JOHN MICHAEL WIENCEK

Provost and Executive Vice President Professor of Chemical Engineering University of Idaho, Moscow, Idaho (Cell) Email:

ACADEMIC AND LEADERSHIP APPOINTMENTS

Phone:

(6/15- present)	Provost and Executive Vice President Professor, Chemical Engineering University of Idaho, Moscow, Idaho.
(8/13-6/15)	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) Professor, Chemical & Life Science Engineering Virginia Commonwealth University, Richmond, Virginia.
(7/07-8/13)	Dean, College of Engineering Professor, Chemical and Biomedical Engineering The University of South Florida, Tampa, Florida.
(7/02 -7/07)	Department Chair Professor, Chemical and Biochemical Engineering The University of Iowa, Iowa City, Iowa.
(7/00-7/02)	Graduate Director Professor, Chemical and Biochemical Engineering The University of Iowa, Iowa City, Iowa.
(1/95 – 7/00)	Graduate Admissions Chair Associate Professor Chemical and Biochemical Engineering The University of Iowa, Iowa City, Iowa.
(7/94-1/95)	Associate Professor, Department of Chemical and Biochemical Engineering Rutgers University, Piscataway, New Jersey.
(7/89-7/94)	Assistant Professor, Department of Chemical and Biochemical Engineering Rutgers University, Piscataway, New Jersey.
EDUCATION	
(7/84-7/89)	 Ph.D. (August 1989) and M.S. (Jan 1986) Chemical Engineering NASA Graduate Fellow Case Western Reserve University Liquid Membrane Separations Employing Nonionic Microemulsions Dissertation Advisor: Prof. Syed Qutubuddin
(9/79-6/84)	B.S. Chemical Engineering, Cum Laude University of Cincinnati Outstanding Chemical Engineering Co-operative Education Student

Student Achievement Award Winner, Professional Practice

Procter and Gamble, Co., Industrial Chemicals Division, Cincinnati, Ohio.

SIGNIFICANT ACCOMPLISHMENTS AS A LEADER:

(6/15-present) **Provost and Executive Vice President**

University of Idaho, Moscow, Idaho.

Institutional Profile: The University of Idaho is the state's land-grant and flagship university. The enrollment is in excess of 12,000 students in over 250 unique academic offerings. There are over 6,000 employees, including 800+ faculty. The main residential campus is in Moscow, Idaho but additional education centers are located in Coeur d'Alene, Boise, Twin Falls and Idaho Falls. The University of Idaho research and extension centers are located in every county in Idaho. The University of Idaho is recognized by the Carnegie Foundation as a Higher Research institution as well as Community Engaged. Total operating expenses are approximately \$470 million/yr.

Significant accomplishments:

- o Developed and implemented Strategic Plan and Process: 2016-2025
 - Metric driven framework developed with broad participation across the entire State
 of Idaho including businesses, alumni, students, faculty, staff, Board members and
 politicians. Input collected through social media, face-to-face meetings and surveys.
 Leveraged on-line tools as well as traditional small group meetings to gain
 widespread participation and input.
 - Plan is unique in defining a process for revisiting the plan periodically through waypoints and for its clear connection to resource processes (budgeting new revenue, reallocation policy, capital campaign fundraising goals, new construction, regional accreditation).
 - Received positive feedback for transparency, communication and collegiality of the development and implementation process.
 - Regional accreditation body, NWCCU, praise plans integrated and holistic approach toward continuous improvement with student success as key focus.
 - Established and chair the Institutional Planning and Effectiveness Committee (IPEC) which has broad oversight and advisory role in service to the Strategic Plan and the President.
- Realignment and reorganization of Provost office to achieve Strategic Plan enrollment goals
 - Reassigned units and personnel to form a new Vice Provost area focused on the full cycle of student engagement including new student recruitment, advising and retention services, career services and job placement to name a few.
 - Took direct management oversight mid-year due to double digit percent declines in applications. These recruiting efforts for Fall 2016 cohort yielded first new student enrollment increase (4.5% undergraduate, 5% graduate programs) since 2010. This growth has continued with an additional 2.4% enrollment growth (Fall 2017 cohort).
 - Established public private partnership with Navitas to provide an international pathway program and to assist in growing international enrollment and improving the internationalization of the university. This partnership has resulted in a significant increase (over 23% in graduate enrollment and 8.2% overall) in international students in Fall 2017 despite visa restrictions imposed by the federal government.
 - Refocused efforts on supporting faculty development with a special emphasis on Teaching and Learning Excellence as well as mentoring and support for faculty at the mid-career level (i.e. Associate Professors).
 - Launched Vandals Idea Project (VIP) which provided (and will continue to provide) annual seed funding to develop innovative solutions to challenges posed by the strategic plan.
 - Invested in Experiential Learning (internships, co-op and research) and Career Readiness via expanded Career Services staff and the Office of Undergraduate Research.

- Assisted President with the roll out of a direct admissions program and subsequent extended education (Enroll Idaho campaign) to promote a "go on" mentality in Idaho.
- Provided clarity on path forward to enhance and support on-line degree program offerings including many degree completion options for adult learners within Idaho.
- Initiated and launched student success center to improve retention and graduation rates.
- Recruited four new Deans, a Vice President of Research and three Vice Provosts.
- o Building trust
 - Due to leadership / fiscal challenges, trust between the university community and the "administration" was very low. I confronted, in a transparent and authentic manner, difficult topics such as changes to our pay plans (movement from spread pay options to pay as you work options), disposition of year end balances, recapping and relaunching program prioritization processes, increased benefits for new parents, shared governance, and IT challenges (especially video conferencing). These conversations are continuing as we deal with upcoming budget reductions.
 - Worked with Faculty Senate to rebuild a transparent University Budget and Finance Committee which was previously rendered ineffective due to the great recession.
 - Worked with Faculty Senate to establish new market-based compensation system with goal of increasing and maintaining faculty compensation at levels consistent with national research universities.
- Program Prioritization and Resource Management
 - Guided and implemented reallocation process that is informed by institutional data and met State Board's new policy requirement.
 - Renewed approach to program prioritization to address concerns with prior process by the State Board of Education.
 - Utilized newly established Institutional Planning and Effectiveness Committee (IPEC) to guide process.
 - Worked closely with faculty and staff workgroups who developed multiple versions of the process reflecting repeated rounds of campus wide feedback.
 - Managed communication of process development and final results to entire university community.
 - Implemented data collection and summary.
 - Following IPEC guidance, translated data into financial reallocation targets.
 - Brought critical review of process to IPEC which will inform future modification.
 - Utilized related framework to implement budget adjustments due revenue decline in FY 2019.
 - Benchmarked academic college resources allocations to peer national averages using Delaware Cost Study (DCS) data.
 - Identified programs for potential closure as part of FY 2019 analysis.
 - Implemented a faculty position control process to allow for strategic hiring and faculty position re-investment as vacancies occur
- o Guided and partnered with the President's Cabinet
 - Recruited new Vice President of Research and Economic Development.
 - Dealt as a team with many controversial matters including moving football from FBS to FCS, re-visioning our most notable annual event (Lionel Hampton Jazz Fest), discontinuing Spread Pay as a payroll option for new employees, and addressing a mid-year enrollment funnel crisis to name a few.
 - Worked jointly on key new initiatives such as market-based compensation, streamlined hiring, improved Banner functionality (requiring fundamental fixes), developing new reallocation processes (program prioritization) to address new State Board of Education policy requirements, a new faculty position description and evaluation process.
 - Worked across most Vice President areas to assess and then seek an international student pathway provider (Navitas). Needing expanded space, special financial structures and integration into current academic offerings, this project has required

an unusual high level of cooperation and guidance but is a critical component of our enrollment growth strategy.

- Improved crisis management and communications skills on job and via training (executive media relations training with national consultant, Harvard Kennedy School Crisis Leadership in Higher Education).
- Collegial and proactive approach to working within and across the State Board of Education's higher education team.
 - Serve and collaborate with fellow Provosts via Council on Academic Affairs and Programs (CAAP) and the State Board Instruction, Research and Student Affairs (IRSA) committee.
 - Project lead on III.Z policy efficacy in meeting state-wide demand for institutionally designated degree programs.
 - CAAP Chair 2018-19.
 - Serve and collaborate with Board members, VP of Finance and Provosts all across the state on joint projects such as Outcomes Based Funding, Program Prioritization, Legislative matters and other issues as identified by the Board.
 - Work closely and collaboratively with the State Chief Academic Officer to meet goals and tasks established by the State Board of Education.

(8/13-6/15) Provost (interim) and Senior Vice Provost of Administration and Strategic Initiatives Office of the Provost and Senior Vice President for Academic Affairs Virginia Commonwealth University, Richmond, Virginia.

Institutional Profile: Virginia Commonwealth University (VCU) is one of the Virginia's largest universities and ranks among the top universities in the country. Located on two downtown campuses in Richmond, VCU enrolls more than 31,000 students in 222 certificate and degree programs in the arts, sciences and humanities. In 2011, President Rao established *Quest for Distinction*, a strategic plan that strives to advance education, research, service, and clinical care with an emphasis on interdisciplinary collaboration, diversity, and community engagement (see: http://www.quest.vcu.edu/). VCU is designated by the Carnegie Foundation as Highest Research activity (highest research level in their classification system) as well as Community Engaged.

Provost and vice president of academic affairs (interim, 8/14-3/15) – The provost is responsible for the overall academic mission of the university through collaborative efforts with the president, deans, faculty, students and staff. Key responsibilities of this position include budgetary planning and management, academic programming and policy, supporting and promoting student learning and success, promoting and supporting scholarly and creative activities of the faculty and students, review of policies, accreditation as well as faculty promotion / tenure.

Significant accomplishments:

- <u>Resolved pending initiatives and concerns</u>
 - Several unresolved issues and concerns of the Board of Visitors, ranging from enrollment planning, prioritization of investments, fund raising, next generation instruction / learning and business meeting format, were discussed and action plans developed to address Board member's concerns. Many of these issues were of a delicate nature requiring a keen ear and careful decision making.
 - A response to several concerns raised by our regional accrediting body, SACS, were due shortly after I became provost. One issue was a thorny issue involving internal authority to allocate and control financial resources. Working with key VP colleagues, this issue was resolved in time to meet our deadline with SACS.
 - A jointly funded position for a choral director (VCU Music department and Richmond Symphony Orchestra or RSO) was quickly put on track after numerous delays and a community cherished choral director was convinced to stay in Richmond to accept this new position. Community partners were very appreciative

of the quick and decisive action to help retain a valued member of the RSO while also providing a key instructional position for the VCU Music department.

- Key property was identified to help address key space needs in Technology Services and VCU's new Office of Continuing and Professional Education. Working collaboratively with the VP Finance and Administration, the property was purchased in Fall 2015.
- <u>Re-building the team</u>
 - Shortly after becoming provost, the Vice Provost for Academic and Faculty Affairs accepted a position as provost of a regional university in New Jersey. With this departure, several shifts in assignment were necessary and several searches in process were brought to a successful close:
 - Appointed a Vice Provost of Academic and Faculty Affairs and initiated a national search with the beginning of the new academic year
 - Appointed a Vice Provost of Finance and Administration
 - Hired Vice Provost Student Affairs, an important leader and role model across both campuses
 - On-boarded new Dean of the Honors College
 - Re-aligned communications and development staff
- Developed strategic focus for the academic year
 - Worked to promote one university philosophy at VCU by: eliminating and combining Dean's meetings on the two campuses into a single Council of Deans, utilizing a common set of tools for financial reporting and Dean evaluation, as well as looking for joint academic and research opportunities such as Spit for Science and Health Sciences Pipeline projects.
 - Rejuvenated communications efforts from the provost's office to include cohesive re-enforcement of the President's messaging for the year, moving that message to the strategic plan activities (i.e. refocusing our strategic plan, *Quest for Distinction* see <u>http://quest.vcu.edu/refocusing-quest/</u>), as well as using blogs, Twitter and Google Hangouts as alternative vehicles to connect with students and faculty.
 - Developed two focused efforts in collaboration with VP of Inclusive Excellence to help recruit (Inclusive Excellence Champions) and retain (Research and External Funding Academy) under-represented faculty.
 - Aligned and set expectations for the distributed advising roles and responsibilities across VCU, with the goal to develop a more accountable and robust advising office that improves student success factors and affords a career ladder for advising professionals.
 - Developed management plan and leveraged the Fall 2015 UCI Road World Bicycling Championship (running through both campuses) conducted over the course of an entire week in the middle of the Fall semester 2015. Worked with the academic calendar committee to decisively adjust our calendar to allow for classes to be suspended that week as well as seeking means through small grants to get faculty and students involved in extra-curricular and scholarly work that can occur during the race event.
 - Implemented an Academic Review Oversight Committee as a standing committee reporting to the provost with expectations of adjusting the review template and format so that appropriate program assessment and prioritization can be extracted from the review process
 - Worked with President's cabinet to develop a response to the Commonwealth's budget cut that came to us in early Fall 2014 which will require 5% cut over two years or slightly over \$5.3 million of recurring funding
 - Developed a strategic plan with detailed resource and business plans for student residential halls (construction completed in Fall 2015).
 - Established a committee to refine VCU's definition of faculty to be more consistent with national norms and to develop formal career paths for full time (non-tenure track) teaching and research faculty.

- Established a Strategic Enrollment Management Council to establish enrollment targets and projections and appropriate integrate into VCU wide planning including revenue estimation, additional funding for personnel (faculty and staff), financial aid deployment, capital construction etc.
- Co-chair with VP Finance a steering committee to develop a new budget model (RCM) for VCU.
- Engage in a meaningful dialog with faculty senate and Deans about our faculty profile (tenure eligible/tenured, full time non-tenured and adjuncts) with a goal to provide high quality instructional experiences for undergraduates and minimize our reliance on adjunct workforce.

