CURRICULUM VITAE
of
Rolf E. Jentoft

PERSONAL INFORMATION

Date of birth: October 2, 1960
Place of birth: San Francisco, California
Nationality: United States of America
Marital Status: Married

CURRENT ADDRESS

159 Goessmann Laboratory
University of Massachusetts
686 North Pleasant Street
Amherst, MA 01003-9303
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EDUCATION

Ph.D., Chemical Engineering, University of California, Davis: June 1999
Dissertation: New Developments in Catalysts for Key Reactions in Petroleum/Hydrocarbon Processing.
Advisor: Prof. B. C. Gates.

Bachelor of Science in Chemical Engineering,
California State University, San Jose, CA: June 1991.

Studied Chemical Engineering
California State University, San Jose, CA: 1980–1983.
Santa Rosa Junior College, Santa Rosa, CA: 1978–1979.

WORK EXPERIENCE

University of Massachusetts, Department of Chemical Engineering, Amherst MA, 01003 (since Jan. 2015)
Position: Lecturer
Teaching: Chem. Eng. 401 and 402 (Senior Labs). 444 (Design), 120 (Fundamentals)
Research: Synthesis and characterization of transition metal carbide catalysts.

University of Oklahoma, Department of Chemical, Biological, Materials Engineering, Norman OK, 73019 (Oct. 2008 – Jan. 2015)
Position: Research Associate, Affiliate Associate Professor
Responsibilities: Training students and post-docs in catalyst/surface characterization techniques: XPS, XRD, TG, DSC, Calorimetry, XAS, physi/chemisorption, GC, MS.
Teaching: CH E 3432 (Unit Operations Lab), CH E 4262 (Design Lab)

Research: Characterization of catalysts, primarily catalysts used in the conversion of biomass to fuels and chemicals. Thermal analysis of the interaction of pyrolysis oil related molecules with catalysts and catalyst supports.

Johnson Matthey Catalysts, Billingham, UK (Nov. 2006-Sept. 2008)
Position: Thermal analysis technology leader
Responsibilities: In charge of thermal analysis lab. Development and application of thermal analysis techniques for the characterization of catalysts, adsorbents and related materials. Techniques include thermogravimetry; differential scanning calorimetry; temperature programmed reduction, oxidation, and desorption; and thermo-mechanical analysis.

Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, Germany (1999–Nov. 2006)
Position: Scientist
Responsibilities: In charge of Thermal Analysis lab. Research on in-situ characterization of catalysts using X-ray absorption spectroscopy, XRD and Thermal Analysis. Construction of in-situ cells for XAS, development of DSC instrumentation with gas flow.

Ohio Hygienic Materials (OHM) Inc., Santa Rosa, CA, USA (1988–1990).
Position: Analyst II (Weekend shift technical supervisor)
Responsibilities: Gas chromatographic analysis of environmental samples for pesticides, hydrocarbons, PCBs, and volatile halogenated organics by EPA methods. High performance liquid chromatographic analysis for carbamates.

Multi-Tech Environmental Testing Laboratory, Santa Rosa, CA USA (1984–1988).
Final position: Chemist in charge of metals analysis
Responsibilities: Supervising 3 analysts in metals group. Metals analysis of water and soil samples by Atomic Absorption (flame, graphite tube, and hydride generation), and by Inductively Coupled Plasma emission spectroscopy.

San Jose State University International Center, San Jose, CA, USA (1982–1983)
Position: Resident advisor
Responsibilities: Assist students with dormitory life, handling emergencies, and security.

Western Electric Co., Santa Rosa, CA, USA (summer 1980)
Position: Installer
Responsibilities: Installation of cable in new telephone terminal building

Kozlowski's Raspberry Farm, Forestville, CA, USA (summers 1978 and 1979)
Position: Clerk

RESEARCH EXPERIENCE

University of Oklahoma, Department of Chemical, Biological, and Materials Engineering, Norman, Oklahoma USA
2008-2015: Deoxygenation of triglycerides to form alkanes and alkenes for sustainable fuels application. Catalyst characterization including XAS, XRD, XPS, TPD/R/O, absorption methods, thermogravimetry and calorimetry, and product characterization with GC, IR and mass spectrometry in support of biofuels research. Development of instrumentation

and procedures for calorimetric measurements in liquid/solid mixtures. Synthesis of mixed metal carbides.

