
Engineering Outreach Policy and Oversight Committee, 1994–present
Council of Center Directors, 1993–1996
Head, Department of Chemical Engineering Faculty Search Committee, 1993
College of Engineering Search Committee for Assistant Dean of Engineering Outreach, 1993
Faculty Senate – Graduate Studies Committee, 1991–present
Undergraduate Chemical Engineering Curriculum Committee, 1991–1993
Department of Chemical Engineering Chair Search Committee, 1991
Schuit Symposium Coordinator, 1988–present
Chemical Engineering Undergraduate Advisor, 1988–present
Faculty Advisor, Student Chapter of AIChE, 1988–1991

Teaching

The Pennsylvania State University

Spring 2001	ChE 301 (First course in chemical engineering for all majors)
Fall 2002	ChE 301
Fall 2003	ChE 301 Honors (New course developed by Foley for Honors students in ChE)

Delaware State University

CHEG 112	Introduction to Chemical Engineering Analysis
CHEG 440	Senior Laboratory: Unit Operations
CHEG 432	Chemical Process Analysis and Design
CHEG 606	Introduction to Catalytic Processes
CHEG 836	Applied Chemical Kinetics
CHEG 83	Chemical Reaction and Reactor Analysis

National Academy of Inventors
Cosmos Club Member, Washington D.C., December 2012
The Pennsylvania Society
American Society for Cybernetics
American Society for Information Science and Technology
Sigma Xi
Phi Lambda Upsilon
Sigma Pi Sigma
Who's Who in Science and Engineering
American Society for Engineering Educators
Fellow, American Institute of Chemists
America Association for the Advancement of Science
American Institute of Chemical Engineers
Electrochemical Society
Carbon Society
American Chemical Society
Materials Research Society
Philadelphia Catalysis Club
North American Catalysis Society

Professional Activities at the University of Delaware*Off-Campus Extracurricular Teaching Industrial Catalysis Course*

LaRoche Chemicals—January 1998
Union Carbide Corporation—November 1996
Los Alamos National Laboratory—September 1996
UOP—July 1995
ARCO Chemical—January 1991
Exxon—October 1990
Phillips Petroleum—July 1990
Union Carbide—May 1990
Amoco Chemical—March 1990

On-Campus Extracurricular Teaching Chemistry of Catalytic Processes

June 1987—June 1998

Corporate Consulting

DuPont Company
Engelhard Corporation
W. L. Gore & Associates, Inc.
Catalytica, Inc.
Rohm and Haas Company
SPI Polyols
W. R. Grace and Company
Johnson Matthey
Westvaco
Monsanto
The Catalyst Group

Professional Societies Service

Session Chair, Nanomanufacturing, AIChE Meeting, November 2005
Session Chair, Nanotechnology for Energy, AIChE Meeting, November 2005
Session Chair, Nanomanufacturing, AIChE Meeting, November 2004
Session Chair, Nanotechnology for Energy, AIChE Meeting, November 2004
Session Chair, Wilhelm Award Session, AIChE Meeting, November 2003
Session Co-Chair, AIChE Meeting, Dallas, October 1999, Catalyst Design
Past Chair, Catalysis and Reaction Engineering Division, AIChE (November 1998)
Session Co-Chair, AIChE Meeting, Miami, November 1998, Catalyst Design
Chair, Catalysis and Reaction Engineering Division, AIChE (November 1997)
Vice Chair, Catalysis and Reaction Engineering Division, AIChE (November 1996)
Present-Past Chairman, Philadelphia Catalysis Club (September 1996)
Chairman, Philadelphia Catalysis Club (September 1995)
Chairman-Elect, Philadelphia Catalysis Club (April 1994)
Chairman, Philadelphia Catalysis Club's Annual Student Poster Contest (January 1994)
Vice Chairman, *Symposium on Membrane Reactors*, AIChE Annual Meeting, St. Louis, Missouri (November 1993)
Director, Philadelphia Catalysis Club (September 1992–Present)
Program Chairman, Philadelphia Catalysis Club (September 1991–April 1992)
Session Chairman, Symposium on Octane and Cetane Enhancement Processes for Reduced Emission Motor Fuels, ACS National Meeting, San Francisco, California (April 1992)
Session Chairman, Symposium on Selectivity Control in Catalysis, ACS National Meeting, New York, New York (August 1991)
Vice Chairman, Symposium on Electronic and Photonic Materials Processing: Chemical Aspects, AIChE Annual Meeting, Chicago, Illinois (November 1990)
Vice Chairman, Symposium on Ultramicroporous Carbons and Carbon Molecular Sieves for Catalysis and Separation, AIChE Annual Meeting, Chicago, Illinois (November 1990)

