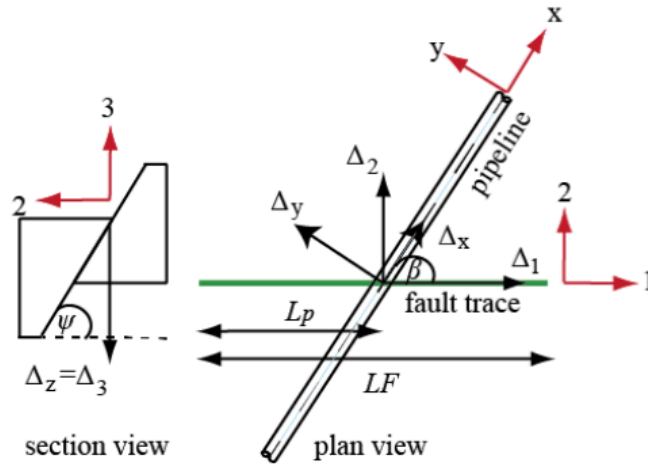




**Professor Charis J. Gantes**



**Fig. 1 Pipe – fault crossing section and plan view**

From: Vasilelos Melissianos, Dimitrios Vamvatsikos and Charis Gantes, "Probabilistic assessment of innovative mitigating measures for buried steel pipeline – fault crossing", Paper number PVP2015-45345, ASME Pressure Vessels and Piping (PVP) Conference, Boston, Massachusetts, July 19-23, 2015

See:

<http://users.ntua.gr/chgantes/en/>

[http://users.ntua.gr/chgantes/files/CV\\_CharisGantes\\_full\\_English.pdf](http://users.ntua.gr/chgantes/files/CV_CharisGantes_full_English.pdf)

<https://www.linkedin.com/pub/charis-gantes/101/67/227>

<https://scholar.google.com/citations?user=1A-W7sYAAAAJ&hl=en>

<http://www.zoominfo.com/p/C.-Gantes/169357702>

Metal Structures Laboratory  
School of Civil Engineering  
National Technical University of Athens, Greece

### **Career Activities:**

Professor Gantes is active in teaching, research and practice of structural engineering, with emphasis on the behavior, analysis and design of steel structures:

- He participates in teaching the compulsory core courses "Steel structures I" in the 7th semester of studies, and "Steel structures II" in the 8th semester, and he is the coordinator of the elective course "Nonlinear behavior of steel structures" in the 9th semester of the structural engineering specialization. He also teaches the graduate course "Design of cable and membrane structures".
- His research activities cover aspects of behavior, analysis and design of steel structures, with emphasis of problems of geometrically and material nonlinear behavior, and strength evaluation of members, connections and structures at the ultimate limit state.
- He supervises doctoral, graduate and undergraduate students working in the above fields.
- He participates as a consultant in the structural design of buildings and other technical projects, mostly made of steel, but also of other structural materials.

- He contributes to the improvement of state-of-the-art of Greek structural engineers in issues related to steel structures by participating in working groups on code development and continuing education seminars.

### **Biography:**

Between 1987 and 1991 he was a graduate student in the Department of Civil and Environmental Engineering at M.I.T., holding scholarships from the "Fulbright Foundation", the "Alexander S. Onassis Foundation" and from M.I.T.

- His research was on the behavior, analysis and design of deployable structures, supervised by Prof. Jerry Connor.
- He received the Master of Science in 1988 and the Ph.D. in 1991.
- His doctoral thesis was entitled "A design methodology for deployable structures".

After returning to Greece in 1991 he initially worked on the design and execution of technical projects, mostly private buildings.

Between 1992 and 1995 he taught "Structural analysis" in the Department of Civil Engineering at the Greek Air Force Academy.

Since 1994 he is a faculty member in the Institute of Steel Structures, School of Civil Engineering, National Technical University of Athens, initially as Lecturer (1994-2000), then as Assistant Professor (2000-2004), Tenured Assistant Professor (2004-2007), Associate Professor (2007-2012), and as Full Professor since 2012.

