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E-mail: [chgantes@central.ntua.gr](mailto:chgantes@central.ntua.gr), [chgantes@alum.mit.edu](mailto:chgantes@alum.mit.edu)Web: <http://users.civil.ntua.gr/chgantes/en/> - LinkedIn: [www.linkedin.com/in/CharisGantes](http://www.linkedin.com/in/CharisGantes)**SUMMARY OF ACTIVITIES IN STRUCTURAL ANALYSIS AND DESIGN****DESIGN AND CONSULTING ACTIVITY**

- Consultant for the structural condition assessment and design of strengthening of the old masonry building “Boys’ and girls’ school” in Delvinaki, Pogoni, Greece (2019-2020).
- Consultant for the structural design of the new passengers’ terminal in Souda Harbor, Crete, Greece (2018-2020).
- Checker of the structural design of steel structures providing temporary support for the deep excavations associated with the construction of One Tower, in Limassol, Cyprus (2017-2018).
- Consultant for the structural design of extensions of Thessaloniki Airport in Greece (2017-2018).
- Consultant for the applicability of rigid stainless steel rods as hangers for the suspended steel roof of LNG tank in Revithousa, Greece (2016).
- Consultant for the construction structural design of industrial facilities of “Hellas Gold” in Skouries, Chalkidiki (2016).
- Consultant for the structural design of the steel structure supporting the cladding of the “Oval Tower” in Limassol, Cyprus (2015-2016).
- Consultant for the structural design of steel structures providing temporary support for the excavations associated with cut-and-cover construction of the Thessaloniki Metro, Greece (2014-2016).
- Consultant for the checking of structural design of three elevated stations in “Red Line South Elevated and at Grade” of Doha Metro, Qatar (2014-2018).
- Consultant for the structural design of two 368.152MW and 590.726MW Power Plant Projects in Hassi R’Mel, Algeria (2012-2015).
- Consultant for the structural condition assessment of the steel structure of the Air-Cooled Condenser at Korinthos Power CCPP in Korinthos, Greece (2013-2014).
- Member of two Committees for Resolution of Technical Differences between the Greek State and the contracting consortium “Moreas S.A.” concerning the time table and payment orders related to the construction of the Highway Corinth-Tripolis-Kalamata and the branch Lefktro-Sparta (2013).
- Consultant for the structural design of Samra Power Station - Fast Track Simple Cycle Combustion Turbine Power Project in Samra, Jordan (2012-2013).
- Consultant for the structural design of solid household waste treatment facility in St. Petersburg, Russia (2012).
- Consultant for the tender structural design of Mechanical Biological Treatment plant (MBT) in Sofia, Bulgaria (2012).

- Consultant for the structural design of Waste Treatment Plant in Izmir, Turkey (2011-2012).
- Consultant for the structural design of Gas Power Plant in Shatt al Basrah, Iraq (2011-2012).
- Structural condition assessment and seismic upgrading design of a power plant facility of the Public Power Corporation on the island of Syros, Greece (2011).
- Checking of structural design for all steel structures associated with the three major highways that are now under design and construction in Greece: PATHE, Ionia Odos and E65 (2008-2015).
- Failure investigation of steel scaffolding during construction of Chamezi Bridge, Crete (2008).
- Participation in the construction structural design of steel structures covering 50,000m<sup>2</sup> of the Athens Metropolitan exposition center next to the Athens International Airport (2007-2008).
- Participation in the preliminary, final and construction structural design of the new football stadium (42,000 seats) of the major Greek football team Panathinaikos, in Athens (2006-2009).
- Participation in the structural design of transformation of the International Broadcasting Center (I.B.C) of the 2004 Athens Olympic Games into a commercial and business center (2006-2008).
- Consultant for the structural design of the cable-suspended steel roof at the archaeological site “Aristotle’s Lyceum” on Rigillis Street in Athens (2002-2008).
- Structural design of spectator stands for outdoor theatre and pedestrian bridge in the archaeological site of Ancient Olympia (2002).
- Consultant for the tender structural design of the “Media Press Center” of the 2004 Olympic Games (2001).
- Evaluation of carrying capacity and strengthening design of composite toll stations along the Athens Peripheral Highway “Attiki Odos” (2001).
- Design of a variety of technical works serving the Athens peripheral highway “Attiki Odos” (1999-2002).
- Checking of structural design of the temporary and permanent structures for the stations Panormou, Attiki, Neos Kosmos, Analtos, Megaro Mousikis and Evangelismos of the new Athens subway system (1994-1997).