Professional Advisory Boards and Journals

Los Alamos National Laboratory, Catalysis Advisory Board
Editorial Board Member: *Applied Catalysis*, 1994 - 1998
Editorial Board Member: *Microporous Materials*, 1992 - 1997
Reviewer for Science, *Nature*, *Nature Materials*, *Advanced Materials*, *Carbon*, *Journal of Catalysis*, *Applied Catalysis*, *Journal of the American Chemical Society*, *AIChE Journal*, *Chemical Engineering Science*, *Journal of Physical Chemistry*, *Microporous Materials*, and *Langmuir*

Invited Lectures

Universities

“On the Design of an Effective Shape Selective Platinum Carbon Catalyst,” Annual Meeting of the Center for Nanoscience, University of Missouri – University of Missouri-St. Louis – St. Louis University – Washington University, December 2014
“On the Design of an Effective Shape Selective Platinum Carbon Catalyst,” University of Missouri-St. Louis, September 2014
UM Patent Attorney/Technology Transfer Office Summit, Columbia, MO, September 2014
“On the Design of an Effective Shape Selective Platinum Carbon Catalyst,” Dean Henry E. Bent Lecture, Chemical Engineering, May 2014
MU Extension CPD Conference, Columbia, MO, June 2014
Rollins Society Luncheon, Columbia, MO, April 2014
“On the Design of an Effective Shape Selective Platinum Carbon Catalyst,” Chemical Engineering Departmental Seminar, Missouri University of Science and Technology, April 2014

University Extension Regional Directors, Program Directors and Continuing Education Directors, January 2014
Alumni Alliance Fall Meeting, Columbia, MO, November 2013
Department Chair Meeting, Missouri University of Science and Technology, October 2013
“Chemical Engineering: Looking Backward and Forward,” Keynote Lecture, On the Occasion of the 110th
Anniversary of the Department of Chemical Engineering at the University of Missouri – Columbia, October 2013.
Interfaculty Council Retreat, Lake Ozark, MO, September 2013
MU Tech Expo, MU Bond Life Science Center, September 2013
Keynote Address, Missouri University of Science and Technology, September 2013
Departmental Seminar, Chemical Engineering, University of California at Los Angeles, December 2004
Departmental Seminar, Industrial Engineering, The Pennsylvania State University, April 2004
Distinguished Lecture in Chemical Engineering, University of Utah, February 2004
Departmental Seminar, Carnegie Mellon University, November 2003
Departmental Seminar, North Carolina State University, November 2000
Departmental Seminar, University of Cincinnati, January 2000
Materials and Fuel Science Departmental Seminar, The Pennsylvania State University, May 1998
Departmental Seminar, University of Massachusetts, November 1997
Dept. Chemistry Colloquium, University of Florida, November 1997
Departmental Seminar, Texas A&M University, September 1997
Monthly Lecture, New York Metropolitan Catalysis Club, October 1997
Du Pont Lecture in Reaction Engineering, Engineering Foundation, Banff, June 1997
Departmental Seminar, Northwestern University, April 1997
Departmental Seminar, University of California at Davis, October 1996
Departmental Seminar, Massachusetts Institute of Technology, March 1996
Departmental Seminar, Drexel University, March 1996
Departmental Seminar, University of Virginia, February 1996
Departmental Seminar, Tufts University, November 1995
Thiele Lecture, University of Notre Dame, October 1995
Access in Nanoporous Materials Symposium, Michigan State University, June 1995
Catalysis Research Gordon Conference, June 1994
Departmental Seminar, University of Pennsylvania, Philadelphia, Pennsylvania, December 1993
Departmental Seminar, University of Minnesota, Minneapolis, Minnesota, November 1993
Departmental Seminar, Cornell University, Ithaca, New York, October 1993