Senior vice provost of administration and strategic initiatives (8/13-8/14, 3/15-6/15) – was hired into this position, was selected by the President to serve as Provost until a national search was successfully completed, and returned to this senior vice provost position once the permanent Provost was selected and joined VCU. The senior vice provost, serving as number two in the Provost's office, provided leadership for the administrative functions within the Division of Academic Affairs and guided strategic initiatives formulated to advance VCU as a premier, urban, public research university. The senior vice provost assists the provost in managing a budget in excess of \$240 million per year. Additional duties included: 1) serve as the senior advisor to the provost on all matters related to academic affairs and as the second leading officer in the Division of Academic Affairs; 2) share in the oversight of selected programmatic areas reporting to the provost; 3) oversee the Office of the Summer Session to provide guidance as the summer session converts to a third full semester; 4) serve as the provost's liaison to the Board of Visitors' Committees for Audit, Integrity and Compliance as well as Finance, Budget and Investment; 5) oversee the provost's Director of Communications to assure effective and timely communication to constituents; 6) serve as the provost's primary designee in areas of finance and administration and other areas of the university as designated by the provost. The senior vice provost worked collaboratively with the provost to provide leadership and oversight for the various individuals and offices reporting directly to the provost including: eight vice provosts, eight deans, and five directors of academic support units. The senior vice provost had direct management authority over the provost's finance office, development and external affairs office, communications director and the daVinci Center. In addition, through involvement with annual budgets, special projects and capital improvements, the senior vice provost collaborated with University leadership to develop private fundraising goals to ensure adequate support for all capital projects.

Significant Accomplishments:

- Evolving the budget and finance process at VCU
 - Served the provost as her representative in high level discussions and meetings focused on financial and other resource matters.
 - Served as a member of the key financial advisory body, the University Budget Advisory Committee (UBAC) and suggested several modifications to the way in which UBAC carries out its functions, as well as offering suggestions for improvement in our ability to steward the limited resources we have in our possession (e.g. better reporting functionality in Banner, better workflow processes, as well as an adjustment to the current Entrepreneurial Programs Tuition Agreements (EPTs)).
 - Key leader from provost's office charged with FY 15 budget development including revenue generation via tuition restructuring / increases, key initiatives to promote future revenue production, most notably a multi-year financial aid set aside to be used for strategic recruiting of new students.
 - Work with multiple groups including Strategic Enrollment Management (SEM), the Office of Planning and Decision Support (OPDS), and the Office of Budget and Resource Analysis (OBRA) to develop a better means of revenue estimation in the wake of a new tuition model which shifts from a flat full-time tuition rate to a

variable per hour rate with an ultimate goal to develop a more integrative multi-year enrollment and budget plan.

- Policy, planning and proposals
 - Led the effort to prepare a formal response to President Obama's proposed restructuring of student financial aid which aims to incentivize value and performance among higher education institutions. The resulting white paper, "Making college more affordable: Initial response to the proposed federal plan for higher education," was utilized with our Board of Visitors and key external stakeholders to frame the discussion from a VCU perspective.
 - Assisted in several proposals and grants including the ADVANCE-IT grant submission to the NSF and the quality enhancement plan to SACS.
 - Worked closely with the leadership of the vice provost for strategic enrollment management to provide written and face-to-face responses to the Department of Education's random program review of our federal student aid programs.
 - Managed the enterprise risk process for academic affairs and worked with the Board of Visitors and designated committees to develop risk mitigation plans.
 - Worked collaboratively with the provost and the other vice provosts to provide timely reports to the president and the provost addressing emerging issues and ongoing VCU initiatives.
- o <u>Strategic and emerging initiatives</u>
 - Served as provost's delegate on the incident response team, providing guidance and support as part of a team that deals with emergencies and events requiring a relatively swift response including a significant flood in Sanger Hall.
 - Worked with the new Wilder School of Government and Public Affairs, the College of Humanities and Sciences to establish the Wilder School.
 - Reached out to the health sciences campus and established strong working relationships with key leadership which has resulted in the development of jointlyfunded programs and the leveraging the resources of both campuses.
 - Developed a new vision for our summer session with the goal of more fully utilizing our campus resources (faculty, space, facilities etc.) year-round.
 - Provided oversight on the two new living learning communities (leadership and innovation) from both the construction and the academic perspectives.
 - Provided guidance and insight, especially around resourcing options, as part of a committee focused on leveraging the Mary and Frances Youth Center to form a larger research center focused on positive youth development.
 - Launched VCU's Office of Continuing and Professional Education, offering nondegree programs to the Richmond region and beyond.
- o <u>VCU community</u>
 - Provided guidance and counsel to the provost as VCU joined the Yale Initiative with our Richmond Public School District partners, an initiative that will greatly enhance project based learning in the K-12 school system.
 - Along with my family, worked with volunteer groups on campus to help bring Christmas gifts to the disabled and deprived. We have continued to remain engaged "beyond Christmas" in making a difference for the disabled that we met as part of this program.
 - Chaired and successfully completed search for the associate vice president of facilities management.
 - Served on the administrative and professional faculty taskforce and led a subcommittee focused on uncovering the underlying reasons for the rapid growth in the number of professional support staff over the past five years.
 - Served on search committee for the vice provost of student affairs.
- <u>Transitioning into and out of the interim Provost role</u>
 - Worked with the exiting Provost to establish a firm footing and plan for the year during which a search for a permanent Provost would occur. Once a new Provost was hired and started, assisted the new provost in managing a budget in excess of \$240 million per year as well as the oversight and evaluation for the various

individuals and offices reporting directly to the provost including: eight vice provosts, eight deans, and five directors of academic support units.

(7/07-8/13) **Dean, College of Engineering**

The University of South Florida, Tampa, Florida.

Institutional Profile (accurate as of 8/13): USF is the fastest growing research university in terms of research expenditures in the USA (http://chronicle.com/article/Biggest-Gainers-in-Federal-/48035/). USF is designated by the Carnegie Foundation as Highest Research activity as well as Community Engaged and ranked 50th in federal research expenditures by the NSF putting USF ahead of Purdue, Michigan State, Princeton and Brown Universities to name a few. USF is ranked 27th among public institutions in the Top American Research Universities. As dean, served as the chief executive officer for the college of engineering, responsible for all personnel including approximately 140 tenured/tenure track faculty, 18 full-time instructors, 60 research faculty and 90 staff. The college's annual expenditures were approximately \$24 million in state funding (educational mission) and \$28 million in externally sponsored research. At the time of my departure, the College of Engineering provided educational offerings in 9 degree programs at all degree levels (BS, MS, PhD) to 3300 undergraduate students and 800 graduate students.

Significant accomplishments:

- o University-wide leadership roles for USF
 - Budget rebasing committee member (2012-13) one of two deans appointed to committee charge with establishing new budgetary model and allocations to provide more transparency, empowerment and incentives to the colleges (a hybrid resource centered management approach)
 - Lead college dean (July 2012-April 2013) organizing campus wide cybersecurity programmatic and research efforts to form a new Institute for Safe and Innovative Computing, a public-private partnership
 - Lead facilitator on MOOCs (Fall 2012) charged by provost with leading the opening discussions across the entire USF community to recommend next steps for USF's engagement with MOOCs (Massive Open Online Courses)
 - Chair of search committee for the founding dean of University College (2011-12) successfully completed.
 - Appointed by vice president of research to serve on the research advisory board (2007-2013).
 - Only dean to serve on the executive research advisory board which also included the vice president of research, provost, vice president of finance, and vice president of health (2007-2012).
 - Budget planning committee (2007-2009) One of two deans appointed by the provost to the budget planning committee, devoted to developing a more transparent and rationale budget process. Committee was disbanded with the formation of a new system wide executive budgetary committee in 2009.
 - Chair of the search committee for the dean of the graduate school and associate vice president of research (2008-2009) successfully completed.
 - Chaired university-wide groups evaluating fiscal viability of university-wide core facility for supporting research in nanotechnology (2006-2007).
 - Chaired university-wide group evaluating potential benefits and shortcomings of merging the sciences with the college of engineering (2007).
 - Founding member and organizational committee member for the National Academy of Inventors (2010), a national organization recognizing inventors that was founded at USF.
 - Numerous taskforce assignments including: USF World (Global Education Initiative), student success, enrollment planning, royalty revenue sharing.

• Involvement with students

 Developed ELATE program (Exploration of Leadership and Teamwork for Engineers) in collaboration with Advisory Board (June-September 2012).

- National Society of Black Engineers, Leadership Seminar (October 2011).
- Army cadet commissioning ceremony (April 2008, 2009, 2011).
- Tau Beta Pi engineering honors society, "Virtual" keynote (April 2010).
- American Institute of Chemical Engineers student chapter, senior banquet speaker (April 2008, 2009, 2010).
- Institute of Electrical and Electronic Engineers student chapter, senior banquet speaker (April 2008).
- Society of Hispanic Engineers, regional student leadership meeting (Tampa), welcoming keynote (April 2008).
- Lecturer, Foundations of Engineering (first year introduction to engineering, welcoming students and giving my personal advice, Q&A, conducted twice per yr).
- Florida Engineering Society student chapter transitional advisor, shaped organization into a leadership development activity.

• Involvement with community

- Keynote speaker, "Coalition interoperability test center at the University of South Florida", Coalition Institute annual meeting, Tampa (March 18, 2013).
- Keynote Speaker, Engineering week banquet of Tampa Bay (February 22, 2013).
- Tampa Hillsborough economic development corporation, manufacturing taskforce (June 2012 – August 2012).
- Special initiative (Nondisclosure agreements in place) with local land development specialists, SOCOM, CENTCOM and MacDill (June 2012 – August 2012).
- Board of directors, Pinellas Science Center, October 2011 August 2012.
- STEM careers initiative in partnership with local community colleges (Hillsborough CC and St. Pete's CC), Bay Area Manufacturers Association (BAMA), Manufacturing Extension Partnership (MEP), and the Pinellas Science Center (2009-2013).
- Partnership with local economic development board including Carbon Motors (December 2008) and "Project 21" (May 2010), an Asian company interested in setting up manufacturing facilities in Tampa.
- American Institute of Chemical Engineers Central Florida section, "enVision USF Engineering," Lakeland (January 12, 2010).
- Florida Engineering Society Tampa section, "USF Engineering: Engineering a Better Tomorrow," Tampa (April 21, 2009).
- Executive advisory board, FIRST Florida region, January 2008- August 2012.
- FIRST Tech Challenge, welcoming remarks, Florida championship, USF, Tampa (January 2008).
- Franz Mantini Concert, welcoming remarks, joint engineering and fine arts fundraiser, February 2008, 2009.
- Energy summit hosted by Senator Mel Martinez, speaker, Tampa (October 14, 2008).
- Center for Urban Transportation Research awards dinner, welcoming remarks, Tampa (October 2008, 2009, 2010).
- Tampa Bay Technology Forum, Panelist, "Preparing the future workforce of Tampa Bay", Tampa (August 29, 2007).

• Involvement nationally

- Chair, engineering dean's council ad-hoc committee on proposed model law changes to professional engineering licensure (April – July 2012).
- Member, engineering dean's council (EDC), American Association of Engineering Education (2008-2013).
- Engineering dean's institute committee (premiere meeting held annually for engineering deans), 2009 August 2012.
- Public policy committee, 2010 August 2013.
- Organizing chair, 2010 engineering dean's institute (St Petersburg). Focused on higher education and America's future.
- Big East engineering dean's consortium (2010).

- Board of Visitors, Case Western Reserve University school of engineering (2010current).
- National Society Black Engineers national meeting, national dean's forum panelist, Orlando (March 21, 2008).
- **Diversity.** Engineering as a field falls short in many regards in terms of ethnic and gender 0 equity. Upon joining the college, a review of current demographics of the College showed an above average performance with respect to ethnic diversity (as compared to other Engineering programs nationally) with a particular strong performance in our graduate programs. However, the college had room to improve its female faculty profile in terms of both numbers as well as rank. In 2007, we had only 8 female faculty comprising 8.5% of the faculty (as compared to the national average of 18% women graduating with a PhD in Engineering). Most (6 of 8) were untenured assistant professors. By 2013, we had increased our female faculty count to 17 (15.5%) with 11 women having tenured ranks of associate or full professor. With respect to our graduate programs, Hispanic Outlook (4/5/2010 issue) ranked the USF College of Engineering 17th nationally for Graduate Engineering Degrees (MS and PhD combined) and 6th for Doctoral Engineering Degrees awarded to Hispanics in 2013. Diverse Issues in Higher Education ranked USF College of Engineering fourth in the nation for conferring engineering doctorates to African Americans, and tenth for conferring engineering doctorates to Hispanic/Latino students. In reaching this status, USF joins AAU member institutions (UF, Georgia Tech, Northwestern) as one of four universities ranked as a top 10 producer of both African American and Hispanic/Latino engineering doctorates.

Chronology of College Evolution

First term as dean (2007-2012)

- Securing a solid foundation (Months 0-6). Upon arriving in 2007, the collegiate research office, fundraising office and advisory board had been dismantled. Faculty and staff felt demoralized and we also faced a 15% budget cut. The provost who hired me left in two months to become chancellor of another large metropolitan university and there was consideration of merging engineering with the sciences. In addition, I was immediately faced with an on-site accreditation visit from the Accreditation Board for Engineering and Technology (ABET). Actions taken included:
 - Worked with my leadership team and the new provost to stabilize our budget and centralize business functions. We strategically eliminated some support units, while taking others to a centralized (campus-wide) support model.
 - We established key policies pertaining to department chair appointments and endowed professorships and implemented them immediately. Lack of these policies had caused some friction among the faculty which was quickly dissipated once the policies were enacted.
 - A communications and work place environment audit was conducted to assess college morale and communication efficacy (internal, external and marketing).
 - Reviewing the accreditation recommendations from the prior accreditation visit that occurred six years earlier, we identified deficiencies in infrastructure renewal plans that were corrected a mere week in advance of the on-site visit.

Resulting outcomes:

- Restructuring and budget reallocation required some staff reduction and reassignments. Funding was reallocated to additional faculty hires, taking the faculty from 98 to the current size of 130, and support for PhD student stipends was more than doubled. Department budgets were tied to a yearly plan which included actively recruiting PhD students in preference to MS students, consistent with the USF strategic plan, which doubled recruitment from approximately 50 graduate students/yr to over 100 PhD students recruited for Fall 2010 entering class while increasing quality metrics.
- Communication was placed as a high priority in subsequent strategic planning.

