

David Victor Rosowsky, Ph.D., P.E., F.ASCE Provost and Senior Vice President

Office of the Provost The University of Vermont 85 South Prospect St., Burlington, VT 05405 phone: (802) 656-4400, e-mail: <u>david.rosowsky@uvm.edu</u> website: <u>http://www.uvm.edu/~provost/</u>

Home address: 44 Holbrook Road, South Burlington, VT 05403 Personal e-mail: <u>dvrosowsky@gmail.com</u>

BRIEF BIO:

David V. Rosowsky was named Provost and Senior Vice President at the University of Vermont in May 2013. Prior to joining UVM, Dr. Rosowsky served as the 15th Dean of Engineering at Rensselear Polytechnic Institute (2009-2013), and before that as Head of the Zachry Department of Civil Engineering at Texas A&M University (2004-2009), where he also held the A.P. and Florence Wiley Chair in Civil Engineering.

The UVM Provost serves as the chief academic officer and is responsible for enhancing the University's intellectual climate, strengthening instruction and scholarship, advancing diversity, creating an outstanding student experience, promoting student access to success, and identifying investments and efficiencies that lead to a thriving future for the University.

Since 1990, Dr. Rosowsky has conducted research in the areas of structural reliability, performance of wood structural systems, design for natural hazards, stochastic modeling of structural and environmental loads, and probability-based codified design. His current research addresses three topics: (1) behavior of the built environment subject to natural hazards, most recently including the effects of climate change and adaptation, (2) modeling and analysis of load effects on buildings and other structures with particular emphasis on complex environmental phenomena, and (3) performance-based engineering for design, post-disaster condition assessment, and loss estimation studies. He currently serves on the Editorial Board of the journal *Structural Safety* and is a past editorial board member of the ASCE *Journal of Infrastructure Systems*, the ASCE *Journal of Structural Engineering* and the journal *Natural Hazards Review*.

Dr. Rosowsky has authored or co-authored more than 150 papers in peer-reviewed journals and more than 140 papers appearing in conference proceedings. A recognized expert in the field of structural reliability, he has been invited to present his research work around the world including invited lecturers in France, Italy, Switzerland, Canada, Japan, Australia and New Zealand. He has supervised more than 20 Masters and Doctoral students. He is the recipient of the ASCE Walter L. Huber Research Prize, the T.K. Hseih Award from the Institution of Civil Engineers (UK), and the ASCE Norman Medal.

Dr. Rosowsky maintains an active research program in wind and earthquake engineering and continues to supervise graduate students and post-doctoral researchers. He is a member of numerous editorial boards, national technical committees, is a registered Professional Engineer, and holds the rank of Fellow of the American Society of Civil Engineers.

RESEARCH IMPACT:

Professor Rosowsky is recognized as one of the world's leading authorities on reliability-based design of engineered wood structures and systems. For the past 25 years, Dr. Rosowsky has been conducting research in the areas of probability-based design, stochastic modeling of structural and environmental loads, performance-based design, and behavior of wood structural systems subject to wind and seismic loads. The results of his research have formed the basis for many of the code provisions found in the current LRFD standard for engineered wood structures, as well the ASCE 7 and ASCE 37 design load standards.

Professor Rosowsky is one of the pioneers in the field of performance-based seismic design of wood structures, having served as an investigator on the CUREE-Caltech Woodframe Project, the NSF NEESWood Project, and most recently the NSF NEESOft Project. His work has been supported by the National Science Foundation, the

United States Department of Agriculture, the National Institutes of Health, the Federal Emergency Management Agency, and various state agencies. He has also received support from a range of industrial sponsors for research on structural system performance and methodologies for establishing element-level design values. Dr. Rosowsky's work on both time-effects in wood (load duration) and repetitive-member (system) factors continues to form the basis for the treatment of these issues in codified design standards around the world.

Dr. Rosowsky's contributions to the development of LRFD standards, stochastic load modeling, performancebased design of wood structures, and most recently hazard analysis and characterization are widely cited throughout North America, Europe, and the Pacific Rim countries. His continuous record of research with his graduate students and post-doctoral researchers over the last 25 years has led to nearly 300 papers, including more than 150 in peer-reviewed journals.