#### FUNDED RESEARCH PROJECTS

- “HP-OCP - High Performance Holistic Computational Optimization Platform”, Search-Create-Innovate, Greek Secretariat of Research and Technology, Assoc. Prof. N. Lagaros as P.I. (2018-2021).
- “Panoptis - Development of a Decision Support System for Increasing the Resilience of Transportation Infrastructure Based on Combined Use of Terrestrial and Airborne Sensors and Advanced Modelling Tools”, H2020-MG-2016-2017/H2020-MG-2017-Two-Stages, budget 4,990,800.00€, Dr. Philippe Chrobocinski (Airbus Defense and Space SAS) as P.I. and Assoc. Prof. A. Doulamis as P.I. of the NTUA research team (School of Rural and Surveying Engineering, NTUA) (2018-2021).
- “OptArch - Optimization Driven Architectural Design of Structures”, H2020-MSCA-RISE-2015, Assoc. Prof. N. Lagaros as P.I. (2016-2020).
- “Divas - Distributed Vibrational and Acoustic Sensing technology”, H2020-MSCA-IF-2015 Marie Skłodowska-Curie actions, Dr. M. Kandyla (Hellenic National Research Foundation) as P.I., P.I. of the NTUA research team (2016-2018).
- “NAT-SEI-ISO - Innovative design of bridge piers on liquefiable soils with the use of natural seismic isolation”, Thalys program, group budget 76,750€, Prof. G. Bouckovalas as P.I. (2012-2015).
- “Optimal Design of Smart Structures”, Greece-Italy Research Cooperation, Ass. Prof. V. Koumouis as P.I. (1993-1995).

**BOOK**

- Vagias, I., Gantes, C.J., Ermopoulos, I. and Ioannidis, G., "Application Examples in Special Topics of Steel Structures", Kleidarithmos Editions, Athens, 2013 (in Greek).  
<http://www.klidarithmos.gr/paradeigmata-efarmoghs-se-aidika-8emata-metallikwn-kataskeywn>

**EDITOR OF COLLECTIVE VOLUMES**

- Gantes, C.J., Section Editor of the section "Structural Analysis for Earthquake Resistant Design" of the Encyclopedia of Earthquake Engineering, Springer Verlag, 2014.  
<http://www.springer.com/978-3-642-35344-4>

**BOOK CHAPTERS**

- Gantes, C.J., "Seismic Analysis of Steel Buildings: Numerical Modeling", *Encyclopedia of Earthquake Engineering*, edited by M. Beer, E. Patelli, I. Kougiumtzoglou and I. Siu-Kui Au, Springer Verlag, 2015.  
doi: [http://dx.doi.org/10.1007/978-3-642-36197-5\\_124-1](http://dx.doi.org/10.1007/978-3-642-36197-5_124-1)

**JOURNAL PUBLICATIONS**

- Nistico, N., Gkagka E.E. and Gantes, C.J., "Roof Isolation with Tuned Mass-based Systems and Application to a Prefabricated Building", *Arabian Journal for Science and Engineering*, Vol. 40, Issue 2, pp. 431-442, February 2015.  
doi: <http://dx.doi.org/10.1007/s13369-014-1537-1>
- Gantes, C.J., Vayas, I., Spiliopoulos, A. and Pouangare, C.C., "Bending and Shear Stiffness Optimization for Rigid and Braced Multi-Story Steel Frames", *Steel & Composite Structures*, Vol. 1, No. 4, pp. 377-392, December 2001.  
doi: <https://doi.org/10.12989/scs.2001.1.4.377>
- Koumousis, V.K. and Gantes, C.J., "Floating Slab of the Athens Metro, Greece", *Structural Engineering International*, Vol. 10, No. 4, pp. 226-228, November 2000.  
<http://dx.doi.org/10.2749/101686600780481220>