Fritz-Haber Institute of the Max-Planck Society, Department of Inorganic Chemistry, Berlin, Germany

2002–2006: Responsible for Thermal Analysis laboratory: thermogravimetry, differential scanning calorimetry, and gas product analysis by mass spectrometer. Adaptation of a High Pressure DSC for in-situ calcination measurements. Application of thermal analysis to the calcination and activation of catalysts. Discrimination of reaction steps during calcination and modeling reaction kinetics.

1999–2006: In-situ X-ray absorption spectroscopy (XAS) studies of Fe and Mn promoted sulfated zirconia in transmission and fluorescence mode. Design of in-situ cell for powdered samples and fluorescence detector. Determination of the kinetics of crystallization of zirconia, and sulfated zirconia with in-situ XRD, combined XRD-DTA, and dispersive XAS at ESRF, ID24.

1999–2005: In-situ XAS of copper/zinc oxide and molybdenum oxide based catalysts. Optimization and characterization (as reactor) of in-situ cells for transmission XAS. Time resolved XAS with QuickXAS (minutes time scale) at HaSyLab, and with dispersive XAS (seconds time scale) at ESRF, ID24.

Doctoral Research, University of California at Davis, CA, USA (1993–1999):

Sulfated zirconia: Catalytic characterization of sulfated zirconia and promoted sulfated zirconia with *n*-pentane as reactant (on-line GC). Analysis of effect of addition of Pt to sulfated zirconia and addition of H_2 to the feed. Measurement of H-D exchange between methane and solid acid catalysts (MS analysis).

Sulfated zirconia: Electron spin resonance and ultraviolet-visible spectroscopic measurements of promoted sulfated zirconia catalysts at different stages of induction and deactivation of the catalyst. As guest of Prof. H. Knözinger, Institut für Physikalische Chemie der Ludwig-Maximilians-Universität München (two, 2-month visits, 1997 and 1998).

LTL zeolite supported platinum: Determination of influence of zeolite morphology on catalyst performance in *n*-hexane reforming. Characterization using EXAFS spectroscopy (Brookhaven National Labs).

Design and construction of heated/cooled (500°C/-180°C) cell for sample treatment and transmission EXAFS analysis of air-sensitive samples.

The effect of the addition of Re on metal particle size in a one-step sol-gel synthesis of Pt (Pt-Re) on alumina. Characterization of samples with surface area and pore volume measurements.

Research at California State University, San Jose, CA, USA (1991–1993):

Design and construction of plug flow reactor system with on-line mass spectral analysis and feed concentration switching to be used for methanol synthesis from CO and H_2 on copper zinc oxide catalyst.

AWARDS

Monsanto Award, California State University, San Jose, March 1983
Dean`s Honor List, Fall 1980, California State University, San Jose
Bank of America "Achievement Award in the field of Mathematics" 1978
Doyle Scholarship, 1978 (Santa Rosa Junior College)

GRADUATE STUDENT COMMITTEES

Master's Thesis (Co-supervised with Dr. L. Lobban)
Andrew D. D'Amico – Direct conversion of Tricaprylin to Fungible Fuel in a Trickle Bed Reactor (2012)
Kyle W. Elam – Deoxygenation of Natural Oils to Produce Fungible Transportation Fuels (2012)

Committee member, Doctoral candidates:
Dr. Phuong Thi Mai Do – Dissertation title: Catalytic Reactions For Upgrading Bio-Oils and Petroleum Fuels (2010)
Dr. Surapas Sitthisa – Dissertation title: Conversion of oxygenates from biomass-derived compounds over supported metal catalysts (2012)
Dr. Wesley Tennyson – Dissertation title: Carbon Nanotube Enhanced Lithion Ion Composite Cathodes (2014)

Committee member, Master's candidate:
James Everette Brown III – Nanotubes and their Implementation into Lithium-ion Batteries (2012)

TEACHING

Lecturer, Department of Chemical Engineering, University of Massachusetts. 2015-present
Fall and spring: Senior lab classes (Chem. Eng. 401 and 402)
Fall: Chemical Engineering Design (Chem. Eng. 444) 2015-2018
Spring 2017: Fundamentals of Chemical Engineering (Chem. Eng. 120)

Instructor for Chemical Engineering Design Lab, 1 or 2 sections (16-20 students/section), University of Oklahoma, Norman (2011-2014)

Instructor for two sections of Unit Operations Lab (16 students/section), University of Oklahoma, Norman (2009).