CURRENT RESPONSIBILITIES AS PROVOST AND SENIOR VICE PRESIDENT:

The Provost/Senior VP is both the Chief Academic Officer and the Chief Budget Officer for the university. The University of Vermont (UVM) is a comprehensive public land-grant university with a total enrollment of 13,000 students (10,000 undergraduate, 75% out-of-state), 3700 faculty and staff, more than 107,000 living alumni, and an array of academic programs (undergraduate, graduate, and professional) across 8 colleges/schools (College of Arts & Sciences, College of Engineering and Mathematical Sciences, College of Education and Social Services, College of Agriculture and Life Science, College of Nursing and Health Sciences, College of Medicine, the Rubenstein School of Environment and Natural Resources, and the Honors College), with a general fund budget of \$330M and a total operating budget of more than \$650M annually. The University of Vermont has long held a reputation for outstanding academic programs and faculty, is regarded as a "Public Ivy," and consistently ranks among the nation's top universities of its size. UVM is a major research university that attracts about \$120M in extramural support for research annually. The university's annual economic impact on the state of Vermont is nearly \$1B. Reporting to the Provost/Senior VP are the eight academic deans, the Dean of the Graduate College, the Dean of Continuing and Distance Education, the Dean of Extension, the Director of the Fleming Museum, the Director for the Office of Institutional Research, the Associate Provost for Undergraduate Affairs, the Associate Provost for Faculty Affairs and International Programs, the Assistant Provost/Chief of Staff, the Vice Provost for Student Life, the Vice President for Enrollment Management, the Vice President for Research, and the Vice President for Finance and Treasurer. The Provost and Senior Vice President is a member of the university's senior leadership team, reporting directly to the President and the Board of Trustees, and is the responsible official for the university in the President's absence.

The University of Vermont has a robust shared governance culture that includes the Faculty Senate, Staff Council, Student Government Association, and Graduate Student Senate. The Provost/Senior VP works closely with all campus governance groups to promote this important culture and ensure their effective engagement. The Faculty Senate at UVM has responsibility for all curricular matters and therefore works closely with the Provost's Office.

The Provost/Senior VP works directly with leadership of the University of Vermont Foundation on all academic fundraising initiatives; sets priorities and strategies as well as annual goals (number of donor engagements, number of new gifts, and fundraising totals) for the deans; travels frequently with Foundation staff for alumni visits and functions; works closely with the President and other senior university officials on capital projects fundraising; and takes a leadership role in cultivation and stewardship of donors for gifts related to university-wide academic priorities including the STEM Complex, the Institute for Environment, new endowed chairs and professorships, and support for students (scholarships and fellowships).

For more information:

Organizational Chart Office of the Provost Website Follow the Provost on Twitter Provost's "Across the Green" memos Provost's Blog

SUMMARY OF ACCOMPLISHMENTS AS DEAN OF ENGINEERING AT RENSSELAER POLYTECHNIC INSTITUTE, 2009-2013 (four years)

RESPONSIBILITIES

Dean of the School of Engineering (160 faculty and more than 100 staff, 3000 undergraduate students and nearly 700 graduate students, annual budget exceeding \$28M, annual research expenditures exceeding \$50M); oversight, leadership, and strategic direction of all academic, research, and operations of the School of Engineering (SoE), the largest School at RPI with seven academic departments and eleven degree programs; directly reporting to the Provost on all academic matters and to the President on all strategic matters; preparation of annual SoE Performance Plan with input from all directly reporting departments, centers, and units; oversight of SoE external communications, alumni relations, governmental and industry relations, and diversity initiatives; work directly with the Office of Institute Advancement on all development and stewardship activities related to the SoE.

