



Professor Manohar P. Kamat

Manohar P. Kamat (Editor), Structural Optimization: Status and Promise, AIAA, 1993, 870 pages

Aerospace Engineering
Georgia Tech, USA

Education:

B.S., Civil Engineering, University of Poona, 1961.

D.C.T., Postgraduate Diploma in Concrete Technology, University of Leeds, 1965.

M.S., Aerospace Engineering, Georgia Institute of Technology, 1969.

Ph.D., Engineering Science & Mechanics, Georgia Institute of Technology, 1972.

Career:

Georgia Tech Experience

Professor, Engineering Science & Mechanics, 1985-1986.

Professor, Aerospace Engineering, 1987-Present.

Other Professional Positions and Consulting Experience

Design Engineer, Consulting Engineering firms in India, England and Holland, 1961 -1966.

Aircraft Structures Engineer, Lockheed - Georgia Company, Marietta, Georgia, 1966 -1971.

Assist. Prof. & Researcher, Virginia Polytechnic Inst. & State Univ., Blacksburg, Virginia, 1972-1976.

Consultant, Ensco, Inc., Springfield, Virginia, 1974-1980.

Associate Prof., Virginia Polytechnic Inst. & State Univ., Blacksburg, Virginia, 1976 – 1982.

Consultant, Systems Technology Laboratories, Arlington, Virginia, 1980-1981.

Professor, Virginia Polytechnic Inst. & State Univ., Blacksburg, Virginia, 1982 – 1985.

Consultant, Northrop Aircraft Corp., Los Angeles, California, 1985-1988.

Selected Publications:

Book:

Manohar P. Kamat (Editor), Structural Optimization: Status and Promise, AIAA, 1993, 870 pages

Journal Articles, etc.:

- Hayduk, R. J., Thomson, R. G., Wittlin, G. and Kamat, M. P., "Nonlinear Structural Crash Dynamics Analysis," SAE Paper 790588, April 1979.
- Killian, D. E., Kamat, M. P. and Nayfeh, A. H. (1983). Numerical Perturbation Solution for the Vibration of Prestressed, Clamped Cylindrical Shells. *Journal of Sound and Vibration*, 86(1):9–22.
- Kamat MP, Khot NS, Watson LT (1983) On optimizing frame type structures in nonlinear response. *Comput Methods Nonlin Solids Struct Mech* 54:111–119
- Wang C.Y, Watson L.T, Kamat M.P, 1983 Buckling, postbuckling, and the flow through a tethered elastic cylinder under external pressure. *ASME J. Appl. Mech.* 50, 13–18.
- Nemeth, M. P., Johnson, E. R., Stein, M. and Kamat, M. P. (1983) Buckling Behavior of Orthotropic Composite Plates with Centrally Located Cutouts. Report VPI-E-83-21, Virginia Polytechnic Institute and State University, June
- Kamat MP, Khot NS, Venkayya VB (1984) Optimization of shallow trusses against limit point instability. *AIAA J* 22:403–408
- R.H. Plaut, P. Ruangsilasingha and M.P. Kamat, Optimization of an asymmetric two-bar truss against instability. *J. Struct. Mech.*,12, No. 4 (1984), 465–470.
- Kamat MP, Raungasilasingha P (1985) Optimization of space truss against instability using design sensitivity derivatives. *eng optim* 8:177–188
- Haftka, R.T.; Kamat, M.P. 1985:Elements of structural optimization. The Hague: Martinus Nijhoff
- Mróz, Z.; Kamat, M.P.; Plaut, R.H. 1985: Sensitivity analysis and optimal design of nonlinear beams and plates. *J. Struct. Mech.* 13, 245–266
- Khot, N.S.; Kamat, M.P. 1985: Minimum weight design of truss structures with geometrical nonlinear behaviour. *AIAA J.* 23, 139–144
- VandenBrink, D. J. and Kamat, M. P. (1985) Post-buckling response of isotropic and laminated composite square plates with circular holes. *Fifth International Conference on Composite Materials* (eds W. C. Harrigan, Jr., J. Strife, and A. K. Dhingra), Metallurgical Soc., Inc., pp. 1393–1409.
- VandenBrink, D. J. and Kamat, M. P. (1987) Post-buckling response of isotropic and laminated composite square plates with circular holes. *Finite Elements in Analysis and Design*, 3, 165–174
- Kamat, M.P. 1987: Optimization of shallow arches against instability using sensitivity derivatives. *Finite Elements in Analysis and Design* 3, 277–284
- Mesquita, L.; Kamat, M.P. 1987: Optimization of stiffened laminated composite plates with frequency constraints. *Eng. Opt.* 11, 77–88