- Successfully recruited and appointed three permanent chairs in our largest departments and director of our Nanotechnology Research and Education Center with strong faculty backing.
- Accreditation for six years was granted to all engineering programs. The visiting accreditation team commented that they were pleased to see an infrastructure renewal plan, which was eventually implemented despite the severe economic downturn of 2007-10.
- Envisioning the college's framework (Months 7-16). The departments and units in the college were all very independent and narrowly focused. These units, while pursuing worthy goals and making significant progress, were not aligning their efforts effectively as a college. We crafted a meaningful mission statement, brought our shared vision into focus and developed our strategic plan, "We Envision a Great Future," the first comprehensive strategic plan in the college's forty years of existence. Actions taken included:
 - Worked with faculty, staff, students and external partners over a year long period to develop a planning document that gave pride of ownership to the college of engineering community.
 - Put staffing and systems in place to allow tracking of critical data and appropriate benchmarks (AAU-Public institution performance).
 - Uncovered a critical misperception among key external stakeholders about the college's goal to grow its research mission. Namely, a belief that growing the research mission is at the expense of the undergraduate education mission.

Resulting outcomes:

- "We Envision a Great Future" strategic plan 2008-2013 for the college of engineering.
- Alignment of all collegiate initiatives to college's strategic plan.
- Concomitant alignment of college initiatives to the USF strategic plan.
- Clear linkage of initiatives to quantifiable metrics of success.
- Critical communication of the intimate linkage between research, graduate programs, undergraduate programs, faculty and students. Improving and growing the research enterprise floats all of these boats.
- **Building the college (2009-2012).** A brief summary of progress towards the Envision strategic plan follows, broken down by the three major goals of the plan:
 - Goal 1: Ensure academic and future professional success for our students.
 - >\$2.5 million in instructional laboratory improvements in four years, much of this amount coming from non-state sources (donations and endowments).
 - \$1.8 million renovation of the marquee student learning space including expanded general use classroom, premier open meeting space (Hall of Flags), multi-functional conference room and shared instructional lab focusing on interdisciplinary learning environment.
 - Restructured discrete student-related services (admissions, recruiting, advising, outreach etc) into unified student services unit with stronger emphasis on professional development and the student's welfare both academically and professionally.
 - Increased emphasis on providing learning experience beyond the classroom for our students (e.g. interns, co-ops, study abroad, international capstone design, and undergraduate research).
 - >\$250,000/yr of set aside funds for undergraduate research projects.
 - Enhanced access to university-licensed software via virtualization so that students can do their projects anywhere, anytime rather than coming into discrete centralized computer labs.
 - Advocated for classroom capture of lecture material to allow students to review complex material presented in lecture.
 - Partnered with career services to more accurately track our student placement upon graduation with the goal of increasing placement rate.
 - Took leadership role to reinstate Florida Engineering Society (National Society of Professional Engineers affiliated) student chapter at USF.

- Due to marketing efforts, strategic faculty hiring, and adjustments to graduate recruiting focus, we were able to get the college of engineering ranked by USNWR for the first time ever in 2011 rankings (119th overall, 79th among public institutions). We continued to move up in the 2012 rankings (112th overall, 75th public), the 2013 (109th overall, 72nd public) and the 2014 (105th overall, 69th public).
- Ranked in the top 1/3 for diversity for all programs reviewed by the NRC as well as the top 1/3 for computer science programs (best program in Florida).
- Ranked fourth in the nation for conferring engineering doctorates to African Americans, and tenth for conferring engineering doctorates to Hispanic/Latino students (source: *Diverse Issues in Higher Education*). USF joins AAU member institutions (UF, Georgia Tech, Northwestern) as one of four universities ranked as a top 10 producer of both African American and Hispanic/Latino engineering doctorates.
- Developed technical workforce initiative in collaboration with the Pinellas Science Center, Florida Manufacturing Extension Partnership, two local community colleges, several middle and high schools
- Work with vice president of innovation partnership to secure learning opportunities for students (internships, capstone design projects etc)

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- Goal 2: Achieve and sustain national recognition in focused areas of research.
 The State of Florida provided four faculty positions to USF to recruit world class scholars. Each position included \$2 million to attract the faculty scholar and allow for a smooth transition. Consistent with USF's strong programs in global sustainability, we successfully recruited Professor James Mihelcic, an international leader in sustainability within the engineering field. With Jim came an entourage of four additional faculty, a Peace Corps MS program and an international capstone design experience that have all yielded very positive press for the college and USF. In addition, we were also able to attract another world class scholar, Rich Gitlin the co-inventor of DSL (technology which provides high speed internet access via traditional phone lines) and member of the National Academy of Engineering. Again, Rich's presence among the USF Engineering faculty has added substantially to our national recognition.
 - Recruited Center for Urban Transportation Research director and worked with provost to review and shape the Center's future strategic vision via a formal review process.
 - Moved college of engineering from an unranked to a ranked position (69th public, 105th overall) in USNWR rankings.
 - Developed cross disciplinary seed grant opportunities to foster collaborations with the arts, humanities, education and other non-traditional collaborations.
 - Assisted faculty to develop and secure high profile grants in sustainability and energy including Florida Energy Systems Consortium (University of Florida is the administrative lead) at \$7.5 million, several power distribution / smart grid projects in excess of \$3 million, as well as Graduate Assistance in Areas of National Need (GAANN) and Bridge the Doctorate (NSF) training grants.
 - Worked with University leadership, especially the VP Research, to develop research partnerships with Draper Laboratories and Mote Marine Laboratory.
 - Restructured biomedical engineering to involve all college of engineering departments and to dramatically improve research and training quality.
 - Focused faculty hiring in the biomedical engineering area. Hiring has taken on a much more collaborative and aligned approach both within engineering and across colleges. Cross college hires include collaboration with internationally recognized diabetes researcher within USF Health as well as

an auditory science team hire in collaboration with the college of behavioral and community sciences.

- Research expenditures continue to climb despite the economic climate from \$22 M in 2007 to over \$28 M in 2011 while reducing the fraction funded from earmarks.
- The college more than doubled the dollar value of grant submissions in timeframe from 2007 to 2009.
- Developed mechanism to allow classified research collaborations with Draper Laboratories.
- Via focused mentoring and proposal editorial assistance, we have secured at approximately one NSF CAREER award winner per year since I have been at USF.
- Worked with vice president of innovation partnership to attract businesses to the Tampa Bay region (IRX Pharmaceuticals and a start up battery manufacturing / R&D company)
- Secured funding from Florida Manufacturing Extension Partnership for a manufacturing outreach liaison to connect manufacturers with engineering researchers to develop solutions to manufacturing problems as well as to move intellectual property out to manufacturing
- Communicated frequently with the Board of Trustees as well as provided a recent significant overview of the college's research performance and future plans (February 28, 2013, Board of Trustees Research Workgroup)
- Goal 3: Establish essential operational infrastructure to achieve College's vision.
 - Established strong communications effort out of Dean's office resulting in College branding and sense of identity (enVision - small "en" refers to engineers humbly serving the Vision), enVision College newsletter (first newsletter printed in over two years), coordinated graduate recruiting advertisement (which doubled our applicant numbers), new website, new department newsletters, annual reports for college and departments. Our website was recognized for excellence with the 2011 Bronze Telly award: best internet/online commercial for a university. In 2012, the college of engineering website won two awards: 1. Interactive Media Award (IMA) best in class - best educational website; and 2. Interactive Media Award (IMA) best in class – best university website. To quote IMA, "The best in class award is the highest honor bestowed by the Interactive Media Awards. It represents the very best in planning, execution and overall professionalism. In order to win this award level, your site had to successfully pass through our comprehensive judging process, achieving very high marks in each of our judging criteria - an achievement only a fraction of sites in the IMA competition earn each year." (Note - the USF CMS was changed in 2013 and this award winning website was stripped of its Flash video content to conform with USF standards; thus, diminishing the websites effectiveness)
 - Centralized key service functions in response to budget pressures of recent years (including IT support, technicians, financial services and advising)
 - Formed college of engineering staff council to enable staff to have a more coordinated voice in all collegiate matters.
 - Developed case statement to raise private funds for a new building that clearly links the role of research to the improvement of all aspects of the college, especially the undergraduate experience.
 - Took fundraising from less than \$700K in 2007 to \$1.2 M in 2008, \$1.7 M in 2009, \$0.8M in 2010, \$39M in 2011, \$69M in 2013.
 - Exceeded capital campaign goals substantially (\$19 million goal versus over \$120 million raised to date).
 - Re-established college advisory board with sharper focus on college's mission and strategic plan and an active executive board.

 Developed / executed programs to enable revenue generation including a weekend MS program in electrical engineering and a pathways program to attract full fee paying international students (USF INTO).

Second term as dean (2012-2013)

- Building the AAU profile. I completed my first term as dean with significant accomplishments and growth in the college. Faculty size went from 98 to over 130 tenured/tenure track faculty and the college broke into national research rankings. As part of my second term contract to serve as dean, I developed a five year sketch to move the college of engineering along the USF-envisioned path of AAU membership. The plan is holistic in its approach and encompasses the following:
 - Public-private partnerships to build synergistic research and educational activities with local business sectors including device design and manufacturing (Jabil), applied materials science (Chromalloy) and cybersecurity (SOCOM).
 - Develop academic research centers which complement these public-private partnerships.
 - Focus on modernization the College's undergraduate curriculum with an aim to improve 6 year graduation rates from 35% to national averages for engineering (50%) within the next decade.
 - Continue to grow the faculty subject to space limitations.
 - Develop technology based platforms for educational delivery that will maintain and improve our competitiveness as an engineering educational provider (in particular novel use and participation in MOOCs and online degree program offerings).
 - Look to ways to integrate the ABET accreditation process into the new curriculum and technology based learning initiatives.

(6/03 -7/07) **Department Executive Officer (DEO or Chair), Chemical & Biochemical Engineering** The University of Iowa, Iowa City, Iowa.

Institutional Profile: The University of Iowa is the flagship institution for the State of Iowa and is designated by the Carnegie Foundation as Highest Research activity. The University of Iowa is also a member of the Association of American Universities, the gold standard for research universities in North America and the world. Enrollments exceed 23,000 students and research expenditures in excess of \$550 million. As the Department Chair of Chemical and Biochemical Engineering, responsibilities included all personnel including fifteen tenured/tenure track faculty, two research faculty and three staff. Administered annual expenditures exceeding \$1 million in state funding and \$8 million in externally sponsored research. Responsible for faculty performance appraisals, salary adjustments, teaching assignments and recruiting.

Significant accomplishments:

- Advisory board for fundraising. Expanded the advisory board's role beyond accreditation evaluations to include fundraising initiatives. Initial fundraising goal of \$100,000 was quickly increased to \$200,000 after convincing a local company to donate \$50,000 within the first three months of the campaign. Upon hearing of this success, one Board member completely matched the \$50,000. In addition, alums with the means to give were recruited to serve on the board and were cultivated for future gift requests. One of the persons placed on the board in 2006 recently added a \$1 million discretionary endowment to the department.
- **Goal based performance plans and evaluation**. Modified our annual review process to factor in annual goals for each faculty member, rather than relying on "gut feel" or onedimensional quantitative metrics. This approach refocused individual energy and talent of some faculty who were not engaged with their own career or the department's mission.
- Diversifying the graduate student body. In concert with other UI faculty, engaged in aggressive recruiting efforts to increase our domestic and minority graduate student population. Upon departing Iowa in 2007, CBE enrolled roughly 40% of the graduate students from under-represented groups (African American, Hispanic or Domestic Women). Prior to these focused efforts, our graduate enrollments rarely exceeded a handful of minority and domestic female students. CBE's success has been noticed across the University of Iowa campus and resulted in the formation of The College of Engineering's Ethnic Inclusion Effort (eI squared).
- International partnerships. Developed and implemented BS/MS degree program with sister institution in India (Dharmish Desai University). Visited the DDU campus in Gujarat, India and developed curriculum jointly with DDU faculty to satisfy all accrediting bodies.
- **Faculty recruiting**. Successfully recruited two junior faculty both with interdisciplinary appointments (one with a major research center and the other with another College), as well as two center directors (Center for Biocatalysis and Bioprocessing, Center for Computer Aided Design).