### **Selected Publications:**

Kounadis, A.N. Gantes, Ch. and Kandakis, G. "Numerical Solutions and Theoretical Predictions Based on Energy Criteria for Establishing the Dynamic Response of Autonomous Dissipative/Nondissipative Systems", 1st National Congress of Comput. Mechanics, Athens, Sept. 3-4, (1992), 601-609.

Kounadis, A.N. and Gantes, C. and Simitses, G.J., "Nonlinear Instability of Structures Subjected to Impact Loading", Proceed. 2nd Europ. Conf. Struct. Dynamics, Eurodyn 93, Trondheim, Norway, 21-23 June, (1993), 641-649.

Gantes C, Kounadis AN. Energy-based dynamic buckling estimates for autonomous dissipative systems. AIAA J, 1995, 33(7): 1342-1349

Kounadis A.N., Gantes C., Simitses G.J., Nonlinear dynamic buckling of multi-dof structural dissipative system under impact loading, Int. J. Impact Engineering, 19 (1), 63-80, 1997.

A.N. Kounadis, C.J. Gantes, I.G. Raftoyiannis, A geometric approach for establishing dynamic buckling loads of autonomous potential N-degree-of-freedom systems, Int. J. Non-linear Mech. 39 (2004) 1635-1646.

Gantes C J and Konitopoulou E 2004 Geometric design of arbitrarily curved bi-stable deployable arches with discrete joint size Int. J. Solids Struct. 41 5517-40

Dimopoulos, C.A. and Gantes, C.J., "Experimental Investigation of Buckling of Wind Turbine Tower Cylindrical Shells with Opening and Stiffening under Bending", Thin-Walled Structures, Vol. 54, pp. 140-155, May 2012.

Dimopoulos, C.A. and Gantes, C.J., "Comparison of Alternative Algorithms for Buckling Analysis of Slender Steel Structures", Structural Engineering and Mechanics, Vol. 44, No. 2, pp. 219-238, 2012.

Dimopoulos, C.A. and Gantes, C.J., "Comparison of Stiffening Types of the Cutout in Tubular Wind Turbine Towers", Journal of Constructional Steel Research, Vol. 83, pp. 62-74, April 2013.

Hadjoannou, M., Douthe, C. and Gantes, C.J., "Influence of Cold Bending on the Resistance of Wide Flange Members", International Journal of Steel Structures, Vol. 13, Issue 2, pp. 353-366, June 2013.

Charis J. Gantes, Maria A. Livanou and Tassos P. Avraam, “New insight into interaction of buckling modes with stable post-buckling response”, *Arabian Journal for Science and Engineering*, Vol. 39, No. 12, pp 8559-8572, December 2014

Georgia Margariti and Charis Gantes, “Linear and nonlinear buckling response and imperfection sensitivity of cable-stayed masts and pylons”, *Structural Engineering International*, 02/2015, Vol. 25, No. 1, 2015

Stelios Vernardos and Charis Gantes, “Preliminary feasibility investigation of initial imperfections is well known to have a detrimental effect on the response of a wide range of structural systems. This has been demonstrated mostly analytically for simple models, assuming small displacements sandwich type shells for wind turbine towers”, 8<sup>th</sup> Hellenic National Conference on Steel Structures, Tripoli, Greece (year not given, probably 2015; abstract not given).

Vasilelos Melissianos, Dimitrios Vamvatsikos and Charis Gantes, “Probabilistic assessment of innovative mitigating measures for buried steel pipeline – fault crossing”, Paper number PVP2015-45345, ASME Pressure Vessels and Piping (PVP) Conference, Boston, Massachusetts, July 19-23, 2015

Christoforos A. Dimopoulos and Charis Gantes, “Numerical methods for the design of cylindrical steel shells with unreinforced or reinforced cutouts”, *Thin-Walled Structures*, 11/2015, Vol. 96, pp 11028, 2015