Teaching Assistant, undergraduate chemical engineering laboratory, University of California, Davis, (1993–1994). Experiments included batch reactor kinetics of t-butyl alcohol dehydration, heat transfer, diffusion, and viscosity measurements.

FUNDING

2020 PI on MSP Research Support Fund, $1000
2019 Co-PI on corporate sponsored research, $15,000.
2012 Co-PI on NSF-EPSCOR REU - Functional Group Contributions to Heats of Adsorption of Bio-oil Compounds on Oxide Surfaces. Total award of $5,000, assigned 50% which was $2,500.

2009 Co-PI on NSF (CBET) Major Research Instrumentation grant: Acquisition of Thermal Analysis and Calorimetry Equipment for Multiple Applications Emphasizing Research on Sustainable Fuels. Award #0923247, total grant of $440,751, assigned 35% which was equal to $154,263.

REVIEWING

Applied Catalysis
Journal of Catalysis
Energy and Fuels
ACS Catalysis
CO_2 Utilization
DOE
NSF

MEMBERSHIPS in PROFESSIONAL OGANIZATIONS

American Institute of Chemical Engineers

American Chemical Society

SOFTWARE

Microsoft Office programs, Origin 7.5
Stoe WinXPOW, Eva, and PowderCell (XRD data acquisition and analysis)
Netzsch Thermokinetic DiffusionControl, Mettler Star software for thermal analysis, TA Instruments “Universal Analysis” software for thermal analysis, AKTS Thermokinetics.
WinXAS and XDAP (EXAFS data analysis)
Corel Draw, Solid Edge (computer-aided design)
Some familiarity with MATLAB

LANGUAGES

English
German (Goethe-Institut Zertifikat: Deutsch als Fremdsprache, May 1987)

PATENT:

EP2004577 (B1) “Hydrogenation process using catalyst comprising ordered intermetallic compound” R. Giedigkeit, M. Armbrüster, K. Kovnir, J. Grin, R. Schlögl, J. Osswald, T. Ressler, R. E. Jentoft

PUBLICATIONS:
h-index = 28

63. Bretzler P., Huber M., Rane A.A., Jentoft R.E., Kohler K., Jentoft F.C.,
Selective synthesis of tungsten carbide phases W2C and WC as hydrogenation catalysts
Journal of Catalysis 405: 60-73 (2022)

62. Cooper C., Dooley K.M., Fierro-Gonzalez J.C., Guzman J., Jentoft R.E., Lamb H., Ogino I., R.C. Runnebaum, Sapre A., Uzun, A.,
Bruce Gates: A Career in Catalysis.
ACS Catalysis 20: 11912-11935 (2020)

61. Liu, Z., Hamad I.A., Li Y., Chen Y., Wang S., Jentoft R.E., Jentoft F.C.,
Poisoning and competitive adsorption effects during phenol hydrogenation on platinum in water-alcohol mixtures
Applied Catalysis A: General 585, (2019), doi.org/10.1016/j.apcata.2019.117199

60. Mehdad, A., Jentoft, R.E., Jentoft, F.C.,
Single-phase mixed molybdenum-tungsten carbides: Synthesis, characterization and catalytic activity for toluene conversion.
Catalysis Today 323, SI: 112-122 (2019) doi.org/10.1016/j.cattod.2018.06.037

59. Mehdad, A., Jentoft, RE, Jentoft, FC,
Highly Selective Molybdenum-Based Catalysts for Ring Hydrogenation and Contraction.
Applied Catalysis 569, SI: 45-56 (2019)

58. Tabet, W., Cerato, A. Madden, A., Jentoft, R.,
Characterization of hydration products formation and strength development in cement-stabilized kaolinite using TG and XRD.
Journal of Materials in Civil Engineering 30, Issue 10 (2018). DOI: 10.1061/(ASCE)MT.1943-5533.0002454.