Corporations/Societies

Merrill Research Retreat, Nebraska City, NE, July 2014
Ewing Marion Kauffman Foundation, Kansas City, MO, July 2014
Council on Research Administrators, Danforth Center, April 2014
REDI Member Breakfast, Columbia, MO, March 2014
Missouri Society of Professional Engineers, Columbia, MO, March 2014
Southwest Rotary Club, Columbia, MO, February 2014
MOBIO Annual Life Sciences Day, January 2014
Missouri Technology Corporation, Columbia, MO, October 2013
Regnier Institute for Entrepreneurship and Innovation Faculty, October 2013
Missouri 100 Fall Meeting, Columbia, MO, September 2013
Rohm and Hass Central Research - Springhouse, February 2004
General Electric Research Center Schenectady, June 2003
General Electric Research Center Schenectady, October 2002
General Electric Research Center Schenectady, May 2002
General Electric Research Center Schenectady, September 2001

Philadelphia Catalysis Club, October 2000
Metropolitan New York Catalysis Society, May 2000
Callery Chemical, Pittsburgh, PA, February 2000
Tri-State Catalysis Society, January 2000
Metropolitan New York Catalysis Society, May 1998
Du Pont Lecture in Reaction Engineering, Engineering Foundation, Banff, June 1997
Organic Chemistry Seminar Series, Du Pont Exptl. Station, May 1997
Special Seminar for the Carbon Program, Du Pont Exptl. Station, July 1996
Rohm & Haas - Technical Center, Spring House, Pennsylvania, November 1995
DuPont - Organic Chemistry Seminar Program, February 1993
Nippon Mining Corporation - Mitsushima Refinery, Kurashiki, Japan, October 1992 Nippon Mining Corporation
- Central Research Laboratory, Tokyo, Japan, October 1992
Mobil - Central Research Laboratory; Princeton, New Jersey, February 1992
Sun Company, Marcus Hook, Pennsylvania, November 1991
ARCO Chemical Company; Newtown Square, Pennsylvania, October 1991
Mobil - Research and Development, Paulsboro, New Jersey, September 1990
British Oxygen Corporation - Technical Group, August 1990
Chemetals, Inc. Research and Development, July 1990
Air Products and Chemicals, Inc., June 1990
Engelhard Corporation Research, January 1990
Firmenich Research and Development, Geneva, Switzerland, October 1989
British Petroleum Research and Development, Sunbury on Thames and Hull, United Kingdom, October 1989
Phillips Petroleum, Research and Development, April 1989
Air Products and Chemicals, Inc., October 1988
Rohm and Haas Company, July 1988
Westvaco Corporation Research, Charleston, South Carolina, July 1988
Allied-Signal Corporation, Morristown, New Jersey, March 1988
Phillips Petroleum Company, December 1987
Air Products and Chemicals, Inc., November 1987
British Petroleum of America, March 1987
Texaco Oil Co., March 1987

Professional Society Meetings

Invited Speaker, Somarjai Award for Catalysis Symposium, American Chemical Society Annual National Meeting, Anaheim, April 2004, "High Activity and Stability Catalysts - Kinetically Frustrated Pt_x Nanoparticles in Nanoporous Carbon Glass."

Central Pennsylvania AIChE Meeting, November 2003, "On Chemistry and Chemical Engineering."

AIChE Meeting, Miami, November 1998, "Structural Modeling of Nanoporous Carbons."

AIChE Meeting, Miami, November 1998, "Cesium Nanoporous Carbon Catalysts."