**CONFERENCE PUBLICATIONS**

- Koulatsou, K., Aggelopoulos, J., Thanasoulas, I.D., Ntaifoti, A., Kalivas, S., Georgiou, O., Louka, A., Likomitros, V., Gkologiannis, C.P. and Gantes, C.J., "Support Steel Structure of the Cladding and the Dome of the "Oval Tower" Building at Limassol of Cyprus", *9<sup>th</sup> Hellenic National Conference on Steel Structures*, Larissa, Greece, 5-7 Oct. 2017 (in Greek with English summary).
- Leontaris, K., Roussos, N., Villi, M. and Gantes, C.J., "Design of the Steel Bracing for the Temporary Support of Deep Excavations through Nonlinear Numerical Analysis", *9<sup>th</sup> Hellenic National Conference on Steel Structures*, Larissa, Greece, 5-7 Oct. 2017 (in Greek with English summary).
- Balaoura, E.S. and Gantes, C.J., "Investigation of the Effectiveness of Capacity Design Guidelines in Multi-Storey Steel Buildings with Concentrically Braced Frames", *9<sup>th</sup> Hellenic National Conference on Steel Structures*, Larissa, Greece, 5-7 Oct. 2017.
- Angelides, M., Gantes, C.J. and Kalochairetis, K.E., "Buckling of Large Diameter Industrial Steel Chimneys", *9<sup>th</sup> Hellenic National Conference on Steel Structures*, Larissa, Greece, 5-7 Oct. 2017 (in Greek with English summary).
- Bouckovalas, G., Psycharis, I., Gantes, C.J., Sextos, A., Kappos, A. and Mylonakis, G., "Performance-Based Design of Bridge Piers in Liquefiable Stees with Shallow Foundation and Limited

Ground Improvement”, *PBD-III, 3<sup>rd</sup> International Conference on Performance-Based Design in Earthquake Geotechnical Engineering*, Vancouver, Canada, 16-19 July 2017.

- Angelides, M., Gantes, C.J. and Kalochairetis, K.E., “Buckling of Large Diameter Steel Chimneys - Part 2: Impact of Openings”, *CICIND Report - The Chimney Magazine*, Vol. 32, No. 1, pp. 57-66, January 2016, *Proceedings of 84<sup>th</sup> CICIND Conference*, Gdansk, Poland, Sep. 24-26, 2015.
- Angelides, M., Gantes, C.J. and Kalochairetis, K.E., “Buckling of Large Diameter Steel Chimneys - Part 1: Impact of Loading Distribution and Ring Stiffeners”, *CICIND Report - The Chimney Magazine*, Vol. 31, No. 2, pp. 109-120, July 2015, *Proceedings of 83<sup>rd</sup> CICIND Conference*, Boston, May 7-8, 2015.
- Kaimenaki, V., Vassilopoulou, I., Gantes, C.J. and Bouckovalas, G.D., “Assessment of Sensitivity of an Arched Steel Bridge to Imposed Horizontal Soil Displacements”, *8<sup>th</sup> Greek National Steel Structures Conference*, Tripoli, 2-4 Oct. 2014 (in Greek with English summary).
- Sextos, A., Psilla, N., Psycharis, I., Kappos, A., Taskari, O., Vassilopoulou, I., Mylona, E.K. and Gantes, C.J., “Performance Criteria for Bridges Designed with Spread Footings on Liquefiable Soils”, *2ECEES - 2<sup>nd</sup> European Conference on Earthquake Engineering and Seismology*, M.A. Ansal and M. Nurlu (eds.), Istanbul, Turkey, Aug. 24-29, 2014.
- Gantes, C.J. and Koulatsou, K., “Suspended Steel Roof of the Archaeological Site of the School of Aristotle”, *BCCCE 2013: 2<sup>nd</sup> International Balkans Conference on Challenges of Civil Engineering*, Tirana, Albania, May 23-25, 2013.
- Ruck, B., Gantes, C.J., Gkologiannis, C.P. and Koulatsou, K., “Wind Tunnel Tests for the Evaluation of Wind Pressures on the Steel Roof of the New Football Stadium of Panathinaikos F.C. in Votanikos”, *7<sup>th</sup> Greek National Steel Structures Conference*, Volos, Sep. 29 - Oct. 1, 2011 (in Greek with English summary).
- Gkologiannis, C.P., Gantes, C.J., Athanasiadis, A., Majowiecki, M., Zoulas, F. and Schmidt, H., “Structural System of Steel Roof of the New Football Stadium of Panathinaikos F.C. in Votanikos”, *7<sup>th</sup> Greek National Steel Structures Conference*, Volos, Sep. 29 - Oct. 1, 2011 (in Greek with English summary).
- Gkologiannis, C.P., Gantes, C.J., Athanasiadis, A., Majowiecki, M., Zoulas, F. and Schmidt, H., “Structural Design of the New Football Stadium of Panathinaikos F.C. in Votanikos, Greece”, *34<sup>th</sup> IABSE Symposium*, Venice, Italy, September 22-24, 2010.
- Gkologiannis, C.P., Athanasiadis, A. and Gantes, C.J., “Presentation of the Structural System of the Roof in the New Panathinaikos Stadium in Votanikos”, *6<sup>th</sup> Greek National Steel Structures Conference*, Ioannina, 2-4 Oct. 2008, Vol. I, pp. 246-253 (in Greek with English summary).
- Lignos, D.G., Krawinkler, H. and Gantes, C.J., “Estimating Seismic Demands for Moment-Resisting Frames with Strength and Stiffness Irregularities, Based on Modal Pushover Analysis”, *STESSA 2006, Behaviour of Steel Structures in Seismic Areas*, Tokyo Institute of Technology, Yokohama, Japan, August 14-17.
- Lignos, D.G. and Gantes, C.J., “Design Considerations for the Effects of Near Fault Ground Motions on Steel Structures”, *5<sup>th</sup> Greek National Steel Structures Conference*, Xanthi, 29 Sep.-2 Oct. 2005, E. Galousis, I. Ermopoulos, Ch. Calfas Eds., Vol. I, pp. 305-312 (in Greek with English summary).
- Gantes, C.J., Loukakis, K.E., Villi, M.M., Psaras, I., Pnevmatikos, N.G. and Mpachounzouzi, G., “Presentation of the Structural System of the Aristotle’s Lyceum Archaeological Site Protection Hangar”, *5<sup>th</sup> Greek National Steel Structures Conference*, Xanthi, 29 Sep.-2 Oct. 2005, E. Galousis, I. Ermopoulos, Ch. Calfas Eds., Vol. II, pp. 37-44 (in Greek with English summary).
- Vassilopoulou, I., Chatzifoti, A. and Gantes, C.J., “Design and Construction of the Athens Olympic Sports Complex Entrance Canopies”, *5<sup>th</sup> Greek National Steel Structures Conference*, Xanthi, 29 Sep.-2 Oct. 2005, E. Galousis, I. Ermopoulos, Ch. Calfas Eds., Vol. II, pp. 77-84 (in Greek with English summary).