INTERESTS AND HOBBIES:

Sailing, Member of Tampa Sailing Squadron, November 2008 – December 2013 Running, Have run at least one marathon per year since 2000 Backyard Astronomy, Stargazing, Astrophotography (newest hobby)

AWARDS AND HONORARY SOCIETIES

Professional:	 Commencement Speaker, University of Idaho (Dec 2015) Commencement Speaker, USF College of Engineering (Dec 2010) Commencement Speaker, USF College of Engineering (Dec 2009) Commencement Speaker, USF College of Engineering (Dec 2008) Commencement Speaker, USF College of Engineering (Dec 2007) Commencement Speaker, University of Iowa College of Engineering (Dec 2006) The University of Iowa College of Engineering Teaching Award (2006) CIC Academic Leadership Program Fellow (2006-7) CIC Departmental Executive Officer Training Program (2003) The University of Iowa Faculty Scholarship Award (1998-2001) The University of Iowa Pan-Hellenic Teaching Award (1997) Rutgers College Parents Association Outstanding Teacher Award (1994) Faculty Academic Service Award (1990, 1993) Includes award of merit based salary increase (above and beyond normal salary increases) DOE Environmental Restoration & Waste Management Jr. Faculty Award (1993-1994) - \$100,000 Award to be used for Research and Teaching Henry Rutgers Research Fellow (1989-1991) - \$20,000 Award used for Research 	
Graduate:	NASA Graduate Student Researcher Fellowship (1987-1989) Alumni Award Recipient (1986, 1987) Certified Engineer in Training, Ohio (1985)	
Undergraduate:	Outstanding Chemical Engineer Co-op Student (1984) Achievement Professional Practice Award (1984) Phi Kappa Tau Scholastic Award (1984) University of Cincinnati, Engineering Honors Scholarship (1984) Phi Kappa Tau Outstanding Man on Campus (1982) Polonia Foundation of Ohio Engineering Scholarship Tau Beta Pi Engineering Honorary Sophos Scholastic Honorary Alpha Lambda Delta Scholastic Honorary Dean's List (8 times) Inter-fraternity Council Scholarship Certificate of Merit (8 times)	
COURSES TAUGHT AT RUTGERS UNIVERSITY (1989-1994)		

CORE REQUIRED COURSES (FULL LECTURE, SEMESTER BASIS COURSES):

Undergraduate:	 155:423 (3 Semester Credit Hrs) Design of Separation Processes (5 times) 155:204 (4 Semester Credit Hrs) Chemical Engineering Analysis I (3 times) 155:415 (4 Semester Credit Hrs) Process Engineering Lab I (4 times) 155:416 (4 Semester Credit Hrs) Process Engineering Lab II (4 times)
Graduate:	155:423 (3 Semester Credit Hrs) Kinetics, Catalysis and Reactor Design (3 times)

ELECTIVE COURSES:

Undergraduate	155:491 (3 Semester Credit Hrs) Special Problems in Chemical Engineering (7 times)
Graduate	 155:555 (3 Semester Credit Hrs) Bioseparations (2 times) 155:601,602 (1 Semester Credit Hrs) Graduate Seminar (10 times) 155:701,702 (1-15 Semester Credit Hrs) Research in Chemical & Biochemical Engineering (11 times)

COURSES TAUGHT AT THE UNIVERSITY OF IOWA (1995 - 2007)

CORE REQUIRED COURSES (FULL LECTURE, SEMESTER BASIS COURSES):

Undergraduate:	 052:044 (4 Semester Credit Hrs) Heat and Mass Transfer Operations (2 times) 052:085 (3 Semester Credit Hrs) Process Dynamics and Control (1 time) 052:086 (3 Semester Credit Hrs) Process Design (5 times) 052:090 (0 Semester Credit Hrs) Freshman Chemical Eng. Seminar (1 time) 052:091 (0 Semester Credit Hrs) Professional Chemical Eng. Seminar (2 times)
100 Level:	 052:118 (3 Semester Credit Hrs) Advanced Mathematics (2 times) 052:144 (3 Semester Credit Hrs) Advanced Transport Phenomena (2 times) 052:217 (3 Semester Credit Hrs) Graduate Transport Phenomena (1 time) 052:171(2 Semester Credit Hrs) Thermodynamics & Transport Lab (1 time) 052:181 (3 Semester Credit Hrs) Bioseparations (3 times) 052:186 (3 Semester Credit Hrs) Process Design (7 times) 052:191 (0 Semester Credit Hrs) Graduate Seminar (6 times)

ELECTIVE COURSES:

Graduate 052:244 (3 Semester Credit Hrs) Topics in Transport Phenomena (1 time)

NEW COURSE DEVELOPMENT

Graduate

052:230 (3 Semester Credit Hrs) Colloid and Interfacial Phenomena (2 times) 052:191 (1 Semester Credit Hr) Nonlinear Regression Using MATLAB (1 time) 052:191 (1 Semester Credit Hr) Dynamic and Static Light Scattering (1 time)

FUNDED RESEARCH GRANTS (Principal Investigator is underlined)

8/19 – present	National Science Foundation, <u>J.M. Wiencek</u> , Jerry McMurtry, Steve Dupuis, LSAMP BD: University of Idaho All-nations LSAMP (\$1,074,998)
5/05-5/07	MannKind Corporation, <u>J.M. Wiencek</u> , Physical Characterization of Technospheres and APIs, (\$123,951)
6/06-5/07	Genencor International, J.M. Wiencek, Professional MS Program, (\$44,412).
8/06-5/07	Genencor International, J.M. Wiencek, Professional Design Experiences for Undergraduate Chemical Engineers, (\$20,000).
2/06-2/12	Eli Lilly, <u>J.M. Wiencek</u> , Assessing Glucagon Gelation Mechanisms in the Production Environment, (\$15,783).
6/05-5/06	Genencor International, J.M. Wiencek, Professional MS Program, (\$144,329).
8/05-5/06	Genencor International, <u>Phil Jordan</u> and J.M. Wiencek, <i>Professional Design Experiences for Undergraduate Chemical Engineers</i> , (\$20,000).
6/04-5/05	Genencor International, J.M. Wiencek, Professional MS Program, (\$110,000).
8/04-5/05	Genencor International, <u>Phil Jordan</u> and J.M. Wiencek, <i>Professional Design Experiences for Undergraduate Chemical Engineers</i> , (\$17,000).
8/03-5/04	Genencor International, <u>Phil Jordan</u> and J.M. Wiencek, <i>Professional Design Experiences for Undergraduate Chemical Engineers</i> , (\$34,132).
8/02-5/03	Genencor International, Ted Smith and J.M. Wiencek, Professional Design Experiences for Undergraduate Chemical Engineers, (\$33,450).
11/01-11/04	National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement) subcontracted through U. Penn., J.M. Wiencek and <u>P. Loll</u> , <i>Intelligent Screens for Integral Membrane Protein Crystallization</i> , (\$1,010,000).
11/01-11/04	National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), J.M. Wiencek and <u>M. Arnold</u> , <i>Noninvasive Near-Infrared Monitors for Protein Crystallization and Biomedical Systems</i> , (\$870,000).
11/98 - 11/02	National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), <u>J.M. Wiencek</u> , <i>Rejuvenation of Spent Media via Supported Emulsion Liquid Membranes</i> , (\$706,000).
9/98 - 5/00	Monsanto Muscatine Production Facility, J.M. Wiencek, Professional Design Experiences for Undergraduate Chemical Engineers, (\$26,000).
5/98 - 5/01	The Whitaker Foundation, J.M. Wiencek, Maintaining X-ray Diffraction Properties in Protein Crystals After Flash Cooling, (\$200,000).
5/97 - 8/01	National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement) subcontracted through U. Penn., J.M. Wiencek and <u>P. Loll</u> , <i>Quantitative Analysis of Surfactant Interactions During Membrane Protein Crystallization</i> , (\$670,000).

FUNDED RESEARCH GRANTS (Principal Investigator is underlined) - continued

5/97 - 8/01	National Aeronautics and Space Administration (Microgravity Biotechnology), J.M. Wiencek and <u>M. Arnold</u> , <i>Real-time Monitoring of Protein Concentration in Solution to Control Nucleation and Crystal Growth</i> , (\$498,000).
5/97 - 8/01	National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), J.M. Wiencek, Thermodynamics of Protein Crystallization and Links to Crystal Quality, (\$561,000).
2/97 - 12/97	Iowa Space Grant Consortium, J.M. Wiencek, M. Arnold, and G. Maxwell, <i>Microgravity Enhanced Protein Crystallization: Feedback Control Using Temperature and Spectroscopy</i> , (\$25,000).
10/95 - 10/96	NIH (subcontract through Cepra, Inc., Somerset, NJ) STTR Program (Technology Transfer), <u>J.M.</u> <u>Wiencek</u> , <i>Protein Crystallizer with Predictive Thermal Control</i> (\$40,332)
8/93 - 7/94	U.S. Army, Picatinny Arsenal (Subcontracted via GeoCenters, Inc.), <u>J.M. Wiencek</u> and H. Pedersen, <i>NIR to Detect XM46 Composition</i> (\$92,000).
8/93 - 7/94	U.S. Army, Picatinny Arsenal (Subcontracted via GeoCenters, Inc.), <u>J.M. Wiencek</u> and H. Pedersen, <i>Shock Sensitivity of XM46</i> (\$90,000).
9/93 - 9/95	U.S. Dept. of Energy, <u>J.M. Wiencek</u> , <i>Environmental Restoration and Waste Management Junior Faculty Award</i> , (\$100,000).
9/93 - 9/97	U.S. Army ERDEC, <u>J.M. Wiencek</u> , Aberdeen Proving Grounds, Md, <i>Removal of Chlorinated Phenols from Contaminated Water Using Bienzymatically-Catalyzed Polymerization in an Organic Solvent</i> , (\$810,000).
9/93 -9/94	New Jersey Department of Environmental Protection and Energy, <u>J.M. Wiencek</u> , <i>Development of a Mobile Apparatus for Selective Removal of Heavy Metals from Contaminated Water Streams</i> , (\$33,000).
8/93 - 7/94	U.S. Army, Picatinny Arsenal (Subcontracted via GeoCenters, Inc.), <u>J.M. Wiencek</u> , <i>A Round Robin Test of XM46 Composition</i> (\$25,000).
7/93 - 7/96	New Jersey Hazardous Substance Management Research Center, <u>J.M. Wiencek</u> and B. Raghuraman, <i>Emulsions Liquid Membrane Separation of Heavy Metals in Hollow Fiber Contactors</i> , (\$194,690).
5/93 - 5/97	National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), <u>J.M. Wiencek</u> and E. Arnold, <i>Thermal Optimization of Growth and Quality of Protein Crystals</i> , (\$560,000).
4/93 - 4/94	National Science Foundation, <u>J.M. Wiencek</u> , <i>Research Experiences for Undergraduates Supplement</i> , (\$10,000)
9/92 - 8/94	American Chemical Society Petroleum Research Fund, <u>J.M. Wiencek</u> , <i>Simultaneous Separation and Polymerization of Aromatics by a Bienzymatically-catalyzed Membrane-reactor</i> , (\$21,000).
9/92 - 9/94	L&F Products Grant-in-aid, <u>J.M. Wiencek</u> , <i>Surfactant Engineering and Separation Science</i> , (\$3,000).
7/92 - 7/93	Army Research Office (for Picatinny Arsenal), J.M. Wiencek and B. Raghuraman, <i>Identification of Gaseous Degradation Products from Liquid Propellant</i> , (\$37,000).

FUNDED RESEARCH GRANTS (Principal Investigator is underlined) - continued

7/92 - 7/93	Army Research Office (for Picatinny Arsenal), <u>J.M. Wiencek</u> and B. Raghuraman, <i>Development</i> of Flame AA Techniques for Iron Analysis of Liquid Propellant, (\$35,000).
7/92 - 7/94	New Jersey Hazardous Substance Management Research Center, <u>J.M. Wiencek</u> , <i>Demulsification of Water/Oil/Solid Emulsions Using Hollow Fiber and Tubular Membrane Modules</i> , (\$100,000).
5/92 - 5/93	National Science Foundation, J.M. Wiencek and Prof. M. Yarmush, <i>Removal of Chlorinated Phenols from Contaminated Water Using Bienzymatically-Catalyzed Polymerization in an Organic Solvent</i> , (\$35,000)
4/92 - 4/93	National Science Foundation, <u>J.M. Wiencek</u> , <i>Research Experiences for Undergraduates Supplement</i> , (\$10,000)
9/91 - 2/93	National Science Foundation (Equipment Award), J.M. Wiencek, <u>M. Yarmush</u> , H. Pedersen, and H. Buettner), <i>Engineering Research Equipment: Image</i> <i>Analyzer and Light Scattering Device</i> (\$18,000).
7/91 - 7/93	National Science Foundation (Research Initiation Award), <u>J.M. Wiencek</u> , Protein Separations Utilizing Temperature-Sensitive Microemulsions (\$80,000).
7/91 - 7/93	Hazardous Substance Management Research Center of New Jersey, <u>J.M. Wiencek</u> , <i>Heavy Metal Ion Recovery from Aqueous Streams Using Emulsion Liquid Membranes</i> (\$110,000).
5/91 - 1/92	U.S. Army, Picatinny Arsenal (Subcontracted via GeoCenters, Inc.), J.M. Wiencek and Prof. H. Pedersen, A <i>Preliminary Assessment of HAN Shelf Life</i> (\$50,000).
9/90 - 6/91	Rutgers Research Council, <u>J.M. Wiencek</u> , Mercury Removal from Water via Emulsion Liquid Membrane Systems - Equipment Request (\$1680).
6/90 - 6/92	Water Resources Council/U.S. Geological Survey, <u>J.M. Wiencek</u> , <i>Removal of Mercury Ions from Aqueous Streams via Microemulsions</i> (\$40,000).
6/90 - 5/91	Biomedical Research Support Grant, J.M. Wiencek, Influence of Protein Primary Structure on Crystal Growth (\$5400).
1/90 - 6/90	Rutgers Research Council, J.M. Wiencek, New Faculty Award, Determining Mass Transfer Kinetics in Emulsion Liquid Membrane Systems (\$3000).
7/89 - 6/91	Henry Rutgers Research Fellow, J.M. Wiencek, Discretionary Funds (\$20,000).