Nanotubes and Nanocarbons, Recent Advances in The Chemistry and Physics of Fullerenes and Related Materials-Symposium, The Electrochemical Society, June 1998, San Diego CA

International Society of Chemical Reaction Engineers, September 1994

International Society of Chemical Reaction Engineers, Baltimore, Maryland, September 1994

ASC National Meeting, New Orleans, 1996 Tutorial Seminar on Inorganic Separating Agents

DOE-PETC Workshop on Higher Alcohols and Oxygenates for Fuels, Pittsburgh, Pennsylvania, October 1993

Annual ACS National Meeting, Keynote Speaker, *Symposium on Molecular Sieves*, August 1993

Annual Spring Seminar, Central New Jersey AIChE, "Fighting Pollution with Chemical Catalysis and Biotechnology," May 1993

Semi-Annual ACS National Meeting, *Symposium on Metal Clusters*, March 1993

Annual Philadelphia Catalysis Club Spring Symposium, March 1993

Annual ACS National Meeting, *Symposium on Catalyst Supports: Chemistry of Forming and Characterization*, August 1992

Annual ACS National Meeting, *Symposium on Selectivity Control in Catalysis*, August 1992

Annual ACS National Meeting, *Symposium on Microporous and Layered Materials*, August 1992
 Zeolite and Layered Materials, Gordon Research Conference, Plymouth, New Hampshire, June 1990
 Symposium on Inorganic Membranes, Materials Research Society, San Francisco, California, April 1990
 Jet Propulsion Laboratory, Workshop on Microgravity, Pasadena, California, January 1990
 Pennsylvania State University, University Park, Pennsylvania, November 1989
 Symposium on Materials Characterization, FACSS 16th Annual Meeting, Chicago, Illinois, October 1989
 Departmental Seminar, Georgia Institute of Technology, May 1989
 Florida Catalysis Conference, Tarpon Springs, Florida, May 1989
 Symposium on Inorganic Separating Agents, National American Chemical Society Meeting, Dallas, Texas, April 1989
 Philadelphia Catalysis Club Spring Symposium, May 1989
 62nd Colloid and Surface Science Symposium, University Park, June 1988
 North American Chemical Congress, Toronto, Canada, June 1988
 AIChE Annual Meeting, New York, November 1987
 60th Colloid and Surface Science Symposium, Atlanta, Georgia, June 1986
 Second Annual Symposium of the New England Catalysis Society, Worcester, Massachusetts, November 1985
 International Society of Chemical Reaction Engineers, Baltimore, Maryland, September 1994
 Mid-Atlantic Regional ACS Meeting, Newark, Delaware, April 1982
 Annual National ACS Meeting, New York, September 1981
 Northeast Regional ACS Meeting, Pittsburgh, Pennsylvania, November 1980

Graduate Theses

28. Andalibi, Mohammed (2014). *Hydrogen Adsorption by Late Transition Metal Complexes Confined in Nanoporous Carbon Materials*. (M.S.)
27. Qajar, A. (2013). *Synthesis and Characterization of Polymer Derived Porous Carbons for Gas Adsorption, Storage, and Separation*. (Ph.D.)
26. Peer, M. (2013). *Nanoporous Carbon-Based Shape Selective Catalyst: Control of Textural and Morphological Properties*. (Ph.D.)
25. Holbrook, B. P. M. (2010). *Nanoporous Carbon Mediated Catalysis and Hydrogen Adsorption*. (Ph.D.)
24. Burket, C. L. (2007). *Genesis and Evolution of Porosity and Microstructure in Nanoporous Carbon Derived from Polyfurfuryl Alcohol*. (Ph.D.)
23. Dronavajjala, K. D. (2007). *Studies of Surface Initiated Polymerization Using Anchored Organometallic Catalyst*. (Ph.D.)
22. Mankidy, P. (2007). *Novel Template-Less Synthesis of Polycyanoacrylate Nanofibers*. (Ph.D.)
21. Merrit, A. R. (2007). *The Design of High Flux Nanoporous Carbon Membranes and Their Application in Small Gas Molecule Separations*. (Ph.D.)
20. Yi, B. (2007). *Structural Modification of Nanoporous Carbon with Single Wall Carbon Nanotube*. (Ph.D.)
19. Giraldo, M. (2006). *Oxidation of Ethylbenzene to Styrene over Carbon Catalysts: A Kinetic Analysis and in-situ DRIFTS Characterization*. (M.S.)
18. McNamara, K. W. (2002). *Alkali Metal Interactions with Nanoporous Carbon: Synthesis, Characterization and Reaction*.
17. Shiflett, M. B. (2002). *Synthesis, Characterization and Application of Nanoporous Carbon Membranes*. (Ph.D.)
16. Strano, M. S. (2001). *Nanoporous Reactive Membranes: Engineering Pore Structure and Selective Transport Properties*.
15. Stevens, M. G. (1999). *Cesium in Nanoporous Carbon: Structural Rearrangements and C-C Bond Formation*.
14. Acharya, M. (1998). *Supported Nanoporous Carbon Membranes, Preparation, Application and Modeling*.
13. Kane, M. S. (ABD). *Structure, Properties and Adsorptive Application of Polymer-Derived CMS*. (ABD).