UNIVERSITY-WIDE LEADERSHIP

- Member of the Institute President's senior leadership team comprised of ten vice presidents and five academic deans
- Senior academic dean; Dean for the largest and oldest of five schools on campus, with the largest percentage of faculty (40%), the largest percentage of undergraduate students (60%), the largest percentage of graduate students (50%), and the largest percentage of extramural research funding (50%)
- Member of University-level committee for hiring Constellation Chair professors (e.g., Tissue Engineering and Regenerative Medicine, Biocatalysis, Computational Science and Engineering, Tetherless World, Future Chips)
- As Dean of Engineering, launched two new high-profile, university-wide research centers: the Center for Modeling, Simulation, and Imaging in Medicine (2010), and the Center for Flow Physics and Control (2011), both with significant initial funding from industry (e.g., Boeing, Pratt Whitney, GE) and large federal grants (e.g., NIH, NSF, AFOSR)

DEVELOPMENT

- Proposed, gained approvals, and implemented first School-based (decentralized) development model in history of the Institute; worked closely with Vice President of Institute Advancement (IA) and IA senior staff, President's Office, and the Board of Trustees to effectively decentralize a tightly controlled development model during "quiet phase" between two major campaigns; benchmarked against peer and aspirant institutions, developed financial and strategic plans for the School of Engineering, transitioned effectively to a unit-based model in which the dean and department heads are fully engaged in cultivating major gifts, and hired the School's first Senior Advancement Officer (July 2011)
- Meetings with individual donors and prospective donors, on-campus and off-campus
- Met with groups of alumni in Boston, New York City, New Jersey, Dallas, Houston, Chicago, Washington DC, Phoenix, Seattle, Los Angeles, San Francisco, London, Jerusalem, and Tel Aviv.
- Meetings with CEO, VP-level, and other corporate senior management to develop industry partnerships with the School of Engineering, the Multidisciplinary Design Lab, the Archer Leadership Center, the Technology Commercialization and Entrepreneurship Program, the Systems Engineering and Technology Management Program, and other high profile facilities/programs

DIVERSITY

- Created the first "Compact for Diversity" for the School of Engineering. The Compact is a three-part plan and commitment to increase the diversity within the School of Engineering community of scholars at Rensselaer Part A: Faculty, Part B: Undergraduate Students, Part C: Graduate Students.
- Appointed the School's first underrepresented minority faculty member to hold an endowed chair.

- Appointed the School's first female faculty member to hold an endowed chair.
- Leading effort to develop, resource, and implement the *Bridge2 Success Pogram* (curriciular and cocurricular college prepatory and skills program) for entering science and engineering students from underrepresented groups (first offering of Bridge2 program will be Summer 2012)
- Appointed first woman Associate Dean and first woman faculty member to School Leadership Team
- Expanded responsibilities of Director for Diversity and Outreach to include both undergraduate and graduate students/programs/organizations
- Expanded responsibilities for Faculty Coach position (previously focused on female assistant professors) to include advocacy of *all* junior faculty during the pre-tenure probationary period
- Championing the construction of a new Child Care Center adjacent to the Rensselaer campus
- Meet regularly with underrepresented student organizations (e.g., SWE, NSBE, SHPE) and participate in recruiting and information events organized by these student groups
- Meet (once a semester) with women and underrepresented minority faculty
- Personally oversight of all SoE faculty search and hiring efforts to broaden gender and ethnic diversity to meet SoE and Institute diversity objectives

SELECTED INITIATIVES

- As part of a series of initiatives aimed at creating a transparent leadership and management structure in the School, developed an annyal Faculty Workload Analysis system. This annual report and dashboard is shared with School leadership (Department Heads, Associate Deans) and is used to inform strategy discussions (e.g., annual leadership retreat, regularly scheduled leadership team meetings, annual budgeting and capital request cyles) and has enabled the emergence of new School-wide strategies for faculty hiring prioritization, assignment and development of professional staff, enrollment management, academic advising, financial management, and ensuring laboratory safety.
- Developed multi-level strategy for managing ballooning SoE enrollments (resulting from strong student interest, admissions policies, and financial considerations) through (1) establishing and enforcing prerequisites in key "gatekeeper" course in each of the four years, (2) promoting undersubscribed majors within SoE and other technologically-focused majors in other Schools, (3) proposing new certificates and minors for students in non-engineering majors, and (4) working closely with Office of Admissions/Enrollment to manage first-year student admissions and transfers into SoE
- Created, with School of Engineering leadership input, a new document entitled *Expectations for Faculty in the School of Engineering*. This guide document makes clear the expectations for faculty at all ranks and effectively demystifies the promotion and tenure processes with clear language, realistic milestones, and expectations for teaching, research, and service.
- Envisioned and implemented a new website, *Better World//Engineering*, which serves as a portal (for current and prospective students, faculty, researchers, alumni, K-12 educators, and the media) into the teaching, research, outreach, and service activities within the School of Engineering that address critical problems with focus on sustainable solutions. (website launched Spring 2011)
- Participated in development of a new "final year registration" policy for doctoral students who have completed all coursework requirements and candidacy exams, with the objective of (1) making our faculty more competitive in extramural grants, and (2) incentivizing faculty to keep their PhD students on-track toward degree completion; Also proposing a new graduate tuition model that allows for higher graduate student stipends (with associated indirect cost recovery) and lower graduate tuition for federal research projects. While the "cost to contract" is unaffected, the new model will result in (1) more competitive graduate assistantship packages, and (2) more indirect returned to the university.
- Outsourced the development of promotional (print and web) pieces aimed at multiple audiences and began establishing a visual identity/print image for the School. Key audiences have included Engineering Deans and Department Heads at major US universities, SoE alumni (more than 14,000 living), prospective students and faculty, program managers at statewide and federal funding agencies, and prospective donors.