PEER REVIEWED PUBLICATIONS

- 50. M. Muniz-Maisonet, M. Grant, and J. Wiencek, "Light scattering measurement of insulin dissociation kinetics" Biotechnology and Bioengineering (submitted).
- 49. S, Murugesan, J.M. Wiencek, R. Ren and R.J. Linhardt, "Benzoate-based room temperature ionic liquids thermal properties and glycosaminoglycan dissolution" Carbohydrate Polymers, <u>63</u> 268 (2006).
- 48. L. Gakhar and J.M. Wiencek, "A possible additional role of mineral oil in successful flash cooling" J of Applied Crystallography, <u>38</u> 945 (2005).
- 47. W.F. Jones, M.A. Arnold, and J.M. Wiencek, "Precipitant-controlled growth of lysozyme crystals in sodium thiocyanate" Crystal Growth & Design, <u>4</u> 1387 (2004).
- L.T. Nguyen, J.M. Wiencek, and L.E. Kirsch, "Characterization methods for the physical stability of biopharmaceuticals," PDA Journal of Pharmaceutical Science and Technology, <u>57</u> 429 (2003).
- 45. S.-Y. Hu, J. Li and J.M. Wiencek, "Feasibility of Surfactant-Free Supported Emulsion Liquid Membrane Extraction," J. of Colloid and Interface Science, <u>266</u> 430 (2003).
- 44. S. Murugesan, N. Karst, T. Islam, J.M. Wiencek and R.J. Linhardt, "Dialkyl Imidazolium Benzoates Room Temperature Ionic Liquids Useful in the Peracetylation and Perbenzoylation of Simple and Sulfated Saccharides," Synlett <u>9</u> 1283 (2003).
- P.J. Loll, C. Hitscherich, V. Aseyev, M. Allaman, and J.M. Wiencek, "Assessing Micellar Interaction and Growth in Detergent Soltuions Used to Crystallize Integral Membrane Proteins," Crystal Growth & Design <u>2</u> 533 (2002).
- C.E. Green, J.M. Wiencek, and M.A. Arnold "Multivariate Calibration Models for Lysozyme from Near-Infrared Transmission Spectra in Scattering Solutions of Monodisperse Microspheres," Analytical Chemistry <u>74</u> 3392 (2002).
- 41. D.J. Schibli, H.N. Hunter, V. Aseyev, T.D. Starner, J.M. Wiencek, P.B. McCray, B.F. Tack, and H.J. Vogel "The Solution Stucture of the Human β-Defensins Lead to a Better Understanding of the Potent Bactericidal Activity of HBD3 against Staphylococcus aures," The Journal of Biological Chemistry <u>277</u> 8279 (2002).
- 40. C. Hitscherich, V. Aseyev, J.M. Wiencek and P.J. Loll, "Effects of PEG on Detergent Micelles: Implications for the Crystallization of Integral Membrane Proteins," Acta Crystallographica D. <u>D57</u> 1020 (2001).
- J. Li, S.Y. B. Hu and J.M. Wiencek, "Development of a Supported Emulsion Liquid Membrane System for Propionic Acid Separation in a Microgravity Environment," Biotechnology and Bioprocess Engineering <u>6</u> 426 (2001).
- 38. M.V. Sawai, H.P. Jia, L. Liu, V. Aseyev, J.M. Wiencek, P.B. McCray, T. Ganz, W.R. Kearney, and B.F. Tack, "The NMR Structure of Human Beta-Defensin-2 Reveals a Novel Alpha-Helical Segment," Biochemistry <u>40</u> 3810 (2001)..
- 37. S.-Y.B. Hu, J.M. Wiencek and M.A. Arnold, "*Application of Near-Infrared Spectra to Temperature-Controlled Protein Crystallization A Simulation Study,*" Applied Biochemistry and Biotechnology <u>94</u> 179 (2001).
- 36. W.F. Jones, J.M. Wiencek and P.A. Darcy, "Improvements in Lysozyme Crystal Quality via Temperature-Controlled Growth at Low Ionic Strength," Journal of Crystal Growth 232 221 (2001).
- 35. P.J. Loll, M. Allaman, and J.M. Wiencek, "Assessing the Role of Detergent-Detergent Interactions in Membrane Protein Crystallization," Journal of Crystal Growth 232 432 (2001).

PEER REVIEWED PUBLICATIONS (cont)

- J.T. Olesberg, M.A. Arnold, S.-Y. Hu and J.M. Wiencek, "Temperature Insensitive Near-Infrared Method for Determination of Protein Concentration during Protein Crystal Growth," Analytical Chemistry <u>72</u> 4985 (2000).
- C. Hitscherich, J. Kaplan, M. Allaman, J.M. Wiencek and P.J. Loll, "Static Light Scattering Studies of OmpF Porin: Implications for Integral Membrane Protein Crystallization," Protein Science <u>9</u> 1559 (2000).
- 32. S.-Y.B. Hu, M.A. Arnold and J.M. Wiencek, "Temperature-Independent Near-Infrared Analysis of Lysozyme Aqueous Solutions," Analytical Chemistry <u>72</u> 696 (2000).
- J.M. Wiencek and S.-Y. Hu, "Emulsion Liquid Membrane Extraction in a Hollow-Fiber Contactor," Chemical Engineering & Technology 23 551 (2000).
- S.-Y. Hu, A. Lillquist, M.A. Arnold and J.M. Wiencek, "Partial-Least Square Analysis of Lysozyme Near-Infrared Spectra," Applied Biochemistry and Biotechnology <u>87</u> 153 (2000).
- S.-Y. Hu, and J.M. Wiencek, "Copper LIX 84 Extraction Equilibrium," Separation Science and Technology <u>35</u> 469 (2000).
- J. M. Wiencek, "New Strategies for Protein Crystal Growth," <u>Annual Reviews of Biomedical Engineering</u>, <u>1</u> 505 (1999).
- 27. P.A. Darcy and J.M. Wiencek, "Identifying Nucleation Temperatures via Differential Scanning Calorimetry," Journal of Crystal Growth <u>196</u> 243 (1999).
- P.A. Darcy and J.M. Wiencek, "Estimating Lysozyme Growth Rates and Solubility from Isothermal Calorimetry," Acta Crystallographica <u>D54</u> 1387 (1998).
- 25. S.-Y. Hu and J.M. Wiencek, "Emulsion Liquid Membrane Extraction of Copper Using a Hollow Fiber Contactor," AIChE Journal, <u>44</u> 570 (1998).
- 24. M. Vasudevan and J.M. Wiencek, "Role of the Interface in Protein Extractions Using Nonionic Microemulsions," J. of Colloid and Interface Science, <u>186</u> 185 (1997).
- C. Schall and J.M. Wiencek, "Stability of Nicotinamide Adenine Dinucleotide Immobilized to Sepharose-4B," Biotechnology and Bioengineering, <u>53</u> 41 (1997).
- 22. C. Schall, J. Riley, E. Li, E. Arnold, and J.M. Wiencek, "Application of temperature control strategies to the growth of hen egg-white lysozyme crystals," J. of Crystal Growth, <u>165</u> 299 (1996).
- 21. C. Schall, E. Arnold and J.M. Wiencek, "Enthalpy of Crystallization of Hen Egg White Lysozyme," J. of Crystal Growth, <u>165</u> 293 (1996).
- 20. M. Vasudevan and J.M. Wiencek, "Mechanism of the Extraction of Proteins into Tween 85 Nonionic Microemulsions," Industrial & Engineering Chemistry Research, <u>35</u> 1085 (1996).
- N. Tirmizi, B. Raghuraman and J.M. Wiencek, "Demulsification of Oil-Water Dispersions via Hollow Fiber Membranes," AIChE Journal, <u>42</u> 1263 (1996).
- B. Raghuraman, N. Tirmizi, B.-S. Kim and J.M. Wiencek, "Emulsion Liquid Membranes for Wastewater Treatment: Equilibrium Models for Pb- and Cd- Diethylhexylphosphoric Acid Systems," Environmental Science & Technology, <u>29</u> 979 (1995).

PEER REVIEWED PUBLICATIONS (cont)

- 17. M. Vasudevan and J.M. Wiencek, "Protein Extraction into Nonionic Microemulsions: Effect of Surfactant Structure," Biotechnology and Bioengineering, <u>46</u> 99 (1995).
- K.A. Larson, J.M. Wiencek, "Mercury Removal from Aqueous Streams Utilizing Microemulsion Liquid Membranes," Environmental Progress, <u>13</u> 253 (1994).
- K.A. Larson, B. Raghuraman and J.M. Wiencek, "Electrical and Chemical Demulsification Techniques for Microemulsion Liquid Membranes," Journal of Membrane Science, <u>91</u> 231 (1994).
- C. Schall, J.M. Wiencek, M.L. Yarmush, and E. Arnold, "Lysozyme Crystallization Studies at High Pressure," J. of Crystal Growth, <u>135</u> 548 (1994).
- K.A. Larson, B. Raghuraman and J.M. Wiencek, "A Mass Transfer Model of Mercury Removal from Water via Microemulsion Liquid Membranes," Industrial & Engineering Chemistry Research, <u>33</u> 1612 (1994).
- B. Raghuraman and J.M. Wiencek, "Equilibrium Partitioning and Emulsion Liquid Membrane Separation of Heavy Metals," Environmental Science and Technology, <u>28</u> 1090 (1994).
- K.A. Larson, J.M. Wiencek, "Extraction of Mercury from Wastewater Using Microemulsion Liquid Membranes: Kinetics of Extraction," Emerging Technologies in Hazardous Waste Management IV (ACS Symposium Series), <u>554</u> 124 (1994).
- S. Qutubuddin, J.M. Wiencek, A. Nabi, J.Y. Boo, "Hemoglobin Extraction Using Cosurfactant-Free Nonionic Microemulsions," Separation Science and Technology, <u>29</u> 923 (1994).
- K.A. Larson, J.M. Wiencek, "Kinetics of Mercury Extraction using Oleic Acid," Industrial & Engineering Chemistry Research, <u>32</u> 2854 (1993).
- B. Raghuraman and J.M. Wiencek, "Extraction with Emulsion Liquid Membranes in a Hollow Fiber Contactor," AIChE J, <u>39</u> 1885 (1993).
- K.A. Larson, J.M. Wiencek, "Liquid Ion Exchange for Mercury Removal from Water over a Wide pH Range," Industrial & Engineering Chemistry Research, <u>31</u> 2714 (1992).
- J.M. Wiencek and S. Qutubuddin, "Microemulsion Liquid Membranes: I. Application to Acetic Acid Removal From Water," Separation Science and Technology, <u>27</u> 1211 (1992).
- J.M. Wiencek and S. Qutubuddin, "Microemulsion Liquid Membranes: II. Copper Ion Removal from Buffered and Unbuffered Aqueous Feed," Separation Science and Technology, <u>27</u> 1407 (1992).
- 4. J.M. Wiencek and S. Qutubuddin, "Solubilization in nonionic microemulsions," Colloids and Surfaces, <u>54</u> 1 (1991).
- J.M. Wiencek and S. Qutubuddin, "Solubilization in Nonionic Microemulsions," in Surfactants in Solution, Vol 10 (K.L. Mittal, ed.) p181 - 190 (1989).
- J.M. Wiencek and S. Qutubuddin, "Microemulsion versus Macroemulsion," Journal of Membrane Science, <u>45</u> 311 (1989).
- J.M. Wiencek and S. Qutubuddin, "Separation of Organics Using Microemulsions," Colloids and Surfaces, <u>29</u> 119 (1988).

PEER REVIEWED CHAPTERS

- J.M. Wiencek, "Crystallization of Proteins," invited Chapter 12 of <u>Handbook of Industrial Crystallization</u> (2nd Edition), edited by Allan S. Myerson, Butterworth-Heinemann Publishers (Newton, MA) p267-285 (2002).
- J.M. Wiencek, S.-Y. Hu, and B. Raghuraman, "Use of Emulsions, Microemulsions and Hollow Fiber Contactors as Liquid Membranes," in Chemical Separations with Liquid Membranes (American Chemical Society Symposium Series Number 642), Chapter 22 (1996).
- 2. J.M. Wiencek and C. Schall, "Product Recovery and Purification via Precipitation and Crystallization," in Handbook of Downstream Processing, Chp 8, edited by E. Goldberg, Chapman & Hall, New York (1997).
- 1. J. M. Wiencek, "Application of Microemulsions as Liquid Membranes," Chapter 28, <u>Handbook of</u> <u>Microemulsion Science and Technology</u>, Eds. P. Kumar & K.L. Mittal, Marcel Dekker (NY), p. 797-810 (1999).

INVITED SEMINARS

- J.M. Wiencek (Speaker), "Insulin Dissociation Kinetics and Relationship to Insulin Formulations," University of Florida, Chemical Engineering, Gainesville, Florida (August 2009).
- J.M. Wiencek (Speaker), "Assessing Insulin Association State within Technosphere® Insulin Formulations," Case Western Reserve University, Chemical Engineering, Cleveland, Ohio (April 2009).
- J.M. Wiencek (Speaker), ""Assessing Insulin Association State within Technosphere® Insulin Formulations," Bristol- Myers Squibb, New Brunswick, New Jersey (July 2008).
- J.M. Wiencek (Speaker), "Association of Insulin and Light Scattering in Flow Environments" Chemical and Biomedical Engineering, University of South Florida, Tampa (April 2008).
- J.M. Wiencek (Speaker), "Stable Emulsion Liquid Membranes for Water Reclamation" Environmental Research Interdisciplinary Colloqium, University of South Florida, Tampa (September 2007).
- J.M. Wiencek (Speaker), "Characterization of pH-induced Aggregation and Gelation of Glucagon," Rensselaer Polytechnic Insitute, Chemical and Biological Engineering, Troy, New York (September 2006).
- J.M. Wiencek (Speaker), "Bouncing light off biopharmaceuticals," Optical Science and Technology Center, The University of Iowa, Iowa City, Iowa (April 2006).
- J.M. Wiencek (Speaker), "Glucagon Fibrillization and the Role of Large Molecular Weight Precursors," Eli Lilly Co., Indianapolis, Indiana (November 2005).
- J.M. Wiencek (Speaker), "Light Scattering Studies of Glucagon Association and Aggregation," MannKind Corporation, Danbury, Connecticut (October 2005).
- J.M. Wiencek (Speaker), "Engineering At Iowa: Engineering and Something More," Southern Yangtzee University, Wuxi, China (October 2005).
- J.M. Wiencek (Speaker), "Collaborative Learning as Part of a Program for Enhanced Design Experience (PEDE)," Genencor Danisco, Wuxi, China (October 2005).
- J.M. Wiencek (Speaker), "Simplified Approaches to Protein Crystallization," China, Japan USA Joint Chemical Engineering Conference, Beijing, China (October 2005).
- J.M. Wiencek (Speaker), "Protein Crystals for XRD: How to Optimize Crystal Growth to get High Resolution Structures" Sarnoff Research Corporation, Princeton, NJ, (Jan 8, 2004).
- J.M. Wiencek (Speaker), "Stable Emulsion Liquid Membranes for Water Reclamation" Engineering Foundation Conference on Water Purification and Reuse, Potsdam, Germany (June 9 13, 2003).
- .M. Wiencek (Speaker), "Harvesting Low Hanging Fruit" Chemical Engineering Department, University of Nebraska, (April 14, 2003).
- J.M. Wiencek (Speaker), "Crystallization of Integral Membrane Proteins" Chemical and Materials Engineering Department, University of Kentucky, (January 22, 2003).
- J.M. Wiencek (Speaker), "Crystallization of Integral Membrane Proteins" Chemical Engineering Department, Iowa State University, (December 3, 2002).

