

Chemical and Biomolecular Engineering Department at the University of Pennsylvania ; 학과소개

이 승 익

본인이 연구하고 있는 Chemical and Biomolecular Engineering Department에 대한 정보는 다음과 같다.

올해 학과의 명칭을 Department of Chemical Engineering에서 Department of Chemical and Biomolecular Engineering 으로 변경한 만큼 생물공학분야에 대한 관심과 연구가 집중적으로 이루어지고 있습니다. 이곳 대학원에서 박사과정으로 있는 한국학생 4명중 3명이 생물공정 분야의 연구실에 소속되어 있습니다. 매주 월요일마다 열리는 학과 세미나의 주제는 시작이후, 계속 생물공정 분야에 집중되고 있습니다.

학과의 구성 및 교수진, 교수의 연구분야, 관련연구센터 등에 대한 정보를 알아보았다. 특히 생물공정분야는 현재도 많은 인력을 필요로 하고있으므로 학위과정 및 박사후 연수를 준비중인 분들은 email 등을 통하여 직접 접촉해 볼 것을 추천하고 싶습니다.

Administration

Chair: John M. Vohs

Assistant to the Chair: John Linscheid

Graduate Group Chair: Eric T. Boder

Director of Graduate Admissions: Talid R. Sinno

Graduate Assistant: Marge Addario

Undergraduate Curriculum Chair: David J. Graves

Undergraduate Assistant: Barry Lipschutz-Perry

Undergraduate Laboratory Technician: Brett Balogh

Manager of Finance and Business Admin. : Richard C. Ferraiolo

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교수진

▷ **Eric T. Boder**, Assistant Professor

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연구분야

Biomolecular engineering, combinatorial libraries and directed evolution, immunological receptor-ligand interactions, physical biochemistry of proteins

▷ **Stuart W. Churchill**, Carl V. S. Patterson Professor Emeritus

Email : churchil@seas.upenn.edu

연구분야

Combustion, incineration, crystal growth, turbulent flow and convection, correlation

※1990년에 퇴임한 명예교수로서 세미나 및 연구활동에도 왕성하게 참석함

▷ **Russell J. Composto**, Associate Professor

Email : composto@lrsm.upenn.edu

연구분야

Polymer surfaces and interfaces, polymer adsorption, diffusion, ion scattering techniques

▷ **John C. Crocker**, Skirkanich Assistant Professor of Innovation

Email : jcrocker@seas.upenn.edu

연구분야

Microrheology of biopolymers, recA searching, 3-D microscopy, device biophysics

▷ **Scott L. Diamond**, Professor

Email : sld@seas.upenn.edu

연구분야

Endothelial cell mechanobiology, thrombosis and thrombolytics, endothelial gene therapy

▷ **Dennis E. Discher**, Associate Professor

Email : discher@seas.upenn.edu

연구분야

Cell and molecular engineering; single molecule biophysics; polymersomes and biomimetic membranes; cell adhesion; natural and artificial blood cells; drug delivery; biomimetic liquid crystals and elastomers; microscopies; computational statistical mechanics

▷ **William C. Forsman**, Emeritus Professor

Email : forsman@seas.upenn.edu

연구분야

Polymer science and engineering, polymer molecules at the solution–solid interface, graphite intercalation compounds

▷ **Eduardo D. Glandt**, Professor and Dean

Email : eglandt@seas.upenn.edu

연구분야

Molecular simulations of gas adsorption, polymer adsorption, barriers to mass transfer in catalysts and adsorbents

▷ **Raymond J. Gorte**, Russell Pearce and Elizabeth Crimian Heuer
Professor

Email : gorte@seas.upenn.edu

연구분야

Automotive emissions control catalysis, anodes for solid-oxide fuel cells,
zeolite acidity

※ 본인의 연구지도 교수로서 zeolite 계 촉매 및 SOFC 연구분야에서 왕성한
연구활동을 보이고 있음.

▷ **David J. Graves**, Associate Professor

Email : graves@seas.upenn.edu

연구분야

Bioproduct recovery from living cells, chemical conversions in living cells,
DNA identification with immobilized hybridization

▷ **Daniel A. Hammer**, Alfred G. and Meta A. Ennis Professor

Email : hammer@seas.upenn.edu

연구분야

Cell adhesion, adhesion-based detection of protein and DNA, virus/cell
interactions, cellular engineering, artificial cells, drug delivery, cell motility
and mechanotransduction, self-assembly of materials, simulations of
molecular and cell behavior

▷ **Alan L. Myers**, Emeritus Professor

Email: amyers@seas.upenn.edu

연구분야

Adsorption, calorimetry, molecular simulation

▷ **Daniel D. Perlmutter**, Emeritus Professor

Email : perlmutt@seas.upenn.edu

연구분야

Gas-solid reactions, chemical reactor engineering

▷ **John A. Quinn**, Robert D. Bent Professor

Email : quinn@seas.upenn.edu

연구분야

Membrane science and engineering, cell adhesion and surface motility, transport behavior of motile bacteria

▷ **Warren D. Seider**, Professor

Email : seider@seas.upenn.edu

연구분야

Process analysis, simulation, design, and control; azeotropic distillation; design and control integration; nonlinear process control; Czochralski crystallization

▷ **Wen K. Shieh**, Professor

Email : shieh@seas.upenn.edu

연구분야

Bioenvironmental engineering, biological Nitrogen removal, environmental systems modeling

▷ **Talid R. Sinno**, Assistant Professor

Email : talid@seas.upenn.edu

연구분야

Transport and reaction in electronic materials processing, computational and statistical mechanical modeling

▷ **Lyle H. Ungar**, Associate Professor

Email : ungar@central.cis.upenn.edu

연구분야

Artificial intelligence, artificial neural networks, statistics, expert systems for process design and control

▷ **John M. Vohs**, Carl V. S. Patterson Professor and Chair

Email : vohs@seas.upenn.edu

연구분야

Reactivity of metal oxide surfaces, surface organometallic chemistry

▷ **Karen I. Winey**, Associate Professor

Email : winey@lrsm.upenn.edu

연구분야

Polymers: structure-property relationships, block copolymers, ion-containing polymers, nanotube/polymer composites

Adjunct Faculty

Leonard A. Fabiano : lfabiano@seas.upenn.edu

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Research area 분류

CBE Research Areas

	Surface and Colloid Science	Materials	Biomolecular Engineering	Catalysis & Reaction Engineering	Systems Engineering	Transport Processes	Environmental	Molecular Simulation
Eric Boder		X						
Stuart W. Churchill						X		
Russell J. Composto		X						
John C. Crocker	X	X	X			X		
Scott L. Diamond		X	X			X		
Dennis E. Discher	X	X	X					X
William C. Forsman		X						
Eduardo D. Glandt	X					X		X
Raymond J. Gorte	X	X	X	X			X	
David J. Graves		X	X					
Daniel A. Hammer	X	X	X					
Alan L. Myers								X
Daniel D. Perlmutter				X				
John A. Quinn		X				X		
Warren D. Seider					X			
Wen K. Shieh					X		X	
Talid R. Sinno		X			X	X		X
Lyle H. Ungar					X			
John M. Vohs	X	X	X	X			X	
Karen I. Winey		X	X					

관련연구센터 및 프로젝트

Center for Science and Engineering Nanoscale Systems

Professional Masters Program in Biotechnology

Institute for Medicine and Engineering

Laboratory for Research on the Structure of Matter (LRSM)