12. Té, M. (1996). *Synthesis, Characterization and Catalysis of Rhodium–Molybdenum Bimetallic Catalysts and Related Metal–Oxide Catalysts for Oxygenate Synthesis*. (Ph.D.).
11. Lowenthal, E. E. (1995). *Bimetallic and Metal–Support Interactions in Rhodium–Molybdenum/ Gamma–Alumina and Their Influence on Oxygenate Synthesis*. (Ph.D.).
10. Casey, S. M. (1995). *Design, Synthesis, and Characterization of Ultrafine–Particle Catalysts for Coal Liquefaction*. (Ph.D.).
09. Raich, B. A. (1995). *Implications of Kinetics for Selectivity and Conversion Enhancement in Palladium Membrane Reactors*. (Ph.D.).
08. Shenoy, V. P. (1993). *Physical and Chemical Phenomena in Arc Synthesis of Fullerenes*. (M.S.).
07. Addie, A. (1993). *The Effect of Polyfurfuryl Alcohol Properties on the Structure of Carbogenic Molecular Sieves*. (M.S.).
06. Mariwala, R. K. (1993). *Microporous Carbogenic Materials: Synthesis, Characterization and Engineering for Adsorption and Catalysis*. (Ph.D.).
05. Raich, B. A. (1992). *Kinetic Sensitivity of Palladium Membrane Reactors*. (M.S.).
04. Lafyatis, D. S. (1992). *The Design and Synthesis of Carbon Molecular Sieve Catalysts for Shape Selective Catalysis*. (Ph.D.).
03. Nariman, K. E. (1992). *Engineering Design and Analysis of Low–Pressure Diamond with Novel Applications*. (Ph.D.).
02. Sengupta, S. K. (1991). *Design and Analysis of a Fast Flow Plasma Reactor for Materials Chemistry and Processing*. (Ph.D.).
01. Saito, A. (1990). *Models for Adsorptive Characterization of Fluid Cracking Catalysts*. (M.S.).