- Facilitating multi-faculty effort, with initial funding/vision provided by a Rensselaer alumnus, to develop a sustainable water desalination system (using renewable energy sources) for agricultural and other uses. Pilot project built in Israel in fall 2010 with collaborative teaching and research programs to be built around the project in future years. Personally engaging potential scientific and financial partners in US and Israel. This activity has both scientific/pedagogical aspects as well as donor/stewardship aspects, all of which may be significant for the Institute and the SoE.
- Raising awareness of the need for service-related projects throughout the engineering curriculum. Working with faculty to create service learning opportunities in key design classes (including capstone design experiences). Promoting and supporting student engagement through curricular and co-curricular experiences that reflect the need for and value of responsible service learning and social entrepreneurship activities. Developing new financial resources and industrial partnerships with key corporate partners (e.g., GE, IBM, Exxon/Mobil, Boeing) in support of social entrepreneurship programs.
- Led the effort to change an academic department name from *Decision Sciences and Engineering Systems* to the *Industrial and Systems Engineering*. This involved garnering stakeholder support as well as moving the request through appropriate university channels in a timely manner. The change was made to (1) better reflect the degree programs and research activities of the departmental faculty, (2) provide a more recognizable department name to potential undergraduate and graduate students as well as potential engineering, (3) better align with our peer and aspirant peer institutions with strengths in industrial engineering, supply chain management, and decision-theoretic systems analysis, and (4) improve the department's rankings among industrial engineering departments.

ENGINEERING RESEARCH CENTER (ERC) LEADERSHIP

- Chair of Engineering Dean's Council, Smart Lighting Engineering Research Center, a National Science Foundation Engineering Research Center (ERC), Rensselaer Polytechnic Institute (with Boston University and University of New Mexico)
- Member, Board of Directors, Center for Subsurface Sensing and Imaging Systems (CenSSIS), a National Science Foundation Engineering Research Center (ERC), Northeastern University (with Rensselaer, Boston University, and University of Puerto Rico Mayaguez)
- Member, Board of Directors, Center for Ultra-wide-area Resilient Electric Energy Transmission Network (CURENT), a National Science Foundation Engineering Research Center (ERC), University of Tennessee (with Rensselaer, Northeastern, and Tuskegee)

ADDITIONAL INFORMATION:

FY13 School of Engineering Performance Plan by D. Rosowsky, Fall 2011 http://rpi.edu/academics/engineering/files/rosowsky/fy13.pdf

2009-2011 School of Engineering Research Report http://www.rpi.edu/academics/engineering/files/rosowsky/engreport.pdf

SUMMARY OF ACCOMPLISHMENTS AS DEPARTMENT HEAD OF CIVIL ENGINEERING AT TEXAS A&M UNIVERSITY, 2004-2009 (five years)

DEPARTMENT LEADERSHIP

- Leadership of the largest civil engineering department in the country, with more than 70 full-time tenure/tenure-track faculty, 1100 undergraduate and 400 graduate students. Oversaw largest growth period in the department's history, hiring 25 new faculty, creating new degree programs and research synergy groups. Defined department priorities, engaged constituents, developed resources, changed selected department policies and procedures to streamline operations, ensure equity, position resources, and facilitate new programs.
- Developed concurrent department themes, *Culture of Excellence* and *Community of Scholars*. Created a vibrant, dynamic, positive environment in the Department. Energized faculty and staff.
- Active promotion the activities in the department as well as the achievements of our faculty and students (various web and print publications, presentations) to various constituent groups.
- Efficient use of leadership team (Associate Department Heads, Division Heads) to manage academic programs, faculty groups, and staff.
- Balanced internal leadership activities (administration, vision, decision-making) with external leadership activities (development, alumni relations, departmental promotion).

