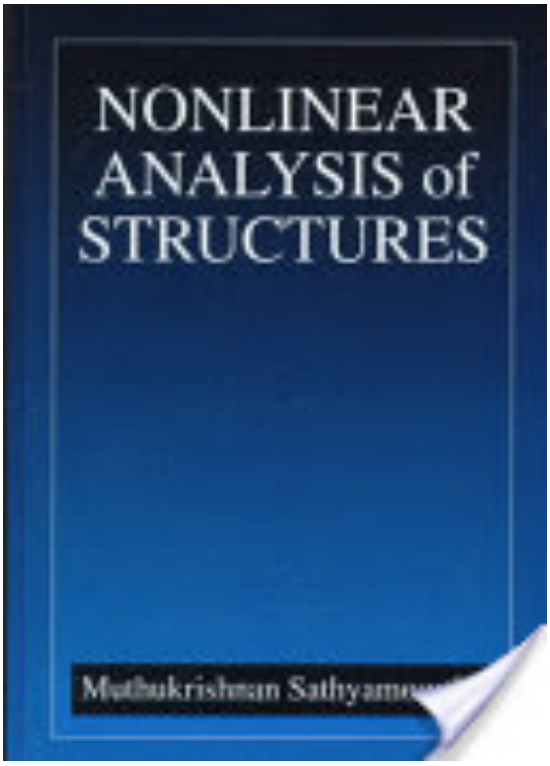

M. Sathyamoorthy, Nonlinear Analysis of Structures, CRC Press, October 1997, 640 pages

Professor Muthukrishnan Sathyamoorthy

See:
https://www.uttyler.edu/directory/me/sathyamoorthy.php

Associate Dean and Professor and Interim Chair
Department of Mechanical Engineering
University of Texas at Tyler, Texas

Education:
M. Tech, Mechanical Engineering Indian Institute of Technology 1970
Ph.D., Aeronautical Engineering Indian Institute of Technology 1973

Biography:
Dr. M. Sathyamoorthy has over 40 years of experience as a teacher, researcher and administrator. Prior to coming to UT Tyler in August 2006 as Associate Provost for Academic Affairs, he was a Professor and Dean of Engineering at West Virginia University Institute of Technology in Montgomery, West Virginia. He also served as Chairman of the Department of Mechanical and Aeronautical Engineering at Clarkson University, Potsdam, New York from 1997 to 2001. He earned his Ph.D. in Aeronautical Engineering from Indian Institute of Technology at Madras, India, in 1973, worked as a Research Fellow at the University of Birmingham, England, and taught at IIT, Madras as well as at the University of Calgary, Alberta, Canada before coming to Clarkson University in 1979. He has published over 120 research papers in international journals and conference proceedings and is the sole author of a majority of his refereed published journal papers. His book on Nonlinear Analysis of Structures published in 1998 is the only book that contains a comprehensive treatment of methodologies for analysis and collection of literatures in the nonlinear structural mechanics area. Dr.

Sathyamoorthy's development of a computerized symbolic manipulation technique for application to static and dynamic analysis of wing structures and their vulnerability studies have been influential individually in their own right on the U. S. Army's and U. S. Air Force's treatment of aircraft vulnerability. The importance of this field to the national defense is critical as we strive for not only higher performance but greater efficiency in our own air fleet and strive for close to zero casualties in any conflict. Dr. Sathyamoorthy has lectured internationally, and has been a consultant to industries and government laboratories. His research has been supported by AFOSR, ARO, and NSF. He is a Fellow of ASME, Aeronautical Society of India and an Associate Fellow of the American Institute of Aeronautics and Astronautics. He played a leading role in ASME at the local, regional and national levels for over 25 years serving on national committees, organizing technical sessions, and contributing to various other professional activities. He is the recipient of the 1993 National ASME Faculty Advisor Award and the ASME Dedicated Service Award in 1999. He also received three teaching awards, the Distinguished Teaching Award from Clarkson University in 2001, the Pi Tau Sigma Mechanical Engineering Distinguished Teaching Award in 1992, and the Tau Beta Pi Faculty Award in 1997. He also received the Outstanding Advisor Award in 1993. He was an active member of the Engineering Dean's Institute of ASEE and continues to serve as an ABET team member on accreditation visits to a broad range of universities in the country. He is listed in Who's Who in Technology, Who's Who in America, Who's Who in Worldwide, Who's Who Registry, Who's Who in Frontiers of Science and Technology, and Who's Who Among America's Teachers.

Research Interests:
General Areas of Solid Mechanics; Nonlinear Analysis of Beams; Plates and Shells; Composite and Stiffened Structures; Aircraft Structures; Mechanisms; Thermal Stresses; Finite Element Methods; Experimental Investigations; Vulnerability Analysis

Selected Publications:
Book:
M. Sathyamoorthy, Nonlinear Analysis of Structures, CRC Press, October 1997, 640 pages

Journal Articles:
M. Sathyamoorthy, Effect of thermal loading on large amplitude vibration of clamped circular plates, Design and Analysis of Plates and Shells, ASME, Chicago, Illinois, (1986), pp. 137-141.
70. M. Sathyamoorthy, Nonlinear vibration analysis of plates: A review and survey of current developments, Applied Mechanics Review 40 (1987), 1553-1561.
M Sathyamoorthy (Department of Mechanical and Industrial Engineering, Clarkson University, Potsdam, New York 13676, USA), "Effects of transverse shear and rotatory inertia on large amplitude vibration of composite plates and shells", Sadhana, Vol. 11, Nos. 3-4, 1987, pp. 367-377
Sathyamoorthy, M.: Effects of Transverse Shear and Rotatory Inertia on Large Amplitude Vibration of Composite Plates and Shells. Composite Materials and Structures, K. A. V. Pandalai, ed., Indian Academy of Sciences, 1988, pp. 95-105.
Sathyamoorthy, M. (1994). Vibration of Moderately Thick Shallow Spherical Shells at Large Amplitudes. Journal of Sound and Vibration, 172(1):63–70.
Sathyamoorthy, M.: Nonlinear vibrations of plates: an update of recent research developments. Appl. Mech. Review (10), 55–62 (1996)