57. Mehdad, A., Jentoft, R.E., Jentoft, F.C.,
Single phase mixed metal carbides: Synthesis and catalytic properties.
Abstracts of Papers of the American Chemical Society, Volume: 254 Meeting Abstract: 169 (2017)

56. Mehdad, A., Jentoft, R.E., Jentoft, F.C.,
Single-phase mixed molybdenum-niobium carbides: Synthesis, characterization and multifunctional catalytic behavior in toluene conversion.
Journal of Catalysis 351: 161-173 (2017)

55. Mehdad, A., Jentoft, R.E., Jentoft, F.C.,
Passivation agents and conditions for Mo_2C and W_2C: Effect on catalytic activity for toluene hydrogenation.
Journal of Catalysis 347: 89-110 (2017)

54. Tabet, W.E., Cerato, A.B., Jentoft R.,
The use of thermogravimetry in quantifying the hydration products in cement-stabilized kaolinite.
Geotechnical Frontiers 2017: Geotechnical Materials, Modeling, and Testing. Editors Brandon, T.L., Valentine, R.J., 280: 92-102 (2017)

53. Weston, J.S., Jentoft, R.E., Grady, B.P., Resasco, D.E., Harwell, J.H.,
Silica nanoparticle wettability: Characterization and effects on the emulsion properties.
Industrial & Engineering Chemistry Research 54: 4274-4284 (2015)

52. Wan, S.L., Waters, C., Stevens, A., Gumidyala, A., Jentoft, R., Lobban, L., Resasco, D., Mallinson, R., Crossley, S.,
Decoupling HZSM-5 Catalyst Activity from Deactivation during Upgrading of Pyrolysis Oil Vapors.
Chemsuschem 8: 552-559 (2015)

51. To, A.T., Jentoft, R.E., Alvarez, W.E., Crossley, S.P., Resasco, D.E.,
Generation of synergistic sites by thermal treatment of HY zeolite: Evidence from the reaction of hexane isomers.
Journal of Catalysis 317: 11-21 (2014)

50. Wan, S.L., Waters, C., Stevens, A, Gumidyala, A., Jentoft, R., Lobban, L., Resasco, D., Crossley, S., Mallinson, R.,
Deactivation of catalysts during upgrading of pyrolysis vapors
Abstracts of Papers of the American Chemical Society 247: 457-ENFL (2014)

49. Pongpilaipruet, A, Magaraphan, R, Jentoft R, Grady, B.P.
Measurements of enthalpy of immersion for hydrophobic fumed silica nanospheres at elevated temperatures and pressures
Abstracts of Papers of the American Chemical Society 247: 200-COLL (2014)

48. Wan, S.L., Waters, C., Jentoft, R., Crossley, S., Lobban, L., Resasco, D., Mallinson, R.,
Deactivation of catalysts during upgrading of pyrolysis vapors
Abstracts of Papers of the American Chemical Society 245: 607-ENFL (2013)

47. Bartley, L.E., Peck, M.L., Kim, S.-R., Ebert, B., Manisseri, C., Chiniquy, D.M., Sykes, R., Gao, L., Rautengarten, C., Vega-Sánchez, M.E., Benke, P.I., Canlas, P.E., Cao, P., Brewer, S., Lin, F., Smith, W.L., Zhang, X., Keasling, J.D., Jentoff, R.E., Foster, S.B., Zhou, J., Ziebell, A., An, G., Scheller, H.V., and Ronald, P.C.,
Over expression of a BAHD acyltransferase, OsAt10, alters rice cell wall hydroxycinnamic acid content and saccharification
Plant Physiology 161: 1615-1633 (2013)

46. Muller, J.O., Frank, B., Jentoft, R.E., Schlogl, R., Su, D.S.
The oxidation of soot particulate in the presence of NO_2
Catalysis Today 191: 106-111 (2012)

