JOHN MICHAEL WIENCEK

ACADEMIC AND LEADERSHIP APPOINTMENTS

Provost and Executive Vice President
Professor, Chemical Engineering

Provost and Vice President of Academic Affairs (Interim, 8/14-3/15))
Sr. Vice Provost for Administration & Strategic Initiatives (8/13-8/14; 3/15-6/15)

Graduate Director
Professor, Chemical and Biochemical Engineering

Gr (7/89-7/94) **Assistant Professor, Department of Chemical and Biochemical Engineering**

EDUCATION

Ph.D. **M.S.** **Chemical Engineering**
NASA Graduate Fellow
Case Western Reserve University
Liquid Membrane Separations Employing Nonionic Microemulsions

B.S. Chemical Engineering, Cum Laude
University of Cincinnati
Outstanding Chemical Engineering Co-operative Education Student

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R **Diversity.**

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R **Envisioning the collegeôs framework (Months 7-16).**

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R **Building the college (2009-2012).**

R *Goal 1: Ensure academic and future professional success for our students.*
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R **Building the AAU profile.**

FUNDED RESEARCH GRANTS (Principal Investigator is underlined)

FUNDED RESEARCH GRANTS (Principal Investigator is underlined) - continued

_____ *Real-time Monitoring of Protein Concentration in Solution to Control Nucleation and Crystal Growth,*

_____ *Thermodynamics of Protein Crystallization and Links to Crystal Quality,*

_____ *Microgravity*

FUNDED RESEARCH GRANTS (Principal Investigator is underlined) - continued

Development of Flame AA Techniques for Iron Analysis of Liquid Propellant,

Demulsification of Water/Oil/Solid Emulsions Using Hollow Fiber and Tubular Membrane Modules,

Removal of Chlorinated Phenols from Contaminated Water Using Bienzymatically-Catalyzed Polymerization in an Organic Solvent,

Research Experiences for Undergraduates Supplement

PEER REVIEWED PUBLICATIONS (cont)

ñTemperature Insensitive Near-Infrared Method for Determination of Protein Concentration during Protein Crystal Growth,ò

ñStatic Light Scattering Studies of OmpF Porin: Implications for Integral Membrane Protein Crystallization,ò

ñTemperature-Independent Near-Infrared Analysis of Lysozyme Aqueous Solutions,ò

PEER REVIEWED PUBLICATIONS (cont)

"Protein Extraction into Nonionic Microemulsions: Effect of Surfactant Structure,"

ñMercury Removal from Aqueous Streams Utilizing Microemulsion Liquid Membranes,ò

ñElectrical and Chemical Demulsification Techniques for Microemulsion Liquid Membranes,ò

ñLysozyme Crystallization Studies at High Pressure,ò

ñA Mass Transfer Model of Mercury Removal from Water via Microemulsion Liquid Membranes,ò

PEER REVIEWED CHAPTERS

ñCrystallization of Proteins,ò

ñUse of Emulsions, Microemulsions and Hollow Fiber Contactors as Liquid Membranes,ò

Product Recovery and Purification via Precipitation and Crystallization

ñApplication of Microemulsions as Liquid Membranes,ò

INVITED SEMINARS

"Association of Insulin and Light Scattering in Flow Environmentsò

INVITED SEMINARS (cont)

"Cryopreservation of Protein Crystals: Applications to Structural Biology

"Engineering Approaches to Improved Protein Crystallization

"Integral Membrane Protein Crystallization: A Light Scattering Study

"In Search of Highly Stable Liquid Membranes for Metal Ion Separations

"Protein Crystallization: Improving Resolution of Xray Structures

PRESENTATIONS

PRESENTATIONS (cont)

ñRole of Electrolyte on Crystallization of Lysozyme,ò

ñAn Intelligent Temperature Control Algorithm for Protein Crystallizationò

ñTemperature Induced Crystallization of Lysozyme in Solutions of NaCl and NaSCN,ò

ñThe Role of the Surfactant in Membrane Protein Crystallization,ò

ñExperimental Investigation of the Effect of Electrolyte on Heats of Crystallization in Protein Systems,ò

ñRapid Phase Diagram Determination via Microcalorimetry,ò

ñMicrogravity Enhanced Protein Crystallization: Feedback Control Using Temperature and Spectroscopy,ò

PRESENTATIONS (cont)

"Protein Extraction Using Affinity Surfactants,ò

ñEnzyme-Catalyzed Polymerization of Phenolics in Monophasic Water-Immiscible Organic Solvents,ò

ñPhenolic Removal from Water Driven by Enzyme Catalysis in Organic Media,ò

ñPhenolic Removal Driven by Enzyme Polymerization in Water-Immiscible Organic Media,ò