1. NAME AND ACADEMIC RANK: ABHAYA K. DATYE DISTINGUISHED PROFESSOR
2. DEGREES:

   Ph.D., Chemical Engineering, 1984, University of Michigan, Ann Arbor, MI

   M.S., Chemical Engineering , 1980, University of Cincinnati, Cincinnati, OH

   B. Tech, Chemical Engineering, 1975, Indian Institute of Technology, Bombay, India
3. NUMBER OF YEARS SERVICE ON THIS FACULTY: 26 YEARS

   2007 – present, Director of graduate program in Nanoscience and Microsystems

   2002-2007 Associate Chair, ChNE

   1994-present Director, Center for Microengineered Materials

   1984-1988 Assistant Prof., 1988 – 1990 Associate Prof., 1993 – present, Professor
4. OTHER RELATED EXPERIENCE – TEACHING, INDUSTRIAL, ETC.:

   1976 - 78, Hindustan Organic Chemicals, Rasayani, India, Scientific Officer.

   1975 - 76, Hindustan Lever Ltd., Research Center, Bombay, India, Research Assistant.

   Sabbaticals and Fellowships

   University of Poitiers, France, 2004

   Haldor Topsoe, Lyngby, Denmark, 1999

   High Temperature Materials Lab Fellowship, 1994, Oak Ridge National Lab

   BP Research Center, Sunbury on Thames, UK, 1991
5. CONSULTING AND PATENTS:

   2 US patents, 1 South African Patent

   ExxonMobil, Allied Signal, Sasol, Catalytica Energy Systems
6. PRINCIPAL PUBLICATIONS OF LAST FIVE YEARS (12 LISTED OUT OF 38):

   232 total publications, 215 presentations, 100 invited talks, H-index 33

   1. Switzer, E.E., T.S. Olson, A.K. Datye, P. Atanassov, M.R. Hibbs, C. Fujimoto, and C.J. Cornelius, Novel KOH-free anion-exchange membrane fuel cell: Performance comparison of alternative anion-exchange ionomers in catalyst ink. Electrochimica Acta, 2010. 55(9): p. 3404-3408.
   2. Mokhonoana, M.P., N.J. Coville, and A.K. Datye, Small Au Nanoparticles Supported on MCM-41 Containing a Surfactant. Catalysis Letters, 2010. 135(1-2): p. 1-9.
   3. Moodley, D.J., J. van de Loosdrecht, A.M. Saib, M.J. Overett, A.K. Datye, and J.W. Niemantsverdriet, Carbon deposition as a deactivation mechanism of cobalt-based Fischer-Tropsch synthesis catalysts under realistic conditions. Appl. Catal., A, 2009. 354(1-2): p. 102-110.
   4. Hyman, M.P., V.M. Lebarbier, Y. Wang, A.K. Datye, and J.A. Vohs, A Comparison of the Reactivity of Pd Supported on ZnO(10(1)over-bar0) and ZnO(0001). Journal of Physical Chemistry C, 2009. 113(17): p. 7251-7259.
   5. Houk, L.R., S.R. Challa, B. Grayson, P. Fanson, and A.K. Datye, The Definition of "Critical Radius" for a Collection of Nanoparticles Undergoing Ostwald Ripening. Langmuir, 2009. 25(19): p. 11225-11227.
   6. Gu, Y., J. St-Pierre, A. Joly, R. Goeke, A. Datye, and P. Atanassov, Aging Studies of Pt/Glassy Carbon Model Electrocatalysts. Journal of the Electrochemical Society, 2009. 156(4): p. B485-B492.

7. Lebarbier, V., R. Dagle, T. Conant, J.M. Vohs, A.K. Datye, and Y. Wang, CO/FTIR spectroscopic characterization of Pd/ZnO/Al2O3 catalysts for methanol steam reforming. Catalysis Letters, 2008. 122(3-4): p. 223-227.
8. Datye, A.K., P.L. Hansen, and S. Helveg, Electron microscopy techniques. Handbook of Heterogeneous Catalysis (2nd Edition), 2008. 2: p. 803-833.
9. Jeroro, E., V. Lebarbier, A. Datye, Y. Wang, and J.M. Vohs, Interaction of CO with surface PdZn alloys. Surface Science, 2007. 601(23): p. 5546-5554.
10. Hansen, P.L., S. Helveg, and A.K. Datye, Atomic-scale Imaging of supported metal nanocluster catalysts in the working state. Advances in Catalysis, Vol 50, 2006. 50: p. 77-95.
11. Datye, A.K., Q. Xu, K.C. Kharas, and J.M. McCarty, Particle size distributions in heterogeneous catalysts: What do they tell us about the sintering mechanism? Catalysis Today, 2006. 111(1-2): p. 59-67.
12. Conant, T., A. Karim, S. Rogers, S. Samms, G. Randolph, and A. Datye, Wall coating behavior of catalyst slurries in non-porous ceramic microstructures. Chemical Engineering Science, 2006. 61: p. 5678-5685.

7. SCIENTIFIC AND PROFESSIONAL SOCIETIES:

   Member of ACS, AIChE, North American Catalysis Society, ASEE, AVS, Microscopy Society of America.

8. HONORS AND AWARDS:

   Univ. of New Mexico Regents Professor, 2010, NSF Excellence award, 2008, Industrial Innovation and Partnerships Division, Univ. of New Mexico Distinguished Professor, 2007, School of Engineering, Senior Teaching Excellence Award 2007, Best paper Materials Science, Microscopy Society of America, 2006, Senior Research Excellence Award, 1998, Junior Research Excellence Award, 1989, Chemical & Nuclear Engr. Graduate students, UNM, Outstanding Teacher Award, 1988, Presidential Lectureship, 1986-88, Univ. of New Mexico

9. INSTITUTIONAL AND PROFESSIONAL SERVICE IN THE LAST FIVE YEARS:

   As PI for the NSF/Research Experiences for Undergraduates Site Program, I have organized a summer program (since 1995) for students from other universities to spend 10 weeks on campus working with researchers at our center. During the summers of 1999- 2001, we also brought 3 high school teachers each year into our summer program via the RET (Research Experiences for Teachers) program funded by NSF.

   As the PI for an NSF/IGERT I have helped develop a new interdisciplinary curriculum in Nanoscience and Microsystems

   Elected Chair of the Gordon Research Conference on Catalysis for 2010. Co-chair, North American Catalysis Society Meeting, Catalyst Characterization session, Houston 2007 Editorial Board of Catalysis Letters and Catalysis Today, 2004- ,Editorial Board of Applied Catalysis, 2001-2004; North American Catalysis Society, Program co-chair, 1995; representative to the International Congress of Catalysis 2000, Western States Catalysis Society, Past President, representative to the Board of the North America Catalysis Society1999-2005. Microscopy Society of America, session chair 1986; International Congress of Electron Microscopy, Cancun 1998, session chair, American Chemical Society, American Vacuum Society, New Mexico Chapter, Chapter Chair.

10. PERCENTAGE OF TIME AVAILABLE FOR RESEARCH AND SCHOLARLY ACTIVITIES: 50%
11. PERCENTAGE OF TIME DEVOTED TO PROGRAM: 100%