45. Zapata, P.A., Faria, J., Ruiz, M.P., Jentoft, R.E., Resasco D.E.
Hydrophobic zeolites for biofuel upgrading reactions at the liquid/liquid interface in water/oil emulsions
Journal of the American Chemical Society 134: 8570-8578 (2012)

44. Klose-Schubert B.S.; Jentoft R.E.; Jentoft F.C.
The balance between reactivity and stability of modified oxide surfaces illustrated by the behavior of sulfated zirconia catalysts
Topics in Catalysis 54: 398-414 (2011)

43. Osswald J., Kovnir K., Armbruster M. , Giedigleit R. Jentoft R.E., Wild U., Grin Y., and Schlogl R.
Palladium-gallium intermetallic compounds for the selective hydrogenation of acetylene - Part II: Surface characterization and catalytic performance
Journal of Catalysis 258: 219-227 (2008)

42. Osswald J., Giedigkeit R., Jentoft R.E., Armbruster M., Girgsdies F., Kovnir K., Ressler T., Grin Y., and Schlogl R.
Palladium-gallium intermetallic compounds for the selective hydrogenation of acetylene - Part I: Preparation and structural investigation under reaction conditions
Journal of Catalysis 258: 210-218 (2008)

41. Su D.S., Serafino A., Muller J.O., Jentoft R.E., Schlogl R., Fiorito S.
Cytotoxicity and inflammatory potential of soot particles of low-emission diesel engines
Environmental Science & Technology 42: 1761-1765 (2008)

40. Beato, P., Blume A., Girgsdies F., Jentoft R. E., Schlögl R., Timpe O., Trunschke A., Weinberg G., Basher Q., Hamid F. A., Hamid S. B. A., Omar E. and Mohd Salim L.
Analysis of structural transformations during the synthesis of a MoVTeNb mixed oxide calalyst.
Applied Catalysis A: General 307, 137-147 (2006)

39. Müller J.-O., Su D.S., Jentoft R.E., Wild U., Schlögl R.
Diesel engine exhaust emission: Oxidative behavior and microstructure of black smoke soot particulate
Environmental Science and Technology 40: 1231-1236 (2006)

38. Yang X., Jentoft R.E., Jentoft F.C.
n-Butane isomerization catalyzed by sulfated zirconia nanocrystals supported on silica or γ-alumina
Catalysis Letters 106: 195-203 (2006)

37. Hävecker M., Pinna N., Weiss K., Sack-Kongehl H., Jentoft R.E., Wang D., Swoboda M., Wild U., Niederberger M., Urban J., Su D.S., Schlögl R.
Synthesis and functional verification of the unsupported active phase of V_xO_y catalysts for partial oxidation of *n*-butane
Journal of Catalysis 236: 221-232 (2005)

36. Hahn A.H.P., Jentoft R.E., Ressler T., Weinberg G., Schlögl R., Jentoft F.C.
Rapid genesis of active phase during calcination of promoted sulfated zirconia catalysts
Journal of Catalysis 236: 324-334 (2005)

35. Müller J.-O., Su D.S., Jentoft R.E., Kröhnert J., Jentoft F.C., Schlögl R.
Morphology controlled reactivity of carbonaceous materials towards oxidation
Catalysis Today 102: 259-265 (2005)

34. Kirilenko O., Girgsdies F., Jentoft R.E., Ressler, T.
In situ XAS and XRD studies on the structural evolution of ammonium paratungstate during thermal decomposition
European Journal of Inorganic Chemistry 11: 2124-2133 (2005)

33. Jentoft R.E., Hahn, A.H.P., Jentoft F.C., Ressler T.
In-situ XANES study of Mn in promoted sulfated zirconia catalysts
Physical Chemistry Chemical Physics. 7(14): 2830-2838 (2005)

32. Zhu Z.P., Su D.S., Weinberg G., Jentoft R.E. and Schlögl R.
Wet chemical assembly of carbon tube-in-tube nanostructures
small 1(1): 107-110 (2005)

31. Jentoft R.E., Hahn A.H.P., Jentoft F.C., Ressler T.
XAS in situ cell for measurements of Mn and Fe promoted sulfated zirconia catalysts
Physica Scripta T115: 794-797 (2005)

30. Klose B.S., Jentoft R.E., Ressler T., Joshi P., Trunschke A., Schlögl R., Jentoft F.C.
Deactivation and regeneration of Mn-promoted sulfated zirconia alkane isomerization catalysts: An in-situ spectroscopic study
Proceedings of DGMK International Conference: C4/C5-Hydrocarbons: Routes to higher value-added products, Munich, Oct 13-15, (2004), ISBN 3-936418-23-3, 23-30.

