



CURRICULUM VITAE - KENNETH R. MORRIS

Professor of Pharmaceutics
College of Pharmacy
University of Hawaii at Hilo
34 Rainbow Drive
Hilo, HI, 96720

EDUCATION

B.S., Eastern Michigan University, April 1978, dual major in Chemistry and Aquatic Biology.

M.S., University of Arizona, August 1986, in Pharmaceutical Chemistry.

Ph.D., University of Arizona, January 1988, in Pharmaceutics, thesis title; Solubility of aromatic compounds in mixed solvents.

EXPERIENCE

Professor of Pharmaceutics- College of Pharmacy, University of Hawaii at Hilo; 2008-present

Professor – Department of Industrial & Physical Pharmacy; Purdue University; West Lafayette, IN; 2002-2008.

Associate Department Head - Department of Industrial & Physical Pharmacy; Purdue University; West Lafayette, IN; 2001-present.

Associate Professor - Department of Industrial & Physical Pharmacy; Purdue University; West Lafayette, IN; 1997-2002.

Principal Investigator - Head of Preformulation and Analytical Chemistry Groups; Bristol-Myers Products Research and Development; Hillside, New Jersey; 1995-1997.

Senior Research Investigator I-III –Final as Head of Preformulation Group; Bristol-Myers Products Research and Development; Hillside, New Jersey; 1993-1995.

Research Investigator - Physical Pharmacy Group; Pharmaceutical Research and Development; SQUIBB Institute for Medical Research; New Brunswick, New Jersey; 1988-1990.

Associate Faculty in Physics - Pima Community College; Tucson, Arizona; 1986.

Chemist - U.S. Environmental Protection Agency; Athens, Georgia; 1979-1984.

Biological Technician - Great Lakes Research Vessels; U.S. Fish & Wildlife Service; Ann Arbor, Michigan; 1977-1979.

NATIONAL OFFICES AND APPOINTMENTS

Member of AAPS-FDA PQRI Bulk Drug Particle Size and Particle Characteristics Committee, 2000-2002.
Member of FDA Science Advisory Board, 2001-2003.
Member of FDA Process Analytical Technologies Subcommittee of the Advisory Committee for Pharmaceutical Science, 2002-2004.
Special Government Employee of FDA (Advisor on issues of pharmaceutical development), 2004-present).
Member of FDA Committee on Good Manufacturing Practices 2004-present
Chair of Raw Materials Committee (E5502) for American Society for Testing and Materials 2004-present.
Member of FDA Advisory Committee for Pharmaceutical Science, 2004-present.
Member Editorial Board of the *Journal of Pharmaceutical Sciences*.

VISITING PROFESSOR

Institute of Pharmacy; Department of Pharmaceutical Technology; University of Innsbruck; Innsbruck, Austria, Summer – 2000.

PATENTS

1. Methods of searching for and generating high free energy forms – In conjunction with SSCI Inc.
2. Methods of searching for solid forms and screening a sample according to its forms - In conjunction with SSCI Inc.
3. Capillary Method for the Isolation of High Free Energy Forms of Materials - In conjunction with SSCI Inc.
4. Methods for Manufacturing 3-Dimensional Scaffolds from ECM Powder - In conjunction with Dr. Steve Badylak, Biomedical Engineering, Purdue University and Dr. Steve Nail, Industrial and Physical Pharmacy, Purdue University.
5. Extracellular Matrix Patches to Modulate Contact Hypersensitivity – In conjunction with Dr. Steve Badylak, Biomedical Engineering.
6. Continuous Quality Verification (CQV) System – In conjunction with the Consortium for the Advancement of Manufacturing Processes.

PUBLICATIONS - Greater than 60 publications; 12 representative selections:

1. Hilden, Jon, Bowman, Keith, Morris, Ken, Wang, Steve, Sprockel, Omar, Ennis, Bryan, “Note on the Interpretation of powder shear test data”, *Powder Technology* (2008), 182, 486-492.
2. Wen, Hong, Morris, Kenneth R., Park, Kinam, “Synergic Effects of Polymeric Additives on Dissolution and Crystallization of Acetaminophen”, *Pharmaceutical Research* (2008), 25(2), 349-358.

