## **Biosketch of DAN M. FRANGOPOL**

The Fazlur Rahman Khan Endowed Chair of Structural Engineering and Architecture Professor of Civil Engineering, Department of Civil and Environmental Engineering, Engineering Research Center for Advanced Technology for Large Structural Systems (ATLSS Center), Lehigh University, 117 ATLSS Drive, Imbt Laboratories, Bethlehem, PA 18015-4729, USA www.lehigh.edu/~dmf206



**Dr. Dan M. Frangopol** is the first holder of the Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture at Lehigh University, Bethlehem, Pennsylvania. Before joining Lehigh University in 2006, he was Professor of Civil Engineering at the University of Colorado at Boulder where he is now Professor Emeritus. From 1979 to 1983, he held the position of Project Structural Engineer with A. Lipski Consulting Engineers in Brussels, Belgium. In 1976, he received his doctorate in Applied Sciences from the University of Liège, Belgium.

Dr. Frangopol's main research interests are in the application of probabilistic concepts and methods to civil and marine engineering including structural reliability, probability-based design and optimization of buildings, bridges and naval ships, structural health monitoring, life-cycle performance maintenance and management of structures and infrastructures under uncertainty, risk-

based assessment and decision making, infrastructure sustainability and resilience to disasters, and stochastic mechanics. According to ASCE (2010) "Dan M. Frangopol is a preeminent authority in bridge safety and maintenance management, structural system reliability, and life-cycle civil engineering. His contributions have defined much of the practice around design specifications, management methods, and optimization approaches. From the maintenance of deteriorated structures and the development of system redundancy factors to assessing the performance of long-span structures, Dr. Frangopol's research has not only saved time and money, but very likely also saved lives... Dr. Frangopol is a renowned teacher and mentor to future engineers." He is an experienced researcher and consultant to industry and government agencies, both nationally and abroad.

Dr. Frangopol holds three honorary doctorates (Doctor Honoris Causa) from the University of Liège, Belgium, the Technical University of Civil Engineering Bucharest, Romania, and the Gheorghe Asachi Technical University of Iaşi, Romania. He is an Honorary Professor at seven universities (Hong Kong Polytechnic, Tongji, Southeast, Tianjin, Chang'an, Dalian, and Harbin Institute of Technology), and a Visiting Chair Professor at the National Taiwan University of Science and Technology. He is a <u>Distinguished Member</u> of ASCE, an Inaugural Fellow of both SEI and EMI, a Fellow of ACI, IABSE, and ISHMII, an Honorary Member of the Romanian Academy of Technical Sciences, an Honorary Member of the Portuguese Association for Bridge Maintenance and Safety, Honorary President of both the <u>IABMAS-Italy Group</u> and the <u>IABMAS-Brazil Group</u>, and an Honorary Member of the <u>IABMAS-China Group</u>.

Dr. Frangopol is the Founding President of the International Association for Bridge Maintenance and Safety (IABMAS) and of the International Association for Life Cycle Civil Engineering (IALCCE), and Founding Director of the Consortium on Advanced Life Cycle Engineering for Sustainable Civil Environments (COALESCE). He is the Vice-President of the International Association for Structural Safety and Reliability (IASSAR), Past-Chair of the Executive Board of IASSAR, and Past Vice-President of the International Society for Health Monitoring of Intelligent Infrastructures (ISHMII). For ASCE he has chaired the Executive and Awards Committees of the Structural Engineering Institute, Technical Activities Division, the Technical Committees on Safety of Buildings, Safety of Bridges, and Optimal Structural Design, the Technical Administrative Committee on Structural Safety and Reliability, and is the current founder and chair of the Technical Council on Life-Cycle Performance, Safety, Reliability and Risk of Structural Systems. For IABSE he has chaired the Working Commission 1 on Structural Performance, Safety and Analysis. He is Past Board Member of the Joint Committee on Structural Safety (JCSS), and Past-Chair of the International Federation for Information Processing (IFIP) Working Group on Reliability and Optimization of Structural Systems.