Patents

15. Qajar, A.; Rajagopalan, R.; Foley, H. C.; Process for Characterization of Micro and Meso Porous Materials. 20,1500,000,377, 2015.
14. Foley, H. C.; Rajagopalan, R.; Marencic, A.; Burket, C. Method for the Synthesis of Porous Carbon Materials. 8,648,00, 2014.
13. Foley, H. C.; Rajagopalan, R.; Merritt, A. Carbon Nanocomposite Membranes and Methods for their Fabrication. 7,708,710, 2010.
12. Corbin, D. R.; Foley, H. C.; Shiflett, M. B.; Mixed Matrix Nanoporous Carbon Membranes. 6,740,143, 2004.
11. Strano, M. S.; Foley, H. C.; Agrawal, H. Supported Mesoporous Carbon Ultrafiltration Membranes and Process for Making the Same. 6,719,147, 2004.
10. Foley, H. C.; Strano, M. S.; Acharya, M.; Raich, B. A. Nanoporous carbon catalytic membranes and method for making the same. 6,471,745, 2002.
09. Foley, H. C., Acharya, M.; Riach, B. A. Mechanical Strength; For Small Molecule Separation or Combined Separation and Chemical Reaction Including Catalytic Reactions. 5,972,079, 1999.
08. Foley, H. C.; Sonnichsen, G. C.; Brake, L. D.; Mariwala, R. K.; Lafyatis, D. S. CMS SiO₂/Al₂O₃ Catalysts for Improved Selectivity in the Synthesis of Amines for Methanol and/or Dimethyl Ether and Ammonia. 5,470,814, 1996.
07. Foley, H. C.; Sonnichsen, G. C.; Brake, L. D.; Mariwala, R. K.; Lafyatis, D. S. CMS SiO₂/Al₂O₃ Catalysts for Improved Selectivity in the Synthesis of Amines for Methanol and/or Dimethyl Ether and Ammonia. 5,482,909, 1996.
06. Foley, H. C.; Lafyatis, D. S.; Mariwala, R. K.; Sonnichsen, G.; Brake, L. D. CMS/SiO₂/Al₂O₃ Catalysts for Improved Selectivity in the Synthesis of Amines from Methanol and Ammonia. 5,354,893, 1994.
05. Foley, H. C.; Mariwala, R. K. A Carbon Molecular Sieve for the Kinetic Separation of Acid Gases and Fluorocarbons. 5,261,948, 1993.
04. Foley, H. C.; Varrin, J., R. D.; Sengupta, S. K. Plasma-Induced, In-Situ Generation, Transport, and Use or Collection of Reactive Precursors, Apparatus Therefore and Products from the Precursor. 5,085,885, 1992.
03. Daly, F. P.; Ando, H.; Foley, H. C.; Hung, H. J. Catalyst Comprising Titania-Zirconia Support and Supported Catalyst Prepared by a Process. 5,021,385, 1991.
02. Daly, F. P.; Ando, H.; Foley, H. C.; Hung, H. J. High Porosity Titania-Zirconia Catalyst Support Prepared by a Process. 5,021,392, 1991.

01. Foley, H. C.; O'Toole, M. P. Bimetallic Catalysts for the Reaction of Carbon Monoxide and Hydrogen and Method of Making the Catalyst. 4,684,618, 1987.
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Books

- Ismail, A. F.; Rana, D.; Matsuura, T.; Foley, H. C., *Carbon-based Membranes for Separation Processes*. Springer: 2011; Vol. XVI, p 324.
- Foley, H. C., *Introduction to Chemical Engineering Analysis Using Mathematica*. Academic Press (San Diego, CA): 2002; p 509.
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Publications

127. Qajar, A., Peer, M., Andalibi, M. R., Rajagopalan, R., & Foley, H. C. (2015). Enhanced ammonia adsorption of functionalized nanoporous carbons. *Microporous and Mesoporous Materials*, 218, 15-23.
126. Andalibi, M. R., Qajar, A., & Foley, H. C. (2015). Evidence of Nanoconfinement Effects in the Adsorption of Hydrogen on Coinage Metal Complexes Dispersed with Porous Carbon. *Journal of Physical Chemistry*, 119 (37), 21314-21322.
125. Qajar, A., Holbrook, B. P. M., Peer, M., Rajagopalan, R., Foley, H. C., Davis, M., & Mueller, K. T. (2015). Synthesis and characterization of boron substituted carbon deposits on PFA-derived carbon substrates for hydrogen adsorption. *Carbon*, 89, 392-403.
124. Merrill Center. (2015). *The new role of land grant research universities in the 21st century: An essay*. [White Paper]. Retrieved from https://research.missouri.edu/about/Merrill_Center_White_Paper.php.
123. Foley, H.C., & Qajar, A. (2014). Importance of density in the design of new adsorbents for technological applications. *Industrial and Engineering Chemistry Research*, 53, 19649-19652.
122. Peer, M., Qajar, A., Rajagopalan, R., & Foley, H. C. (2014). Synthesis of carbon with bimodal porosity by simultaneous polymerization of furfuryl alcohol and diphloroglucinol. *Microporous and Mesoporous Materials*, 196, 235-242.
121. Peer, M., Qajar, A., Rajagopalan, R., & Foley, H. C. (2014). On the effects of confinement within a catalyst consisting of platinum embedded within nanoporous carbon for hydrogenation of alkenes. *Carbon*, 66, 459-466.
120. Qajar, A., Peer, M., Rajagopalan, R., & Foley, H. C. (2013). Characterization of micro- and mesoporous materials using accelerated dynamics adsorption. *Langmuir*, 40, 12400-12409.
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