3. Soh, Josephine, L.P., Boersen, Nathan, Carvajal, M. Teresa, Morris, Kenneth R., Peck, Garnet E., Pinal, Rodolfo, "Importance of Raw Material Attributes for Modeling Ribbon and Granule Properties in Roller Compaction: Multivariate Analysis on Roll Gap and NIR Spectral Slope as Process Critical Parameters" *Journal of Pharmaceutical Innovation* (2007), 2(3-4), 106-124.
4. Engers, David A., Fricke, Molly N., Newman, Ann W., Morris, Kenneth R., "Triboelectric charging and dielectric properties of pharmaceutically relevant mixtures" *Journal of Electrostatics* (2007), 95(12), 2645-2656.
5. Wildfong, P.L., Morris K.R., Anderson, C.A., Short, S.M. "Demonstration of a shear-based solid-state phase transformation in a small molecular organic system: chlorpropamide" *Journal of Pharmaceutical Sciences* (2007), 96(5):1100-13.
6. Li H, Stowell, J.G., He, X., Morris, K.R., Byrn, S.R., "Investigations on solid-solid phase transformation of 5-methyl-2-[(4-methyl-2-nitrophenyl) amino]-3-thiophenecarbonitrile" *Journal of Pharmaceutical Sciences* (2007), 96(5):1079-89.
7. Wildfong, P.L., Hancock, B.C., Moore, M.D., Morris, K.R., "Towards an understanding of the structurally based potential for mechanically activated disordering of small molecule organic crystals" *Journal of Pharmaceutical Sciences* (2006) 95(12):2645-56.
8. Hlinak, A.J., Kuriyan K., Morris, K.R., Reklaitis, G.V., Basu P.K., "Understanding critical material properties for solid dosage form design" *Journal of Pharmaceutical Innovation* 2006, 1, 12-17.
9. Engers, David A., Fricke, Molly N., Storey, Ryan P., Newman, Ann W., Morris, Kenneth R., "Triboelectrification of pharmaceutically relevant powders during low-shear tumble blending" *Journal of Electrostatics* (2006), 64, 826-835.
10. Romero-Torres, Saly; Perez-Ramos, Jose; Morris, Kenneth R.; Grant, Edward R., "Raman spectroscopy for tablet coating thickness quantification and coating characterization in the presence of strong fluorescent interference" *Journal of Pharmaceutical and Biomedical Analysis* (2006), 41(3), 811-819.
11. Miller, Ronald W.; Gupta, Abhay; Morris, K.R.; "Roller compaction scale-up" *Drugs and the Pharmaceutical Sciences* (2006), 157(Pharmaceutical Process Scale-Up (2nd Edition)). 237-266.

12. Venkatasubramanian, Venkat, Zhao, Chunhua, Joglekar, Girish, Jain, Ankur, Hailemariam, Leaelaf, Suresh, Pradeep, Akkisetty, Pavankumar, Morris, Kenneth, Reklaitis, G.V., "Ontological informatics infrastructure for pharmaceutical product development and manufacturing", *Computers & Chemical Engineering* (2006), 30(10-12), 1482-1496.

COLLABORATORS**Collaborators and co-authors**

Peck, G. E., Purdue University; Miller, R., Bristol-Myers Squibb; Griesser, U. J., Universitat Innsbruck (Austria); Stowell, J. G., The Chao Center; Reklaitis, G. V., Purdue University.; Nail, S. L., Eli Lilly and Company; Mullarney, M., Pfizer Global Research & Development; Park, K., Purdue University; Schlam, R. F., Bristol-Myers Squibb; Li, T., University of Kentucky; Bateman, S. D., Novartis Pharmaceutical Corporation; Erck, R., Argonne National Laboratory; Hancock, B., Pfizer Global Research & Development. Bates, S., SSCI Inc.; Wen, H., Schering-Plough Research Institute; Chen, X., Schering-Plough Research Institute; Qiu, Z., Schering-Plough Research Institute; Frunzi, G. P., Bristol-Myers Squibb; Eckhardt, C. J., University of Nebraska; Taylor, L. S., Purdue University; Carvajal, Teresa., Purdue University; Pinal, Rodolfo, Purdue University; Venkatasubramanian, Venkat, Purdue University.

Thesis Advisor- Yalkowsky, Samuel H., University of Arizona.

Thesis Advisees and Post-doctoral Fellows (last 5 years)

Wang J. (Bristol-Myers Squibb); Bi, M. (Amgen); Cao, W. (Amgen); Hilden, L. (Bristol-Myers Squibb); Findlay, P. (Bristol-Myers Squibb), Wildfong, P. L. D. (Duquesne University), Hilden, J. (Bristol-Myers Squibb),
Co-advised with S. R. Byrn—Eisenhauer, T. D. (Eli Lilly and Company); Gupta, A. (Food and Drug Administration), Engers, D. (Aptuit); Sheng, X., Boerrigter, S. (Aptuit).

Thesis Advisees and Post-doctoral Fellows (present)

McCann, R.,