29. Su D.S., Jentoft R.E., Müller J.-O., Rothe D., Jacob E., Simpson C.D., Tomovic Z., Müllen K., Messerer A., Pöschl U., Niessner R., Schlögl R.
Microstructure and oxidation behavior of Euro IV diesel engine soot: a comparative study with synthetic model soot substances
Catalysis Today 90(1-2): 127-132 (2004)

28. Su D.S., Müller J.-O., Jentoft R.E., Rothe D., Jacob E., Schlögl R.
Fullerene-like soot from EURO-IV diesel engine: consequences for catalytic automotive pollution control
Topics in Catalysis 30/31: 241-245 (2004)

27. Jentoft F.C., Hahn A.H.P., Krohnert J., Lorenz G., Jentoft R.E., Ressler T., Wild U., Schlögl R., Hässner C., Köhler K.
Incorporation of manganese and iron into the zirconia lattice in promoted sulfated zirconia catalysts
Journal of Catalysis 224(1): 124-137 (2004)

26. Purnama H., Ressler T., Jentoft R.E., Soerijanto H., Schlögl R., Schomäcker R.
CO formation/selectivity for steam reforming of methanol with a commercial $CuO/ZnO/Al_2O_3$ catalyst
Applied Catalysis A - General 259(1): 83-94 (2004)

25. Klose B.S., Jentoft R.E., Hahn A., Ressler T., Kröhnert J., Wrabetz S., Yang X., Jentoft F.C.
Mechanical stress induced activity and phase composition changes in sulfated zirconia catalysts
Journal of Catalysis 217(2): 487-490 (2003)

24. Wienold J., Jentoft R.E., Ressler T.
Structural investigation of the thermal decomposition of ammonium heptamolybdate by in situ XAFS and XRD
European Journal of Inorganic Chemistry 6: 1058-1071 (2003)

23. Ressler T., Jentoft R.E., Wienold J., Girgsdies F., Neisius T., Timpe O.
Structure-activity relationships of heterogeneous catalysts from time-resolved X-ray absorption spectroscopy
Nuclear Instruments and Methods in Physics Research B 200: 165-170 (2003)

22. Ressler T., Wienold J., Jentoft R.E., Girgsdies F.
Evolution of defects in the bulk structure of MoO_3 during the catalytic oxidation of propene
European Journal of Inorganic Chemistry 2: 301-312 (2003)

21. Ressler T., Wienold J., Jentoft R.E., Neisius T.
Bulk structural investigation of the reduction of MoO_3 with propene and the oxidation of MoO_2 with oxygen
Journal of Catalysis 210(1): 67-83 (2002)

20. Yang X., Jentoft F.C., Jentoft R.E., Girgsdies F., Ressler T.
Sulfated zirconia with ordered mesopores as an active catalyst for *n*-butane isomerization
Catalysis Letters 81(1-2): 25-31 (2002)

19. Ressler T., Wienold J., Jentoft R.E., Neisius T., Günter M.M.
Kinetics of solid-state reactions in heterogeneous catalysis from time-resolved X-ray absorption spectroscopy
Topics in Catalysis 18(1-2): 45-52 (2002)

18. Günter M.M., Ressler T., Jentoft R.E., Bems, B.
Redox behavior of copper oxide/zinc oxide catalysts in the steam reforming of methanol studied by in situ X-ray diffraction and absorption spectroscopy
Journal of Catalysis 203(1): 133-149 (2001)

17. Schlögl R., Knop-Gericke A., Hävecker M., Wild U., Frickel D., Ressler T., Jentoft R.E., Wienold J., Mestl G., Blume A., Timpe O., Uchida Y.
In situ analysis of metal-oxide systems used for selective oxidation catalysis: how essential is chemical complexity?
Topics in Catalysis 15(2-4): 219-228 (2001)

