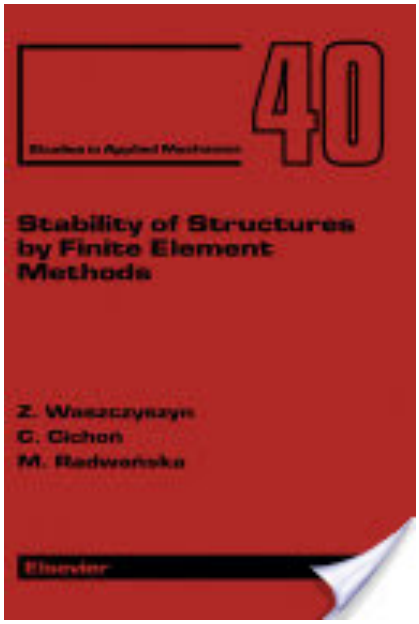
Professor Zenon Waszczyszyn



Z. Waszczyszyn, Cz. Cichon and M. Radwanska, Stability of Structures by Finite Element Methods, Elsevier, Oct. 2013 (orig. 1994), 483 pages

See:
https://www.l5.pk.edu.pl/~zenwa/
https://www.l5.pk.edu.pl/~zenwa/cv.html

Chair of Computational Structural Mechanics
Institute of Computer Methods in Structural Engineering
Cracow University of Technology, Warszawska, Kraków, Poland

Research Interests:

- nonlinear mechanics of structures (buckling and postcritical analysis of elastoplastic beams, arches, plates and shells, following or multiple loads), I.1,2, II.1,2,3 (references on the attached list of publications)
- computational methods (analysis of two-point BVPs, "exact" finite elements, consistent approach in the Newton-Raphson method with constraint equations), II.4,5, III.5,6
- analysis of engineering problems (dynamics of high voltage outdoor sustations under shot circuit currents, analysis of R/C cooling towers), V.2,43,96,105
- applications of neurocomputing in mechanics of structures and materials and in structural mechanics (neural procedures in hybrid FEM/NN programs, identification analysis and implicit modeling of physical relationships, NNs in experimental mechanics, NNs and nondestructive methods for damage identification), II.6, 33,34, 37,39,42

Career:

1956	M. Sc. (Civil Engineering), Cracow University of Technology (CUT)
1957-62	Design Engineer in the Cracow Office of Industrial Structures

1959-64	University Assistant at the Chair of Strength of Materials and Structural Statics (CSMSS) of CUT
1964	D. Sc. (Eng.), CUT
1964-72	Assistant Professor at CSMSS of CUT
1970	Habilitation, CUT
1972-78	Associate Professor, CUT
1973-78	Head of Computer Center of CUT
1978	Full Professor, CUT
1978-92	Head of the Laboratory of Structural Stability and Computational Methods in the Institute of Structural Mechanics of CUT
1988	Visiting Professor at TU Delft, the Netherlands
1989	Corresponding Member of the Polish Academy of Sciences
1990	Active Member of the Polish Academy of Sciences and Arts (the oldest Polish Academy of Sciences reactivated in Cracow in 1989)
1991-93	Vice-Rector for International Relations and University Staff of CUT
1993-	Head of the Chair of Computational Structural Mechanics at the Institute of Computer Methods in Civil Engineering (ICMCE) of CUT
1997-	Director of ICMCE of CUT
1998-	SEFI ((Societé Européenne pour la Formation des Ingenieurs) Fellow
2001	Doctor Honoris Causa of the Budapest University of Technology and Economics, Hungary
2001	Laureate of Subsidy for Scientists of the Polish Foundation for Science in the field of technical sciences

Publications:

· 6 books (2 co-authored, 3 edited, 1 co-edited)
· about 160 original papers
· more than 40 chapters in books, state-of-the-art-papers and published invited lectures
· more than 170 oral scientific presentations including 43 general and invited lectures at congresses, conferences and symposia

Selected Publications:

Book:

Z. Waszczyszyn, Cz. Cichon and M. Radwanska, Stability of Structures by Finite Element Methods, Elsevier, Oct. 2013 (orig. 1994), 483 pages

Journal Articles, etc:

Zenon Waszczyszyn, "Numerical problems of nonlinear stability analysis of elastic structures", Computers & Structures, Vol. 17, No.1, 1983, pp. 13-24

Waszczyszyn, Z., Radwanska, M., Pabisek, E., Application of the initial value method to analysis of elasto-plastic plates and shells of revolution, Computers and Structures, Vol. 16, No. 6., pp. 761–771, (1983).

Z. Waszczyszyn (Institute of Structural Mechanics, Cracow Technological University, Poland), “Multiple subvolume models for the analysis of inelastic behaviour of metals”, Delft University of Technology, The Netherlands Memorandum M-594, June 1988
Waszczyszyn Z.: Stability problems and methods of analysis of nonlinear FEM equations, [in:] Handbook of Computational Solid Mechanics, M. Kleiber (Ed.), Springer-Verlag, Berlin, Heidelberg, 1998, 253–323.
Zenon Waszczyszyn and Marek Bartczak, “Neural prediction of buckling loads of cylindrical shells with geometrical imperfections”, International Journal of Non-Linear Mechanics, Vol. 37, Nos. 4-5, June 2002, pp. 763-775, Special Issue: Stability & Vibration in Thin-Walled Structures