Dr. Frangopol is the recipient of several national and international awards including the 2012 IALCCE Fazlur R. Khan Life-Cycle Civil Engineering Medal, the 2012 ASCE Arthur M. Wellington Prize, the 2012 IABMAS Senior Research Prize, the 2010 ASCE Distinguished Membership, the 2009 ISHMII Fellowship Award, the 2008 IALCCE Research Award, the 2008 Royal Academy of Engineering Distinguished Visiting Fellowship Award, the 2007 ASCE Ernest Howard Award, the 2006 IABSE OPAC Award, the 2006 ELSEVIER Munro Prize, the 2006 T. Y. Lin Medal, the 2005 ASCE Nathan M. Newmark Medal, the 2004 Kajima Research Award, the 2003 ASCE Moisseiff Award, the 2002 JSPS Fellowship Award for Research in Japan, the 2001 and 2014 ASCE J. James R. Croes Medal, the 2001 Research Prize of the International Association for Structural Safety and Reliability (IASSAR), the 1998 and 2004 ASCE State-of-the-Art of Civil Engineering Award, and the 1996 Distinguished Probabilistic Methods Educator Award of the Society of Automotive Engineers (SAE). Among several awards he has received at the University of Colorado, Frangopol is the recipient of the 2004 Boulder Faculty Assembly Excellence in Research Award, the 2003 Clarence L. Eckel Faculty Prize for Excellence, and the 1987 Teaching Award. He is also the recipient of the Lehigh University's 2013 Eleanor and Joseph F. Libsch Research Award.

Dr. Frangopol is the Founding Editor of <u>Structure and Infrastructure Engineering</u> an international peerreviewed archival journal dedicated to recent advances in maintenance, management and life-cycle performance of a wide range of structures and infrastructures. He is also the Founding Editor of the Book Series <u>Structures and Infrastructures</u> (CRC Press, Taylor & Francis Group, Balkema). The aim of this Book Series is to present research, developments, and applications written by experts on the most advances technologies for analyzing, predicting and optimizing the performance of structures and infrastructures.

Dr. Frangopol is the author or co-author of two books, 38 book chapters, 310 articles in archival journals, and more than 500 papers in conference proceedings. Dr. Frangopol is also the editor or co-editor of 40 books published by ASCE, Balkema, CIMNE, CRC Press, Elsevier, McGraw-Hill, and Thomas Telford. He has served as an editorial board member of 14 international journals, including *Bridge Engineering, Computers & Structures, Construction and Building Materials, Engineering Structures, Probabilistic Engineering Mechanics,* and *Structural Safety*. Additionally, he has chaired and organized several national and international structural engineering conferences and workshops. He has given plenary keynote lectures in numerous major conferences held in Asia, Australia, Europe, North America, and South Africa.

Dr. Frangopol has performed research and served as a consultant in many major projects sponsored by the National Science Foundation, the Federal Highway Administration, the Office of Naval Research, the National Aeronautics and Space Administration, the Army Corps of Engineers, the Air Force Office of Scientific Research, the Department of Defense, the Army Armament Research, Development and Engineering Center, the National Cooperative Highway Research Program, the Colorado, Florida and Pennsylvania Departments of Transportation, the Transportation Research Board, the Applied Technology Council, the Pennsylvania Infrastructure Technology Alliance, the Henry Luce Foundation, the U.K. Highways Agency, the North Atlantic Treaty Organization, and the Japan Ministry of Education, among others. Also, he received research funding from ArcelorMittal, the Tokyo Electric Power Company, the Japan Institute of Systems Research, the Dutch Ministry of Infrastructure and Environment, the Korean Ministry of Land, Transport and Maritime Affairs, the U.S.-Spain Joint Committee for Scientific and Technological Cooperation, the Parson Transportation Group, the American Society of Civil Engineers, the Georgia Institute of Technology, and the University of Colorado.

Dr. Frangopol has supervised the dissertations of 37 Ph.D. students and the theses and reports of 52 M.S. students. In addition, he has supervised 16 post-doctoral researchers and hosted about 50 visiting scholars. Many of his former students are university professors in the United States and abroad, and several are prominent in professional practice and research laboratories. He also served as External Member of Ph.D. Thesis Committees at major universities in Austria, Australia, Canada, Denmark, England, France, India, Italy, the Netherlands, Portugal, Serbia, Spain, Sweden, Switzerland, and the U.S.

For additional information on Dr. Frangopol's activities please visit <u>http://www.lehigh.edu/~dmf206/</u>