



### **Professor Srinivasan Sridharan (1942 – 2011)**

Department of Civil Engineering  
School of Engineering & Applied Science  
Washington University, St. Louis

#### **In Memoriam:**

Srinivasan Sridharan, PhD, professor of civil engineering in the School of Engineering & Applied Science at Washington University in St. Louis since 1980, died April 24, 2011, at St. Johns Mercy Medical Center in St. Louis from complications of treatment for leukemia. He was 69.

Sridharan earned a bachelor's in civil engineering in 1962 and a master's in structural engineering in 1967 from the University of Madras in India. He earned his doctorate in structural stability from the University of Southampton in England in 1978.

“He took pleasure in rigorous intellectual inquiry as a scientist and academic, and treasured his role as a guide and mentor to countless students over three decades,” writes his son, Sathya.

His colleague Phillip L. Gould, PhD, senior professor of mechanical engineering and materials science, was impressed that Sridharan had the initiative to remake himself in mid-career. Recognizing that the field of

classical structural mechanics was fully mature, he switched to analysis of the newly emerging composite and laminate materials and attracted funding for this research program from a variety of sources.

“Dr. Sridharan was the consummate academic,” says Kevin Truman, PhD, dean of the School of Computing & Engineering at the University of Missouri-Kansas City and Sridharan’s colleague and former chair at WUSTL. “He prided himself on giving his lectures with few or no notes. He believed that the students, like him, should have a clear and full understanding of the subject matter, and he felt this was one way to make that point, to lead by example.”

He held his graduate students to the highest standard, agrees Gould, and felt that they should demonstrate proficiency, not just competence, before graduating. When he sat on the dissertation committee for another colleague’s graduate student, he was never a silent partner but instead took an active and constructive role in the examination.

Known for his intense focus, Sridharan sometimes neglected more mundane matters when he was intellectually engaged. One colleague remembers a lunchtime search for a sandwich lost within the piles of paper on his desk during a spirited conversation about engineering.

Sridharan was famous for candor, but those who knew him well recognized his candor was part of his sincere and caring personality. “He always saw the good in people and would often advocate for those that could not help themselves,” Truman recalls. “He was a true champion for the underdog.”

Gould was particularly impressed by Sridharan’s bi-cultural background, and the grace with which he moved between cultures. When he traveled with Sridharan to India, Gould says, it was obvious he was respected and admired in his native country for his achievements in the international arena.

Sridharan shared his culture generously with those who indicated an interest. Gould’s wife, for example, learned Indian cooking from Sridharan’s mother.

But Sridharan’s engagement with Indian culture ran deeper than his WUSTL colleagues ever knew.

“His friends will fondly remember his passionate discussions on a variety of spiritual subjects, particularly the Bhagavad Gita and Ramayana,” writes his son. “Our father was a lover of classical Indian music, Sanskrit scripture, Hindi poetry, and Hindu epics. He was also a captivating storyteller with a wonderful sense of humor.”

### **A recent CV follows:**

Professor, Department of Mechanical Engineering and Materials Science

#### **Education:**

Ph.D., University of Southampton, United Kingdom, 1978.

M.Sc. (1st Class) in Structural Engineering, University of Madras, India, 1967

B.E. (1st Class with Honors) in Civil Engineering, University of Madras, India, 1962

**Honors and Awards:**

Senior fellowship of the state ( Tamilnadu, India) sponsored Technical Teachers' Training Program, August 1965- September 1968.

Commonwealth Scholarship offered by the Association of Commonwealth Universities, U.K, September 1974-October, 1977.

Post-doctoral fellowship, Structural Stability Group, University College London, U.K, November 1977-September 1980.

NASA-ASEE summer faculty fellow,1992; Navy- ASEE Summer Faculty Fellow, 1995

Visiting Fellow, May-June 1994, Institut für Statik, Universität Hannover,Germany.

Exchange visitor to Institute of Industrial Science, University of Tokyo, Japan, 1998-2000

Visiting Professor, Universita Degli Studi-Della Calabria, Italy, Dec.1998

Elected Fellow of ASCE, 1997

Professional Registration: Registered as Professional Engineer in the State of Missouri from 1997.

**Courses Taught in recent years:**

Structural Behavior and Analysis

Structural Engineering Materials

Structural Stability

Nonlinear and Dynamic Stability

Structural Dynamics

Introductory Elasticity

Composite Structures

Computational Structural Mechanics

Advanced Engineering Mathematics I &II

**Current Research Interests:**

Piezoelectric control of Stiffened Structures

Delamination of Laminated Composite under Impact

Dynamic Delamination of Sandwich Members

Interactive Buckling in Stiffened Plate and Shell Structures

Composite Plate, Shell and Sandwich Structures

Dynamic Instability of Stiffened Composite Shells

Micromechanics-based Nonlinear Analysis of Composites

**Professional Activities:**

Associate Editor , Journal of Engineering Mechanics, 1992-1994;  
Chairman Stability Committee, ASCE Engineering Mechanics Division, ASCE 1992-1994.  
Organizer of International Symposium on “ Stability of Structures” with P.S.G. College of Technology, India.  
External examiner for several doctoral dissertations around the world.  
Reviewer for Journals in the area of Mechanics and Composite Materials.  
Consultant to Everest International Consultants, Inc, CA, 1996; Boeing Company , 2001.

**Editorship of Books and Conference Proceedings:**

Stability of Structures, Vol. I and II , Proceedings of the International Conference ICSS-1, June 7-9, 1995, Coimbatore, India ( with S. Rajasekaran), Allied Publishers, New Delhi.

Delamination Behavior of Composites, Woodhead Publishing company, Cambridge, U.K., 2008  
ISBN 978-1084569-244-5.

**Publications In Refereed Journals:**

Many papers listed. See: [www.research.engineering.wustl.edu/~ssrid/index.html](http://www.research.engineering.wustl.edu/~ssrid/index.html)