ADMINISTRATION AND MANAGEMENT

- Responsibility for operation of a large academic department with annual academic budget of \$8M and an annual research budget in excess of \$12M; recognized as an efficient, effective manager with the ability to multi-task, prioritize work, set an agenda, and steer toward a goal, who has a broad view of civil engineering and a wide knowledge of peer institutions, and who has a vision for the future of the department.
- Approached all aspects of department administration with energy and enthusiasm. Created and maintained an open-door style of management and an informal (yet effective) main office atmosphere.
- Regular faculty meetings (about 3 per semester), staff meetings (1-2 per semester), and meetings with student leaders (2 per semester); meet with CE Council (leadership team) weekly.
- Prioritization and timely attention to all matters related to department operations. Provided timely information, as requested, to the Dean's Office, Provost, Vice President for Research, and upper administration.

EXTERNAL DEVELOPMENT

- Worked closely with Director of Development and the Texas A&M Foundation on strategic planning, gift solicitations, creation of endowments, fostering long-term relationships with potential donors, and stewardship.
- Regular visits (8-10 per year) with groups of former students in Houston, Austin, Dallas/Fort Worth, and San Antonio. These included arranged luncheons, meetings at corporate offices, and meeting with selected former students at their homes. Many of these visits involved making presentations to groups about department activities and plans. Hosted numerous visits to the department by former students and other potential donors.
- Quarterly updates of document describing fundraising priorities and gift opportunities.
- Actively promoted accomplishments and achievements of our faculty and students through various electronic and print media pieces. Part of a broader effort to present a professional image for the Department, these promotional pieces were frequently used in development activities.
- More than \$26M in new gifts to the Department in five year period (2004-2009)

SELECTED INITIATIVES

• Created policy and positioned resources to reduce teaching loads for untenured faculty and selected research-active faculty. Developed strategy to ensure equitable teaching loads/expectations across ranks and divisions within the department.

- Developed biannual Research Report, with full faculty support and participation, for dissemination to a broad constituency.
- Created and implemented Faculty Mentoring Program with both internal and external mentors as well as industry liaison(s) for all new assistant professors.
- Created and charged two task forces, one on the undergraduate experience and the other on the graduate experience. Reports published Summer 2006.
- Negotiated new indirect return policy with Texas Transportation Institute, one of the department's largest research sponsors, resulting in improved ability to reinvest in major research areas/labs and better support of individual faculty PI's.
- Oversaw development of a slate of new one-year Master of Engineering (MEng) programs in Civil Engineering.
- Created Pre-Faculty Fellows program, including development of financial resources in support of this program, to prepare doctoral students to be competitive for university faculty positions.
- Created new development mechanisms including cluster gifts to allow groups of former students to pool their gifts in support of a larger initiative (i.e., endowed fellowship or professorship) and bridge scholarships which can be carried forward by undergraduate students into graduate study.
- Increased department's permanent endowment for graduate fellowships from less than \$500K to more than \$3.5M.
- Increased the number of endowed faculty positions (professorships and chairs having endowments ranging from \$500K to \$1.5M) in the department from 14 to 24.
- Led efforts to create new certificate and degree programs in Engineering and Public Policy