INVITED SEMINARS (cont)

- J.M. Wiencek (Speaker), "Cryopreservation of Protein Crystals: Applications to Structural Biology," The Whitaker Foundation Annual Conference, LaJolla, (August 10, 2001).
- J.M. Wiencek (Speaker), "Engineering Approaches to Improved Protein Crystallization," Department of Chemical & Environmental Engineering, Illinois Institute of Technology, Chicago, (September 13, 2000).
- J.M. Wiencek (Speaker), "Integral Membrane Protein Crystallization: A Light Scattering Study," Henry E. Bent Distinguished Lecture Series, Department of Chemical & Environmental Engineering, The University of Missouri - Columbia, (April 20, 2000).
- J.M. Wiencek (Speaker), "In Search of Highly Stable Liquid Membranes for Metal Ion Separations," Department of Chemical & Environmental Engineering, The University of Toledo, (October 23, 1998).
- J.M. Wiencek (Speaker), "Protein Crystallization: Improving Resolution of Xray Structures," Department of Medicinal Chemistry and Pharmacy, The University of Iowa, (October 14, 1998).
- J.M. Wiencek (Speaker), "Protein Crystallization and Other Work," The Center for Microgravity and Materials Research, The University of Alabama in Huntsville, (April 23, 1998).
- J.M. Wiencek (Speaker), "Protein Crystallization: The Effects and Uses of Temperature," Biochemistry Department, The University of Iowa, (January 1998).
- J.M. Wiencek (Speaker), "The Effect of Electrolyte on the Enthalpy of Crystallization of Lysozyme" Spacebound 97, Montreal, Canada, (May 1997).
- J.M. Wiencek (Speaker), "Protein Crystallization: Microcalorimetric Investigations & Thermally Controlled Growth" NASA Protein Crystal Growth Conference, Panama City Beach, Florida, (April 1996).
- P.A. Darcy (Speaker) and J.M. Wiencek, "Thermal Analysis of Protein Crystallization" Symposia on Protein Crystallization, American Chemical Society Meeting, New Orleans, LA (March 24, 1996).
- J.M. Wiencek (Speaker), "Effect of DMSO on Peroxidase-Catalyzed Polymerization of Cresol" U.S. Army Edgewood Research, Development, and Engineering Center Scientific Conference on Chemical Defense Research, (November 15, 1995).
- J.M. Wiencek (Speaker), "The Use of Emulsions, Microemulsions and Hollow Fiber Contactors as Liquid Membranes" Symposia on Chemical Separations with Liquid Membranes, American Chemical Society Meeting, Annaheim, CA (April 1995).
- J.M. Wiencek (Speaker), "Predictive Thermal Control of Lysozyme Crystallization" NASA Protein Crystal Growth Conference, Panama City Beach, Florida, (April 24, 1995).
- J.M. Wiencek (Speaker), "Liquid Membrane Technology: Applications to Metal Removal from Water" AIChE Local Section Meeting, Iowa Chapter, Iowa City, IA (March 21, 1995).
- J.M. Wiencek (Speaker), "Production of Protein Crystals Suitable for X-ray Diffraction Analysis: Controlling Growth Rates via Temperature Manipulations" Fall Colloquia, Chemistry and Chemical Engineering, Polytechnic University, Brooklyn, NY (October 5, 1994).
- J.M. Wiencek (Speaker), "Membrane-based Extraction of Metal Ions from Contaminated Water" NIST Workshop on Environmental Separations, Boulder, Co (July 19, 1994).
- J.M. Wiencek (Speaker), "Liquid Membrane Technology: Applications to Metal Removal From Water" 34th Annual Spring Symposium, NJ AIChE Section, East Brunswick, NJ (May 20, 1994).

INVITED SEMINARS (cont)

- J.M. Wiencek (Speaker), "Thermal Optimization of Protein Crystal Growth" NASA Protein Crystal Growth Conference, Panama City Beach, Florida, (April 21, 1994).
- J.M. Wiencek (Speaker), "Membrane-based Extraction of Metal Ions" Brown University, Providence, RI (March 3, 1994).
- J.M. Wiencek (Speaker), "Membrane-based Extraction of Metal Ions" Wayne State University, Detroit, MI (March 2, 1994).
- J.M. Wiencek (Speaker), "Membrane-based Extraction of Metal Ions" Dept. of Energy Efficient Separation Processes Integrated Program, Dallas, Texas (January 10, 1994).
- J.M. Wiencek (Speaker), "Efficient Separation from Dilute Solution via Driving Force Manipulation" University of Iowa, Iowa City, Iowa, (December 9, 1993).
- J.M. Wiencek (Speaker), "Waste Stream Cleanup by Enzymatically-Catalyzed Reaction in an Organic Solvent" U.S. Army Edgewood Research, Development, and Engineering Center Scientific Conference on Chemical Defense Research, (November 16, 1993).
- J.M. Wiencek (Speaker), "Thermal Optimization of Protein Crystal Growth" NASA Protein Crystal Growth Conference, Panama City Beach, Florida, (April 26, 1993).
- J.M. Wiencek (Speaker), "Separations for Water Treatment," Union Camp Inc., Princeton, NJ (May 27, 1993).
- J.M. Wiencek (Speaker), "Novel Separation Techniques," DuPont Co., Wilmington, DE (April 19, 1993).
- J.M. Wiencek (Speaker), "Emulsion Liquid Membranes for Heavy Metal Ion Separation," AIChE Jersey Section Meeting, Wachtung, NJ (April 13, 1993).
- J.M. Wiencek (Speaker), "Heavy Metal Ion Recovery from Water via Microemulsion Liquid Membranes," AIChE Central Jersey Section Meeting, Princeton, NJ (March 16, 1993).
- J.M. Wiencek (Speaker), "Separation Techniques Utilizing Microemulsions," Exxon Research and Engineering, Annandale, NJ (Oct. 1992).
- J.M. Wiencek (Speaker), "Surfactant-Enhanced Separation Techniques," University of Maine, Department of Chemical Engineering, Orono, Maine, (Oct. 1991).
- J.M. Wiencek (Speaker), "Liquid Membrane Separation Techniques," Corning Incorporated, Corning, NY, (June 1991).
- J.M. Wiencek (Speaker), "Surfactant-Based Separation Techniques," Rutgers University Department of Chemical and Biochemical Engineering, Piscataway, NJ, (Oct. 1990).
- J.M. Wiencek (Speaker), "Nonionic Microemulsion Liquid Membrane Separations," University of Cincinnati, Department of Chemical Engineering, Cincinnati, OH, (Feb. 1989).
- J.M. Wiencek (Speaker), "Liquid Membrane Separations Using Microemulsions," Invited lecture at The Cleveland Engineering Society, Cleveland, Ohio, (June 1987).

PRESENTATIONS

- J.M. Wiencek (Speaker), "Characterization of pH-induced Aggregation and Gelation of Glucagon," Rensselaer Polytechnic Insitute, Chemical and Biological Engineering, Troy, New York (September 2006).
- J.M. Wiencek (Speaker), "Bouncing light off biopharmaceuticals," Optical Science and Technology Center, The University of Iowa, Iowa City, Iowa (April 2006).
- J.M. Wiencek (Speaker), "Glucagon Fibrillization and the Role of Large Molecular Weight Precursors," Eli Lilly Co., Indianapolis, Indiana (November 2005).
- J.M. Wiencek (Speaker), "Light Scattering Studies of Glucagon Assocation and Aggregation," MannKind Corporation, Danbury, Connecticut (October 2005).
- J.M. Wiencek (Speaker), "Engineering At Iowa: Engineering and Something More," Southern Yangtzee University, Wuxi, China (October 2005).
- J.M. Wiencek (Speaker), "Collaborative Learning as Part of a Program for Enhanced Design Experience (PEDE)," Genencor Danisco, Wuxi, China (October 2005).
- J.M. Wiencek (Speaker), "Industrial Partners in Chemical Engineering Education," Penford Products, Cedar Rapids, Iowa (March 2005).
- J.M. Wiencek (Speaker), "ChemCad Overview," Professional Seminar, UI CBE, Iowa City, Iowa (February 2005).
- S.Y. B. Hu (Speaker), J. Li, and J.M. Wiencek, "Drop Coalescence in Hollow Fiber Membrane Modules in a Microgravity Environment," AIChE Annual Meeting, Indianapolis, IN (Nov. 2002).
- L. Gakhar (Speaker), and J.M. Wiencek, "Ice Formation in Flash Cooled Protein Crystals," AIChE Annual Meeting, Indianapolis, IN (Nov. 2002).
- W.F. Jones (Speaker), and J.M. Wiencek, "Precipitant Induced Growth of Lysozyme Crystals via Constant Supersaturation Control," AIChE Annual Meeting, Indianapolis, IN (Nov. 2002).
- K. Parekh (Speaker), and J.M. Wiencek, "*High Pressure Cooling of Protein Crystals*," AIChE Annual Meeting, Indianapolis, IN (Nov. 2002).
- J.Li (Speaker), S.Y.B. Hu, and J.M. Wiencek, "Solvent Toxicity Issues in the Extraction of Propionic Acid from Propionibacteria Fermentation Media," Biocatalysis, Evolution and Metabolic Engineering Conference, Iowa City, IA (Oct 2002).
- Gakhar, L. Parekh, K. and Wiencek, J.M., "Maintaining X-ray Diffraction Properties in Protein Crystals After Flash Cooling," Optical Science & Technology Center Annual Meeting, Iowa City, IA (Sept 2, 2002).
- W.F. Jones (Speaker) and J.M. Wiencek, "Precipitant based CSC Growth of Lysozyme", Optical Science & Technology Center Annual Meeting, Iowa City, IA (Sept 2, 2002).
- M.M. Allaman (Speaker) and J.M. Wiencek, "Light Scattering Investigation of Interactions in Membrane Protein Detergent Systems", Optical Science & Technology Center Annual Meeting, Iowa City, IA (Sept 2, 2002).
- V. Aseyev (Speaker), C. Hitscherich, J.M. Wiencek, and P.Loll, "Intermicellar Interactions versus Micellar Growth in Crystallization of Membrane Proteins," 4th International Symposium on Molecular Mobility and Order in Polymer Systems, St.-Petersburg Russia, June 3-7, 2002.

- V. Aseyev (Speaker), C. Hitscherich, J.M. Wiencek, and P.Loll, "The Role of Detergent and PEG in Crystallization of Membrane Proteins," The International Symposia on Polyelectrolytes 2002, Lund Sweden, June 15-19, 2002.
- S.Y. B. Hu (Speaker), J. Li, and J.M. Wiencek, "The Development of a Supported Emulsion Liquid Membrane System for PropionicAcid Separation in a Microgravity Environment," AIChE Annual Meeting, Reno, NV (Nov. 2001).
- J.Li (Speaker), S.Y.B. Hu, and J.M. Wiencek, "Supported Emulsion Liquid Membranes for Propionic Acid Recovery from Fermentation Media," Center for Biocatalysis and Bioprocessing Annual Meeting, Iowa City, IA (Oct 2001).
- C.F. Hitscherich (Speaker), V.O. Aseyev, J.M. Wiencek and P.J. Loll, "*The Role of Detergent Cloud Point in Crystallization of Membrane Proteins*," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- L. Gakhar (Speaker), M.A. Yousef and J.M. Wiencek, "Maintaining X-ray Diffraction Properties in Protein Crystals After Flash Cooling," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- M.A. Yousef (Speaker), L. Gakhar and J.M. Wiencek, "Flash Cooling of Protein Crystals under Atmospheric and High Pressure," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- W.F. Jones (Speaker) and J.M. Wiencek, "Temperature-Controlled Growth of Lysozyme at Low Ionic Strength," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- V.O. Aseyev (Speaker), C.F. Hitscherich, J.M. Wiencek and P.J. Loll, "*Physical Properties of PEG-Detergent Solutions in Evaluating Crystallizability of Integral Membrane Proteins*," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- P. J. Loll (Speaker), J. Kaplan, C. Hitscherich, M. Allaman, and J. Wiencek, "Assessing of the Role of Detergent-Detergent Interactions in Membrane Protein Crystallization," Eighth International Conference on the Crystallization of Biological Macromolecules, Sandestin, Florida (May 14-19, 2000).
- W.F. Jones and J.M. Wiencek (Speaker), "Improvements in Lysozyme Crystal Quality Via Temperature-Controlled Growth at Low Ionic Strength," Eighth International Conference on the Crystallization of Biological Macromolecules, Sandestin, Florida (May 14-19, 2000).
- C.E. Green (Speaker), M.A. Arnold and J.M. Wiencek, "Calibration Models for Lysozyme from Near-Infrared Spectra in Scattering Solutions," Pittsburgh Conference, (March 12, 2000).
- L.T. Nguyen (Speaker), L.E. Kirsch, and J.M. Wiencek, "Effects of Shear Stress on the Structural and Mechanical Characteristics of Glucagon Gel Systems," American Association of Pharmaceutical Scientists, New Orleans, LA (Nov. 1999).
- P. Loll (Speaker), C.F. Hitscherich, and J.M. Wiencek, "Integral Membrane Protein Crystallization Studied with Static Light Scattering," American Crystallographic Association, Buffalo, NY (May 1999).
- W.F. Jones (Speaker), and J.M. Wiencek, "Temperature-Controlled Crystallization: The Effect of Precipitant Type on Temperature Sensitivity," American Crystallographic Association, Buffalo, NY (May 1999).
- S.Y. Hu (Speaker), and J.M. Wiencek, "Online Near-Infrared Spectroscopic Monitor to Facilitate Temperature-Controlled Protein Crystallization" American Crystallographic Association, Buffalo, NY (May 1999).
- C.F. Hitscherich (Speaker), and J.M. Wiencek, "The Use of Light Scattering as a Tool for Studying Integral Membrane Protein Crystallization," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1998).

