

Graduate Student Resume Sample (2-page resume)

	Name	
	E.I.T.	
School Address		Home Address
303A Norwood Hall		207 Adams Road
Rolla, MO 65401		Chicago, IL
573-341-4253		573-341-1453
career@umr.edu		jobs@yahoo.com
<hr/>		
Objective	To obtain a full-time position in chemical engineering research and development.	
Education	Ph.D. Chemical Engineering	May 2005
	University of Missouri-Rolla	GPA: 3.6
	Dissertation: Network Modeling of the Convective Flow and Diffusion of Molecules Adsorbing in Monoliths and in Columns packed with Porous Adsorbent Particles.	
	M.S. Chemical Engineering	May 2000
	Emphasis: Biochemical	GPA: 3.92
	University of Missouri-Rolla Minor in Mathematics	
	B.S. Chemical Engineering	May 1999
	University of Arkansas	GPA: 4.0
Research Experience	University of Missouri-Rolla	Rolla, MO
	Graduate Research Assistant	6/03 – present
	Chemical Engineering Department	
	<ul style="list-style-type: none"> • Developed a simulation which constructs a pore network model of any porous medium- packed bed or monolith characterized by a pore size distribution (PSD), function, pore connectivity (0 to 18), pore spatial distribution, and lattice coordination number • Created mathematical models and FORTRAN simulations for the calculation of the intraparticle diffusion coefficient and intraparticle flow rate of molecules in a network of pores under retained and unretained conditions taking into account steric hindrance at the entrance to the pore, frictional resistance within the pore, molecular size of the adsorbate and ligand, and fractional saturation of the adsorption sites (ligands), as well as pore size and pore connectivity • Demonstrated how the theory of pore network (discrete) models and dynamic continuum models can be combined to generate data such as breakthrough curves and total mass adsorbed in monoliths and columns packed with adsorbent particles in <i>a priori</i> manner • Developed algorithms and computer programs which simulate mercury intrusion and size exclusion chromatography for any porous network • Created an algorithm that estimates the physical characteristics of an actual porous medium by comparing pore network model simulations of mercury intrusion with experimental data (parameter estimation) • Extended the pore network model to simulate nitrogen adsorption/desorption with capillary condensation and estimated the physical characteristics of an actual porous medium by fitting this model to experimental nitrogen adsorption/desorption data • Implemented a simulation which uses site rather than bond percolation in order to model a wider variety of media (e.g. strands, etc.) 	

	Name	
	Page 2	
<hr/>		
Corporate Experience	Dow Chemical Company- Texas Operations	Freeport, TX
	Summer Intern	5/02-8/02
	(Hydrocarbons Production- Light Hydrocarbon-8)	
	<ul style="list-style-type: none"> • Rated heat exchangers and compressors for performance • Completed heat exchanger design and Aspen training courses 	
	Summer Intern (Environmental Services)	5/01-8/01
	<ul style="list-style-type: none"> • Aided in implementation of the hazardous organic NESHAP • Developed computer programs to format regulation compliance tables 	
	Miles, Inc – Agricultural Chemicals Division	Kansas City, MO
	Summer Engineer	5/00-8/00
	(Environmental Ops - Waste Treatment Plant)	
	<ul style="list-style-type: none"> • Started up and optimized neutralization system for stack gases • Determined VOC response factors for gaseous waste stream analyzers • Instructed science workshop program for children 	
Skills	Computer skills: FORTRAN, UNIX, Matlab, DOS, Windows, SigmaPlot, Apen	
	Data Analysis: Parameter Estimation, Model Discrimination, IMSL Subroutine Libraries	
Publications	J.J. Meyers, O.K. Crosser and A.I. Liapis, “Pore Network Modelling: Determination of the Dynamic Profiles of the Pore Diffusivity and its Effect on Column Performance as the Loading of the Solute in the Adsorbed Phase Varies with Time” , <i>J. Chromatogr. A</i> , submitted for publication in May 2000	
	B.A. Grimes, J.J. Meyers and O.K. Crosser, “Modeling and Simulation of the Dynamic Behavior of Monoliths: Effects of Pore Structure from Pore Network Model Analysis and Comparison with Columns Packed with Porous Particles” ; <i>J. Chromatogr. A</i> , Volume 865 (1999) pp. 13-25.	
Presentations	J.J. Meyers, Athanasios I. Liapis, Network Modeling and Simulation of the Performance of Continuous Bed Chromatography , 12 th International Symposium on Preparative/ Process Chromatography, Ion Exchange, Adsorption/ Desorption Processes, and Related Separation Techniques (PREP '99), May 23-26, 1999, San Francisco, CA, U.S.A.	
Honors	Chancellors Fellowship Monsanto Fellowship Sigma Xi Scientific Research Society of North America Dow Chemical Outstanding Junior in Chemical Engineering All-Academic Honors, MIAA Swimming Conference- 3 years Bright Flight Scholarship (Undergraduate scholarship)	
Professional Activities	American Institute of Chemical Engineers	