- Gantes, C.J., Theodoridis, G. and Kalligeros, C.K., “Presentation of the Structural System and Calculation of Wind Pressures for the Hangar of the New AEK Stadium”, *5<sup>th</sup> Greek National Steel Structures Conference*, Xanthi, 29 Sep.-2 Oct. 2005, E. Galousis, I. Ermopoulos, Ch. Calfas Eds., Vol. II, pp. 93-100 (in Greek with English summary).
- Lignos, D.G. and Gantes, C.J., “Seismic Demands for Steel Braced Frames with Stiffness Irregularities Based on Modal Pushover Analysis”, *4<sup>th</sup> European Workshop on the Seismic Behavior of Irregular and Complex Structures*, Thessaloniki, Greece, Aug. 26-27, 2005.
- Lignos, D.G., Stergiou, E. and Gantes, C.J., “Structural Reliability of Steel Structures Based on Interstory Drift and Direct Loss Demands”, *5<sup>th</sup> Greek Association on Computational Mechanics (GRACM) Congress*, Limassol, Cyprus, June 29-July 1, 2005.
- Lignos, D.G. and Gantes, C.J., “Modal Pushover Analysis as a Tool for Evaluation and Design of Irregular Frames”, *3<sup>rd</sup> MIT Conference on Computational Fluid and Solid Mechanics*, Cambridge, Massachusetts, June 14-17, 2005, edited by K.J. Bathe, Elsevier, pp. 336-339.
- Psaras, I. and Gantes, C.J., “Comparison of Analysis Methods for Plane Steel Frames”, *4<sup>th</sup> Greek National Conference on Steel Structures*, Patra, Greece, May 24-25, 2002, edited by D.E. Beskos, D.L. Karabalis and A.N. Kounadis, Vol. 1, pp. 32-40.
- Gantes, C.J., Vayas, I., Spiliopoulos, A. and Pouangare, C.C., “Optimum Bending and Shear Stiffness Distribution for Performance Based Design of Rigid and Braced Multi-Story Steel Frames”, *3<sup>rd</sup> International Conference STESSA 2000 - Behaviour of Steel Structures in Seismic Areas*, Montreal, Canada, Aug. 21-24, 2000, edited by F.M. Mazzolani and R. Tremblay, pp. 585-592.
- Ermopoulos, J. and Gantes, C., “Conception and Optimization of Structural Forms by Imitating Nature”, *IASS/IABSE International Symposium on Conceptual Design of Structures*, Stuttgart, Germany, October 7-11, 1996, Vol. I, pp. 207-214.