- W.F. Jones (Speaker), and J.M. Wiencek, "Role of Electrolyte on Crystallization of Lysozyme," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1998).
- S.Y. Hu (Speaker), and J.M. Wiencek, "An Intelligent Temperature Control Algorithm for Protein Crystallization" AIChE Annual Meeting, Miami Beach, Florida (Nov. 1998).
- J.M. Wiencek (Speaker), and Patricia Darcy, "Temperature Induced Crystallization of Lysozyme in Solutions of NaCl and NaSCN," International Conference on Crystallization of Biological Molecules, Granada, Spain, (May 1998).
- J. Foelske (Speaker), and J.M. Wiencek, "The Role of the Surfactant in Membrane Protein Crystallization," AIChE Annual Meeting, Los Angeles, California (Nov. 1997).
- P.A. Darcy (Speaker), and J.M. Wiencek, "Experimental Investigation of the Effect of Electrolyte on Heats of Crystallization in Protein Systems," AIChE Annual Meeting, Los Angeles, California (Nov. 1997).
- P.A. Darcy (Speaker), and J.M. Wiencek, "*Rapid Phase Diagram Determination via Microcalorimetry*," AIChE Annual Meeting, Los Angeles, California (Nov. 1997).
- S.-Y. Hu (Speaker), J.M. Wiencek, M.A. Arnold, and G. Maxwell, "Microgravity Enhanced Protein Crystallization: Feedback Control Using Temperature and Spectroscopy," 7th Annual Iowa Space Grant Consortium Meeting, Des Moines, IA (Oct. 1997)
- J. Bonita (Speaker), E. Arnold and J. Wiencek, "The Use of Temperature to Control the Rate of Catalase Crystallization," AIChE Annual Meeting, Chicago, Illinois (Nov. 1996).
- P.A. Darcy (Speaker) and J.M. Wiencek, "Microcalorimetric Measurement of Growth and Solubility of Lysozyme," AIChE Annual Meeting, Chicago, Illinois (Nov. 1996).
- S.-Y. Hu (Speaker), and J.M. Wiencek, "Use of Hollow Fiber Contactors with Emulsion Liquid Membranes," AIChE Annual Meeting, Chicago, Illinois (Nov. 1996).
- J. Bonita (Speaker), E. Arnold and J. Wiencek, "*Effect of Crystal Growth Rate on Protein Crystal Quality*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1995).
- P.A. Darcy (Speaker) and J.M. Wiencek, "Calorimetric Analysis of Lysozyme Crystallization," 50th Calorimetry Conference, Gaithersburg, MD (July 24-28, 1995)
- C.A. Schall (Speaker) and J.M. Wiencek, "Stability of Immobilized Dihydro Nicotinamide Adenine Dinucleotide (NADH) to Chemical Regeneration," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Vasudevan (Speaker) and J.M. Wiencek, "Protein Separations Using Nonionic Microemulsions: Surfactant Structure Effects," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Vasudevan (Speaker) and J.M. Wiencek, "Improving Specificity in Protein Separation Using Nonionic Microemulsions," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Vasudevan (Speaker) and J.M. Wiencek, "Application of Equilibrium Microemulsion Extraction to Recover Large Molecular Weight Proteins," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- J.S. Bonita (Speaker), E.V. Arnold and J.M. Wiencek, "Temperature Control Strategies for Maximization of Protein Crystal Size," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).

- A. Upadhyay (Speaker) and J.M. Wiencek, "Protein Extraction Using Affinity Surfactants," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Uytingco (Speaker), S. Parida and J.M. Wiencek, "Enzyme-Catalyzed Polymerization of Phenolics in Monophasic Water-Immiscible Organic Solvents," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Uytingco (Speaker), S. Parida and J.M. Wiencek, "*Phenolic Removal from Water Driven by Enzyme Catalysis in Organic Media*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Uytingco (Speaker), S. Parida and J.M. Wiencek, "Phenolic Removal Driven by Enzyme Polymerization in Water-Immiscible Organic Media," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- J.M. Wiencek (Speaker), C.A. Schall, E. Li, and E. Arnold, "Measurement of Enthalpy of Fusion of Lysozyme Crystals by Calorimetry and Application to Maximization of Crystal Size," AIChE Annual Meeting, St. Louis, Missouri (Nov. 1993).
- J.M. Wiencek (Speaker), C.A. Schall, E. Li, and E. Arnold, "Thermal Optimization of Protein Crystal Growth," Advances in Separation Technology (Engineering Foundation Conference), Amsterdam, Holland (July 1993).
- J.M. Wiencek (Speaker), B. Raghuraman, and N. Tirmizi, "Clarification of Oil-Water Dispersions via Hydrophobic and Hydrophilic Microfiltration," Advances in Separation Technology (Engineering Foundation Conference), Amsterdam, Holland (July 1993).
- J.M. Wiencek (Speaker) and B. Raghuraman, "Heavy Metals Separation from Water via Emulsion Liquid Membrane Techniques," Advances in Separation Technology (Engineering Foundation Conference), Amsterdam, Holland (July 1993).
- K.A. Larson (Speaker) and J.M. Wiencek, "Extraction of Mercury from Wastewater Using Microemulsion Liquid Membranes: Modeling the Separation Process," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- K.A. Larson (Speaker), B. Raghuraman and J.M. Wiencek, "Demulsification of Microemulsion Liquid Membrane Systems: A Comparison of High Voltage Electrical Demulsification and Nonelectrical Techniques," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- C. Schall (Speaker) and J.M. Wiencek, "Protein Crystal Growth Under Hydrostatic Pressure," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- A. Upadhyay (Speaker), M. Uytingco, G. Tutt, S. Griff, S. Rego and J.M. Wiencek, "*Removal of Iron from Liquid Electrolyte Solutions via Extraction*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- J.M. Wiencek (Speaker) and B. Raghuraman, "Heavy Metal Ion Recovery from Aqueous Streams Using Emulsion Liquid Membrane Systems," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- M. Uytingco (Speaker) and J.M. Wiencek, "Environmental Separations Driven by Enzyme Catalysis," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- J.M. Wiencek (Speaker) and K.A. Larson, "Extraction of Mercury from Wastewater Using Microemulsion Liquid Membranes: Kinetics of Extraction," AIChE National Meeting, New Orleans, La., (April 1992).
- J.M. Wiencek (Speaker) and K.A. Larson, "Recovery of Mercury from Aqueous Waste Streams Using Microemulsion Liquid Membranes," AIChE National Meeting, Pittsburgh, Pa., (August 1991).

- J.M. Wiencek (Speaker) and S. Qutubuddin, "*Employing Microemulsions as Liquid Membranes*," 7th International Symposium on Surfactants in Solution, Ottawa, Canada (Oct. 1988).
- S. Qutubuddin (Speaker) and J.M. Wiencek, "*Microemulsion Liquid Membrane Separations,*" Invited review paper, ACS National Meeting, Los Angeles, California, (Sept. 1988).
- J.M. Wiencek (Speaker) and S. Qutubuddin, "Separations by Diffusion Employing Microemulsions," ACS 62nd Colloid and Surface Science Symposium, Penn State, (June 1988).
- J.M. Wiencek (Speaker) and S. Qutubuddin, "Modeling of Diffusion Based Separations Employing Microemulsions," AIChE Annual Meeting, New York, (Nov. 1987).
- J.M. Wiencek (Speaker) and S. Qutubuddin, "Separations by Diffusion Employing Microemulsions," ACS 61st Colloid and Surface Science Symposium, Ann Arbor, Michigan, (June 1987).
- S. Qutubuddin (Speaker) and J.M. Wiencek, "Solubilization in Nonionic Microemulsions," Invited paper at 6th International Symposium on Surfactants in Solution, New Delhi, India, (Aug 1986).
- S. Qutubuddin (Speaker) and J.M. Wiencek, "Solubilization in Nonionic Microemulsions," Gordon Conference on Chemistry at Interfaces, Kimball Union Academy, New Hampshire, (July 1986).
- J. Wiencek (Speaker) and S. Qutubuddin, "Solubilization in Nonionic Microemulsions," ACS 60th Colloid and Surface Science Symposium, Atlanta, Georgia, (June 1986).
- J.M. Wiencek (Speaker) and S. Qutubuddin, "Separation of Organics Using Microemulsions," AIChE National Meeting, New Orleans, Louisiana, (April 1986).

SERVICE TO UNIVERSITY

The University of South Florida, VCU and University of Idaho (see Administrative Experience Section)

The University of Iowa:

College of Engineering, Virtual International Design Mentor, 2004-2007 College of Engineering, Center for Computer Aid Design – Director Search (Committee Chair), Jan 2005 – June 2005 College of Engineering, Engineering Faculty Council (Secretary), June 2002 – June 2003

College of Engineering, Engineering Faculty Council (Secretary), June 2002 – June 2003 College of Engineering, Graduate Study and Research Council (Chair), Sept 2002 – June 2003 College of Engineering, Promotion and Tenure Committee, Jan 2001 – June 2003 Provost, Postdoctoral Education Advisory Committee, Sept 2000 – June 2001 VP Research, Physical Sciences & Engineering Committee, July 1999 – June 2001 Strategic Planning Committee, College of Engineering, June 1999 – June 2006 Graduate Director, University of Iowa, Sept 1998 – June 2003 Faculty Advisor, Omega Chi Epsilon Chemical Eng. Honorary Society, Sept 1995 - 2007 Faculty Advisor, American Institute of Chemical Engineers, Sept 1996 – Aug 1998 Graduate Admissions Committee, University of Iowa, Jan 1995 – Sept 1998 Curriculum Committee, University of Iowa College of Engineering, Sept 1996 – June 1999 Curriculum Committee (Secretary), University of Iowa College of Engineering, 1997-98

Rutgers University:

Faculty Advisor, Rutgers University AIChE Student Chapter, Jan 1992 - Jan 1995
Faculty Advisor, Rutgers University ISPE Student Chapter, Sept 1992 - Dec 1993
Faculty Advisor, Rutgers University Chem Eng Graduate Student Orgn, Jan 1992 - Jan 1995
Faculty Representative, Jersey Section of the AIChE, Jan 1992 - Jan 1995
Associate Director, N.I.H. Biotechnology Training Program, Aug. 1991- Jan. 1993

Industrial Liaison, N.I.H. Biotechnology Training Program, March 1990 - Jan 1995 Executive Committee - N.I.H. Biotechnology Interdisciplinary Program, March 1990 - Jan 1995 Graduate Recruiting Committee, 1989- 1994 Merck Lectures in Chemical Engineering, Spring 1991 Chemical Engineering Seminar Series, Fall 1990 Thesis Topics Brochure, 1990 - 1994 Graduate Oral Qualifier Coordinator, 1989-1990 Graduate Handbook Coordinator, 1989 - 1992 College of Engineering Admissions Recruitment Policy Committee, 1989 - 1992 College of Engineering Committee on Committees, 1991 - present Advisor to Sophomore Chemical Engineering Students, 1989 – 1991

PROFESSIONAL SOCIETIES (see "Service to Profession" for list of Leadership Roles in these Societies)

American Institute of Chemical Engineers

- Food, Pharmaceutical and Bioengineering Division
- Separations Division
- American Chemical Society
 - Division of Colloid and Surface Chemistry
 - Division of Industrial Chemistry (Separation Science Subdivision)
 - Division of Environmental Chemistry

American Crystallographic Association

American Society for Engineering Education

National Institute of Pharmaceutical Technology and Education

SERVICE TO PROFESSIONAL COMMUNITY

Committee member, Public Policy Colloquim, Engineering Dean's Council, ASEE, May 2010- Aug 2013 Committee member, Organizing Committee for Engineering Dean's Institute, ASEE, July 2009 – Aug 2013

Chair, Organizing Committee for Engineering Dean's Institute, ASEE, St Petersburg, Florida, July 2009-May 2010

Executive Committee Member, National Institute of Pharmaceutical Technology and Education (NIPTE), October 2005 – January 2008

Consultant: Eli Lilly, Indianapolis, Indiana (Jan 2005 – present)

Consultant: MannKind Biopharmaceuticals, Danbury, Connecticut (Dec 2005 - June 2008)

Vice Chair, Advances in Crystallization, AIChE Annual Meeting, Nov. 2003

Chair, Crystallization at Interfaces, AIChE Annual Meeting, Nov. 2002

Chair, Crystallization of Pharmaceutical and Biological Molecules, AIChE Annual Meeting, Nov. 2000 Panel Member, NASA Microgravity Biotechnology Glovebox Proposal Review Committee, 1999

Secretary, AIChE Separations Division, 1998-present

Panel Chair, NASA Science Concept Review of Shuttle Flight Experiments, June 1998

Director, AIChE Separations Division, 1995-1998

Membership Committee Chair, AIChE Separations Division, 1991 - 1996

Panel Reviewer, NASA Science Concept Review of Shuttle Flight Experiments, Oct. 1995

Panel Reviewer, NASA Requirements Definition Review of Shuttle Flight Experiments, Oct. 1995

Panel Reviewer, NSF Small Business Innovative Research Proposal Evaluation, Sept. 1994 Panel Reviewer, NSF Research Initiation Awards, March 1994

Panel Reviewer, NSF Small Business Innovative Research Proposal Evaluation, Sept. 1993

Consultant: Solvay Animal Health, Inc. (July 1996 - October 1996)

- Chair, Separations for Environmental Restoration, AIChE National Meeting, Aug. 1993
- Chair, Product Recovery and Purification, AIChE Annual Meeting, Nov. 1992
- Chair, Membranes for Bioseparations, AIChE National Meeting, Aug. 1992

Chair, Separations of Contaminants from Groundwater, AIChE National Meeting, Aug. 1992

Consultant: CIBA-GEIGY, Summit, New Jersey (Dec 1991 - Dec 1992)

Chair, *Separations for Wastewater Treatment*, AIChE National Meeting, Aug. 1991 Consultant: Corning Inc., Corning, New York (June 1991) Reviewer of Technical Proposals submitted to NSF, DOE and the N.Y. State Centers Reviewer of Technical Papers - The Chemical Engineering Journal Reviewer of Technical Papers - Chemical Engineering Science Journal Reviewer of Technical Papers - The Journal of Membrane Science Reviewer of Technical Papers - Energy and Fuels (an ACS Publication) Reviewer of Technical Papers - Langmuir (an ACS Publication) Reviewer of Technical Papers - Biotechnology and Bioengineering Reviewer of Technical Papers - Journal of the American Chemical Society Reviewer of Technical Papers - Journal of Crystal Growth Reviewer of Technical Papers - AIChE Journal Reviewer of Technical Papers - Biophysical Journal

HIGH SCHOOL OUTREACH (Science Research Program with local high schools)