EXAMPLES OF LEADERSHIP DEMONSTRATING COMMITMENT TO DIVERSITY

- Added four new women faculty in Civil Engineering, one each in 2005 and 2006, and two in 2007.
- Supported the creation (and annual budget) of a Women's Faculty Network, dedicated to mentoring women graduate students in Civil Engineering. (Our department has 9 women faculty members and more than 80 women graduate students.)
- Hired an African American woman faculty member in 2007 and hired an African American to fill a key senior staff position
- Regularly released women faculty members from all teaching duties for one semester after having a baby.
- Made use of teleconferencing technologies to interview a faculty candidate (located on the west coast) in the second trimester of her pregnancy, who was advised against travel.
- Appointed a senior woman faculty member to key leadership position and worked closely with her on diversity initiatives aimed at recruiting both students and faculty.
- Initiated informal programs with Prairie View A&M University (HBCU institution and member of the Texas A&M System) and Texas A&M University at Kingsville (minority serving institution with a large Hispanic student population) to facilitate faculty interaction, research collaboration, student group interaction, and recruiting of minority graduate students.
- Worked closely with Dean's Office to develop a 3-2 pre-engineering transfer program from Texas A&M International (a minority serving institution located in Laredo, TX and having a large Hispanic student population) to Texas A&M University.

PROFESSIONAL BACKGROUND, RESEARCH AND SCHOLARSHIP

FELLOW STATUS:

Fellow, American Society of Civil Engineers (ASCE)

Fellow, *Institute of Science, Technology, and Public Policy*, Bush School of Government and Public Service, Texas A&M University, College Station, Texas

EDUCATION:

| PhD | Civil Engineering | Johns Hopkins University, Baltimore, Maryland | 1990 |
|-----|-------------------|---|------|
| MS | Civil Engineering | Tufts University, Medford, Massachusetts | 1987 |
| BS | Civil Engineering | Tufts University, Medford, Massachusetts | 1985 |

PROFESSIONAL REGISTRATION: Professional Engineer (Texas) License No. 95382

ACADEMIC LEADERSHIP EXPERIENCE:

| University of Vermont | Provost and Senior Vice President, and Professor of Engineering | 2013-present |
|--|---|--------------|
| Rensselaer Polytechnic Institute (4 years) | Dean of Engineering, Professor of Civil and Environmental Engineering, Professor of Industrial and Systems Engineering | 2009-2013 |
| Texas A&M University (5 years) | Department Head, A.P. and Florence Wiley Chair Zachry Department of Civil Engineering | 2004-2009 |

PREVIOUS ACADEMIC APPOINTMENTS:

Oregon State University (Professor and endowed chairholder, Richardson Chair in Wood Science and Engineering, Full Professor with tenure in College of Engineering and College of Forestry; 2000-2004), Clemson University (Assistant Professor and Associate Professor with tenure, College of Engineering; 1994-2000), Johns Hopkins University (Visiting Scholar, School of Engineering; 1993-1994), Purdue University (Assistant Professor, College of Engineering; 1990-1993); also concurrently held visiting scholar/professor appointments at several international universities for periods ranging from three months to two years.

RESEARCH INTERESTS: structural reliability, performance-based design, infrastructure risk assessment, wind and earthquake engineering, design for natural hazards

GRADUATE AND POST-DOCTORAL ADVISING:

Served as major professor for 12 PhD students and 14 MS (thesis) students since 1990.

Served as committee member for 11 PhD students and 19 MS (thesis) students since 1990.

Supervised 7 post-doctoral researchers since 1996.

Currently (2015) co-advising one PhD student and supervising one post-doctoral researcher.

FUNDED RESEARCH:

Served as PI or Co-PI on more than \$10M in total contracts, the majority coming from NSF, since 1990.

In addition to NSF, funding has been obtained from NIH, USDA, FEMA, FHWA and several state transportation departments.

KEYNOTE LECTURES:

Numerous invited keynote lectures (in the fields of reliability-based design and probabilistic modeling of hazards) presented in the UK, France, Italy, Switzerland, Canada, Japan, Australia and New Zealand over the last two decades.

CONFERENCE SCIENTIFIC COMMITTEES (LAST 4 YEARS):

International Scientific Committee, 12th International Conference on Application of Statistics and Probability in Civil Engineering (ICASP12), Vancouver, British Columbia, Canada, July 2015.

Scientific Committee, 11th International Conference on Structural Safety and Reliability (ICOSSAR), New York City, NY, June 2013.

Scientific Committee, 11th ASCE Joint Specialty Conference on Probabilistic Mechanics and Structural Reliability, Notre Dame, IN, June 2012.