16. Ressler T., Wienold J., Jentoft R.E., Timpe O., Neisius T.
Solid state kinetics of the oxidation of MoO_2 investigated by time-resolved X-ray absorption spectroscopy
Solid State Communications 119(3): 169-174 (2001)

15. Ressler T., Wienold J., Jentoft R.E.
Formation of bronzes during temperature-programmed reduction of MoO_3 with hydrogen - an in situ XRD and XAFS study
Solid State Ionics 141: 243-251 (2001)

14. Jentoft R.E., Gates B.C.
H-D exchange between CD_4 and solid acids: $AlCl_3$/sulfonic acid resin, promoted and unpromoted sulfated zirconia, and zeolite HZSM-5
Catalysis Letters 72(3-4): 129-133 (2001)

13. Hahn A., Ressler T., Jentoft R.E., Jentoft F.C.
The role of the 'glow phenomenon' in the preparation of sulfated zirconia catalysts
Chemical Communications (6): 537-538 (2001)

12. Jentoft R.E., Hahn A., Jentoft F.C., Ressler T.
Manganese, iron and sulfur K edge XAFS of promoted sulfated zirconia catalysts
Journal of Synchrotron Radiation 8(Part 2): 563-565 (2001)

11. Wienold J., Jentoft R.E., Ressler T.
Phase formation during the decomposition of ammonium heptamolybdate - an in situ XAFS and XRD investigation
Journal of Synchrotron Radiation 8(Part 2): 677-679 (2001)

10. Ressler T., Jentoft R.E., Wienold J., Timpe O.
Solid-state kinetics from time-resolved in situ XAFS investigations: reduction and oxidation of molybdenum oxides
Journal of Synchrotron Radiation 8(Part 2): 683-685 (2001)

9. Ressler T., Jentoft R.E., Wienold J., Guenter M.M., Timpe O.
In situ XAS and XRD studies on the formation of Mo suboxides during reduction of MoO_3
Journal of Physical Chemistry B 104(27): 6360-6370 (2000)

8. Eibl S., Jentoft R.E., Gates B.C., Knözinger H.
Conversion of *n*-pentane and of *n*-butane catalyzed by platinum-containing WO_x/TiO_2
Physical Chemistry Chemical Physics 2(11): 2565-2573 (2000)

7. Scheithauer M., Jentoft R.E., Gates B.C., Knözinger H.
n-Pentane isomerization catalyzed by Fe- and Mn-containing tungstated zirconia characterized by Raman spectroscopy
Journal of Catalysis 191(2): 271-274 (2000)

6. Scheithauer M., Cheung T.K., Jentoft R.E., Grasselli R.K., Gates B.C., Knözinger H.
Characterization of WO_x/ZrO_2 by vibrational spectroscopy and *n*-pentane isomerization catalysis
Journal of Catalysis 180(1): 1-13 (1998)

5. Jentoft R.E., Tsapatsis M., Davis M.E., Gates B.C.
Platinum clusters supported in zeolite LTL: Influence of catalyst morphology on performance in n-hexane reforming
Journal of Catalysis 179(2): 565-580 (1998)

4. Rezgui S., Jentoft R.E., Gates B.C.
n-Pentane isomerization and disproportionation catalyzed by promoted and unpromoted sulfated zirconia
Catalysis Letters 51(3-4): 229-234 (1998)

3. Zhao A.L., Jentoft R.E., Gates B.C.
Iridium clusters in KLTL zeolite: Synthesis, structural characterization, and catalysis of toluene hydrogenation and *n*-hexane dehydrocyclization
Journal of Catalysis 169(1): 263-274 (1997)

2. Rezgui S., Jentoft R., Gates B.C.
Supported Pt and Re-Pt on alumina prepared by sol-gel synthesis with in situ water formation: Role of rhenium
Journal of Catalysis 163(2): 496-500 (1996)

1. Jentoft R.E., Deutsch S.E., Gates B.C.
Low-cost, heated, and/or cooled flow-through cell for transmission x-ray absorption spectroscopy
Review of Scientific Instruments 67(6): 2111-2112 (1996)