Rebecca Kazinka, Advisors: L. Olson and J.M. Wiencek, *Liquid phase diffusion cell construction* Stephanie Kim, Advisors: L. Olson and J.M. Wiencek, *Liquid phase diffusion cell construction* Jeanne Alnot, Advisor(s): S.-Y. Hu and J.M. Wiencek, "*Controlled seeding techniques for nucleating lysozyme*." Heather Allaman, Advisors: M. Allaman and J.M. Wiencek, "*Growth of E.Coli for Porin*" Rachel Erb, Advisors: M. Allaman and J.M. Wiencek, "*Growth of E.Coli for Porin*"

(not up to date)

UNDERGRADUATE STUDENT SUPERVISION

- Stacey Rego, Advisor(s): J.M. Wiencek, *Mercury Removal from Contaminated Water via Microemulsion Liquid Membranes*.
- Jennifer Carey, Advisor(s): C.A. Schall and J.M. Wiencek, A Feasibility Study of Employing Dielectrophoresis for Protein Precipitation.
- Rajeew Gupta, Advisor(s): J.M. Wiencek, b-Galactosidase Partitioning in Nonionic Microemulsions.
- Karyn Fulman, Advisor(s): R.A. Ahlert and J.M. Wiencek, *Extraction of Proteinaceous Material from Quahog Shells*.
- Edwin Li, Advisor(s): C.A. Schall and J.M. Wiencek, *Lysozyme Crystallization at High Pressure* (J.J. Slade Scholar Project).
- Shilpa Bhagat, Advisor(s): B. Raghuraman, N. Tirmizi and J.M. Wiencek, *Nickel Removal from Water via Emulsion Liquid Membranes*.
- Nancy Boctor, Advisor(s): A. Upadhyay and J.M. Wiencek, Synthesis and characterization of Affinity Surfactants (J.J. Slade Scholar Project).
- Kimberly Tahan, Advisor(s): M. Vasudevan and J.M. Wiencek, *Hemoglobin partitioning in C12E3 upper phase microemulsions* (J.J. Slade Scholar Project).
- Nai-Jen Hsu, Advisor(s): N. Tirmizi and J.M. Wiencek, Membrane-based demulsification of oil-water mixtures.
- Gung Chang, Advisor(s): N. Tirmizi, B. Raghuraman and J.M. Wiencek, *Equilibrium partitioning of cadmium in DEHPA systems*.
- Timothy Maher, Advisor(s): M. Uytingco and J.M. Wiencek, HRP-Catalyzed Polymerization of Cresol.
- Ayman Mohammed, Advisor(s): M. Uytingco and J.M. Wiencek, HRP-Catalyzed Polymerization of Cresol.
- Danielle Fina, Advisor(s): P. Darcy, J. Bonita and J.M. Wiencek, Survey of Protein Crystallization Systems.
- Teri Petro, Advisor(s): P. Darcy, J. Bonita and J.M. Wiencek, Thaumatin Crystallization.
- Ryan Cooper, Advisor(s): J.M. Wiencek, HRP-Catalyzed Polymerization of Cresol.
- Joanne Yamasaki, Advisor(s): P. Darcy, J. Bonita and J.M. Wiencek, *Purification and Crystallization of Glucose Isomerase*.
- Jeanne Peacock, Advisor(s): P. Darcy and J.M. Wiencek, Feedback Control of Lysozyme Crystallization.
- Jennifer Foelske, Advisor(s): P.Darcy and J.M. Wiencek, Membrane Protein Crystallization.
- Ben Nothwehr, Advisor(s): S.-Y. Hu and J.M. Wiencek, NIR Detection of Lysozyme.

Robert Salach, Advisor(s): Wayne Jones and J.M. Wiencek, Temperature Controlled Growth of Lysozyme Crystals from NaSCN Solutions. Jacqueline Lang, Advisor(s): J.M. Wiencek, Quantification of Dimer Concentration in Lysozyme. Joy Mayfield, Advisor(s): Wayne Jones and J.M. Wiencek, *Electrolyte/PEG Screening of Lysozyme*. Allison Green, Advisor(s): Lida Nguyen and J.M. Wiencek, Glucagon Gellation. Beth Ficek, Advisor(s): Lida Nguyen and J.M. Wiencek, Insulin Crosslinking. Allison Green, Advisor(s): Lida Nguyen and J.M. Wiencek, Insulin Crosslinking. Fransceca Pirovano, Advisor(s): Lida Nguyen and J.M. Wiencek, Insulin Crosslinking. Cassidy Whitmore, Advisor(s): J.M. Wiencek, Maceration Optimization Trung Bui, Advisor(s): J.M. Wiencek, Maceration Optimization Virginia Kimmel, Advisor(s): J.M. Wiencek, Maceration Optimization Ann Kirsch, Advisor(s): J.M. Wiencek, Ion Exchange Treatment for Haze Quality Kristine Golveo, Advisor(s): J.M. Wiencek, Ion Exchange Treatment for Haze Ouality Erica Scheckel, Advisor(s): J.M. Wiencek, Ion Exchange Treatment for Haze Quality Kristin Knight, Advisor(s): J.M. Wiencek, Ion Exchange Treatment for Haze Quality Michael McConney, Advisor(s): J.M. Wiencek, Ion Exchange Treatment for Haze Ouality Andy Campbell, Advisor(s): J.M. Wiencek, Ion Exchange Treatment for Haze Quality Brett Darrow, Advisor(s): J.M. Wiencek, Ion Exchange Treatment for Haze Quality Stephen Goldman, Advisor(s): J.M. Wiencek, Ion Exchange Treatment for Haze Quality Afton Thumser, Advisor(s): J.M. Wiencek, Feedstock Recycle Feasiblity Study Aiman Alam, Advisor(s): J.M. Wiencek, Feedstock Recycle Feasiblity Study Luanna Williams, Advisor(s): J.M. Wiencek, Feedstock Recycle Feasiblity Study Jeff Skrentner, Advisor(s): J.M. Wiencek, Feedstock Recycle Feasiblity Study Tyler Kleene, Advisor(s): J.M. Wiencek, BOD management study James Aberg, Advisor(s): J.M. Wiencek, BOD management study Robert Smith, Advisor(s): J.M. Wiencek, BOD management study Peter Rasmussen, Advisor(s): J.M. Wiencek, BOD management study Brett Ingold, Advisor(s): J.M. Wiencek, Donnan Effects in Light Scattering Studies of Insulin Jessica Heth, Advisor(s): J.M. Wiencek, Honors Project: Water Treatment Technology and Public Health Mike Johnson, Advisor(s): J.M. Wiencek, NF Membranes for Waste water treatment Kate Cannady, Advisor(s): J.M. Wiencek, NF Membranes for Waste water treatment Karin Rod, Advisor(s): J.M. Wiencek, NF Membranes for Waste water treatment Dawn Leonard, Advisor(s): J.M. Wiencek, NF Membranes for Waste water treatment Jonathan Larsen, Advisor(s): J.M. Wiencek, NF Membranes for Waste water treatment

GRADUATE THESIS - PRINCIPAL ADVISOR

Attaguile, Salvatore, M.S., December 1997, Rational Designs for Crystallizing Integral Membrane Proteins.

Bonita, Jill (NIH and NASA Fellow), Ph.D., August 1997, *Predictive Temperature Control of Protein Crystallization*.

Darcy, Patricia (NIH and NASA Fellow), Ph.D., August 1998, Calorimetric Characterization of Lysozyme. Gakhar, Lokesh Ph.D., December 2003, Modeling Flash Cooling of Protein Crystals.

Hitscherich, Carl, Ph.D., December 2001, *Quantification of Surfactant Effects in Membrane Protein Crystallization*.. Hu, Shih-Yao, Ph.D., June 1997, *Selective Ion Separations Using Hollow Fiber Encapsulated Liquid Membranes*.

Jones, Wayne, Ph.D., May 2004, *Controlling growth kinetics in protein crystallization*.

Kirsch, Ann, MS, Dec 2005, Genencor Professional MS Program

Larson, Karen, Ph.D., Jan 1993, Mercury Removal from Contaminated Water via Microemulsion Liquid Membranes.

Li, Jin, Ph.D., December 2003, *Rejuvenation of Fermentation Media via Supported Emulsion Liquid Membranes*. Lokenvitz, Diana, M.S., May 2001, *Optimization of OmpF Porin Extraction and Purification*.

Parekh, Kalpesh, M.S., December 2003, High Pressure Flash Cooling of Protein Crystals.

Rodgriguez, Jessica, M.S., May 2007, Novel Membrane Distillation Methods of Desalination of Seawater

Rose, Rebecca, M.S., December 2001, Design of a Rapid Screening System for Second Virial Coefficients. Saxena, Roli, M.S., May 1995, Organic Soluble Enzyme Catalysts.

Schall, Constance (NIH and NASA Fellow), Ph.D., August 1995, *Enzymatic Reaction Utilizing Immobilized Coenzyme, NADH*.

Skrentner, Jeffrey, MS, Dec 2006, Genencor Professional MS Program

Upadhyay, Ashish (NIH Fellow), M.S., May 1995, Measurement of Affinity Surfactant - Protein Binding

- Uytingco, Myrna (NIH and NSF Fellow), Ph.D., Dec 1995, Polymerization of p-Cresol by Horseradish Peroxidase in 2-Octanol/Dimethyl Sulfoxide Cosolvent System.
- Vasudevan, Madhavan (NIH Fellow), Ph.D., Dec 1994, Employing Microemulsion Phases for Selective Protein Recovery.

Whitmore, Cassidy, MS, May 2005, Genencor Professional MS Program

Ye, Bo, M.S., December 1997, The Split Step Method Applied to Advancing Reaction Front Models.

GRADUATE THESIS - COMMITTEE MEMBER (Chemical Engineering Unless Otherwise Noted)

Alexander, Anthony, M.S., expected Dec 1998, Kinetic Models of ETBE Production over Liquid Metal Catalysts.

Arands, Rolf, M.S., Oct 1990, Development of an In-situ and On-site Remediation Process for Phenol Distillate Lagoons.

Baker, Brian (Biochemistry), Ph.D., Jan 1998, Modeling and Measuring Protein-Ligand Binding

Balachandran, Srinath, PhD, June 2009, Nanocrystalline Diamond For RF-MEMS Applications (Dissertation Chair). Byrne, Stephen, Ph.D., Jan 1991, Mechanisms of Interaction Between Aniline, Soil, Soil Solution, and Soil Microbes.

Carlo, S. (Chemistry), Ph.D., August 1999, UHV Surface Chemistry of Photopolymerization.

Chen, T.Y. (Chemistry), Ph.D., August 1999, Electrochemical Studies of Nafion Composites.

- Datta, Amlan, Ph.D., Dec 1994, Alkaloid Overproduction and Liquid Extraction in Two-Phase Air Lift Bioreactors using California Poppy Plant Culture.
- Guo, Jianzheng (Mech. Eng.), Ph.D. December 2000, Parallel Numerical Simulation of Transport Phenomena in Alloy Solidification on Unstructured 3D Meshes.
- Guttikunda, Sarath, Ph.D., Expected May 2001, Sectoral Analysis of Asian Emissions on Urban and Regional Air Quality.

Kohen, Elizabeth, M.S., Dec 1998, Archaeal Liposomes: Formation and Characterization.

Legiec, Irene, Ph.D., May 1991, Design and Scale-up of a Heavy Metals Recovery Process from Municipal Solid Waste Incinerator Residues.

Li, Yanzi, M.S., Aug 1998, Large-Scale Enzymatic Synthesis of Methyl Glucoside Acrylate and Its Application in Superabsorbant Materials

Novick, Scott, Ph.D., expected May 1999, Novel Biocatalytic Materials.

Phadnis, Mahesh, PhD, December 1998, Regional Models of Aerosol Pollutant Chemistry and Transport in Southeast Asia.

Phillips, Cory, Ph.D., December 1998, Development of a Clean Biomass Ethanol-to-ETBE Process.

Ramasubramanyan, Natarajan, Ph.D., Jan 1994, Process Optimization of Amylase Production by Recombinant Bacillus Subtilis Using Immobilization Systems.

Song, Chul Han, Ph.D., expected May 1999, Box Models of Aerosol Pollutant Chemical Kinetics and Transport.

Stuart, Ben, M.S., May 1993, Characterization of Municipal Waste Combustion Air Pollution Control Residues as a Function of Particle Size.

Tong, Xinglin, Ph.D., May 1999, Effects of Convection on Grain Structure Development.

Venkatramanyan, Shankar, Ph.D., Sept 1995, Combined Pneumatic Fracturing and Bioremedition of BTXcontaminated Soil.

Yao, Jiann-Rong, Ph.D., Expected December 2001, Biocatalytic Polymer Beads by Suspension Polymerization.

Yousef, Mohammed, Ph.D., Dec 1999, The Effect of Molecular Interactions on the Osmotic Pressure and Diffusion Coefficients of Binary Protein Solutions.

Zhao, Hong, Ph.D., May 1996, Fiber Optic Sensor for Detecting Groundwater Contaminants.

Zook, Lois (Chemistry), Ph.D., June 1997, Characterization and Processing in Nafion Composite Membranes.

(not up to date)

POST DOCTORAL RESEARCH ASSOCIATES

- Aseyev, Validimir, Biosciences Initiative Postdoctoral Award, *Characterization of Protein-Micelle Complexes via* Laser Light Scattering (October 1999 – present)
- Hu, Shih-Yao, Near Infrared Analysis of Lysozyme and Temperature-controlled Crystallization (June 1997 Sept. 1999)

Parida, Sanghamitra, Enzyme Purification and Catalysis (July 1993 - May 1995).

Raghuraman, Bhavani, Heavy Metal Ion Removal from Water via Emulsion Liquid Membranes (July 1991 - Dec 1994).

Tirmizi, Neena, Demulsification of Water/Oil Emulsions in Membranes (July 1992 - Sept 1994).

FULL TIME LABORATORY STAFF

Allaman, Margaret, Research Associate II (April 1999 – December 2003) Hu, Shih-Yao, Assistant Research Engineer (Sept. 1999 – September 2003).

VISITING SCIENTIST

Prof. Byoung-Sik Kim, Dongguk University, Dept. of Chemical Eng., Seoul, Korea, *Modeling of Equilibrium and Mass Transport in Metal Extraction Systems* (Sept. 1992 - Feb. 1993).