International Advisory and Scientific Committees, 11th World Conference on Timber Engineering (WCTE 2012), Auckland, New Zealand, August 2012

CURRENT PROFESSIONAL COMMITTEE ACTIVITY:

ASCE Technical Council on Life-Cycle Performance, Safety, Reliability, and Risk of Structural Systems, Task Group 3 (Risk Assessment of Structural Infrastructure Facilities and Risk-Based Decision Making)

Advisory council member, International Forum on Engineering Decision Making (IFEDM)

Member, U.S. Technical Acitivities Group for ISO/TC 98/SC 2 Reliability of Structures

EDITORIAL BOARDS:

Editorial Board, *Structural Safety* (Elsevier), 2008-present Associate Editor, ASCE *Journal of Infrastructure Systems*, 2004-2008 Associate Editor, *Natural Hazards Review*, 2001-2005 Associate Editor, ASCE *Journal of Structural Engineering*, 1995-2004 Editorial Board, *Structural Engineering Review* (Elsevier), 1995-1997

PUBLICATIONS

More than 150 papers in peer-reviewed journals since 1990

Papers appearing in peer-reviewed journals in the last 3 years:

- 1. Gomez, C., Sanchez-Silva, M., Duenas-Osorio, L. and Rosowsky, D. (2011), "Heirarchical Infrastructure Network Representation Methods for Risk-Based Decision Making," *Structure and Infrastructure Engineering*, 2011:1-15.
- 2. Gardoni, P. and Rosowsky, D.V. (2011), "Seismic Fragility Increment Functions for Deteriorating Reinforced Concrete Bridges, *Structure and Infrastructure Engineering*, 7(11):869-879.
- 3. van de Lindt, J.W., Pei, S., Pang, W. and Rosowsky, D.V. (2011), "IDA Comparison of an IBC-Designed and DDD Six-Story Light-Frame Wood Building," ASCE *Journal of Performance of Constructed Facilities*, 25(2):138-142.
- 4. Rosowsky, D.V. (2011), "Recovery: Rebuilding a Resilient Housing Stock," *International Journal of Disaster Resiliance in the Built Environment*, 2(2):139-147.
- 5. Karthik, M.M., Mander, J.B. and Rosowsky, D.V. (2011), "Lumber-Boxed Concrete Structural System Concept and Preliminary Analysis," ASCE *Journal of Structural Engineering*, 137(11):1381-1389.

- 6. Sanchez-Silva, M., Klutke, G-A, and Rosowsky, D.V. (2011), "Life-Cycle Performance of Structures Subject to Multiple Deterioration Mechanisms," *Structural Safety*, 33(3):206-217.
- 7. Zhong, J., Gardoni, P. and Rosowsky, D. (2012), "Seismic Fragility Estimates for Corroding Reinforced Concrete Bridges," *Structure and Infrastructure Engineering*, 8(1):55-69.
- 8. Sanchez-Silva, M., Klutke, G-A, and Rosowsky, D.V. (2012), "Optimization of the Design of Infrastructure Components Subject to Progressive Deterioration and Extreme Loads," *Structure and Infrastructure Engineering*, 8(7):655-667.
- 9. Wang, Y. and Rosowsky, D.V. (2012), "Joint Distribution Model for Prediction of Hurricane Wind Speed and Size," *Structural Safety*, 35(1):40-51.
- 10. Zhong, J., Gardoni, P. and Rosowsky, D.V. (2012), "Closed-form Seismic Fragility Estimates, Sensitivity Analysis and Importance Measures for Reinforced Concrete Columns in Two-column Bents," *Structure and Infrastructure Engineering*, 8(7):669-685.
- 11. van de Lindt, J.W., Rosowsky, D.V., Pang, W. and Pei, S. (2013), "Performance-Based Seismic Design of Mid-Rise Woodframe Buildings," ASCE *Journal of Structural Engineering*, 139(8):1294-1302.
- 12. Rosowsky, D.V. and Wang Y. (2013), "Joint Wind-Snow Hazard Characterization for Reduced Reference Periods," ASCE *Journal of Performance of Constructed Facilities*, 28(1):121-127
- 13. Han, S.R., Guikema, S.D. and Rosowsky, D.V. (2013), "Integrating Models and Data to Estimate the Structural Reliability of Utility Poles During Hurricanes," *Risk Analysis*, to appear.
- 14. Rosowsky, D.V. (2013), "Evolution of Probabilistic Analysis of Timber Structures from Second-Moment Reliability Methods to Fragility Analysis," *Structural Safety*, 41:57-63.
- 15. Wang, Y. and Rosowsky, D.V. (2013), "Characterization of Joint Wind-Snow Hazard for Performancebased Design," *Structural Safety*, 43:21-27.
- 16. Mudd, L., Wang, Y., Letchford, C. and Rosowsky, D. (2014), "Assessing Climate Change Impact on the US East Coast Hurricane Hazard: Temperature, Frequency, Track," ASCE *Natural Hazards Review*, to appear.
- 17. Wang. Y. and Rosowsky, D.V. (2014), "Effects of Earthquake Ground Motion Selection and Scaling Method on Performance-based Engineering of Woodframe Structures," ASCE *Journal of Structural Engineering*, 140(11):04014086.
- 18. Mudd, L., Wang, Y., Letchford, C. and Rosowsky, D. (2014), "Hurricane Wind Hazard Assessment for Rapidly Warming Climate Scenario," *Journal of Wind Engineering & Industrial Aerodynamics*, to appear.
- Rosowsky, D.V. (2014), Discussion of "Professional Decisions, I: the Central Role of Models, and II: Responsibilities," by D.G. Elms and C.B. Brown, *Civil Engineering and Environmental Systems*, 30(3-4):294-295.

Under review:

1. Rosowsky, D.V., Mudd, L. and Letchford, C., "Assessing Climate Change Impact on the Joint Wind-Rain Hurricane Hazard for the Northeastern U.S. Coastline," Special ICSRM volume (invited paper), under review.

Plus 3 book chapters and more than 140 conference proceedings papers since 1990.

HONORS, AND AWARDS:

Elected to grade of Fellow, American Society of Civil Engineers (ASCE), October 2007.

- Outstanding Career Achievement Award, Tufts University Graduate School, 2007.
- Outstanding Alumni Achievement Award, Department of Civil and Environmental Engineering, Tufts University, 2005.

Holder of the A.P. and Florence Wiley Chair in Civil Engineering, Texas A&M University, 2004-2009. Erksine Fellow, University of Canterbury, Christchurch, New Zealand, April-May, 2004.

2001 ASCE Walter L. Huber Civil Engineering Research Prize, "for his research on stochastic modeling of behavior of engineered wood construction subject to natural and man-made hazards, and development of practical risk-consistent criteria for design of wood structures."

2001 Institution of Civil Engineers **T.K. Hsieh Award** (with C.H. Juang and W.K. Tang) for "*the best paper published by the Institution in the field of structural and soil vibrations caused by seismic effects.*" Title of papers: "CPT-based Liquefaction Analysis, I: Determination of Limit State Function, and II: Reliability and Design"

Inaugural holder of Richardson Chair in Wood Engineering, Oregon State University, appointed July 2000.

Clemson University Board of Trustees Award for Faculty Excellence, May 1999.

1998 ASCE Norman Medal (with B.R. Ellingwood) to "the authors of a paper that is judged worthy of special commendation for its merit as a contribution to engineering science." Title of paper: Combining Snow and Earthquake Loads for Limit States Design, Journal of Structural Engineering, November 1996.

Clemson University Board of Trustees Award for Faculty Excellence, May 1998.

DOW Outstanding New Faculty Award, American Society for Engineering Education (ASEE), Southeast Section, June 1997.

Chi Epsilon Outstanding Teacher Award in Civil Engineering, 1995-96.

PROFESSIONAL REGISTRATION:

P.E. License No. 95382 (Texas) E.I.T. Certificate No. 10780 (Massachusetts)

PROFESSIONAL SOCIETIES:

Fellow, American Society of Civil Engineers (ASCE) Member, American Association for the Advancement of Science (AAAS) Member, American Society for Engineering Education (ASEE) Member, Chi Epsilon, Civil Engineering Honor Society Member, Sigma Xi, Scientific Research Society

PERSONAL:

Born June 15, 1963, Boston, Massachusetts Married (Michelle) with two children (Melissa and Leo)

REFERENCES AVAILABLE UPON REQUEST