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Charis J. GANTES, Ph.D.

Professor of Structural Engineering
Director of the Institute of Steel Structures

Department of Structural Engineering - School of Civil Engineering - National Technical University of Athens
9 Heroon Polytechniou Street, GR-157 80, Zografou Campus, Athens, Greece
tel. + 30 210 7723440 - telefax + 30 210 7723442
E-mail: chgantes@central.ntua.gr, chgantes@alum.mit.edu
Web: http://users.civil.ntua.gr/chgantes/en/ - LinkedIn: www.linkedin.com/in/CharisGantes

AREAS OF SPECIALIZATION

Structural analysis and design with emphasis on steel structures, earthquake-resistant design, evaluation of ultimate capacity of structures under extreme loading including seismic, wind and blast, employing mostly numerical (finite elements) but also experimental and analytical methods, nonlinear behavior, structural stability, connections in steel structures, unconventional industrial steel structures, steel structures for energy applications, steel structures for marine applications, wind turbine towers, tension structures, deployable structures, buried pipelines.

EDUCATION

- Ph.D. in Structural Engineering, M.I.T., 1991.
- Master of Science (S.M.) in Civil Engineering, M.I.T., 1988.
- Diploma in Civil Engineering, National Technical University of Athens, Greece, 1985.
- Abitur, German Highschool of Athens, Dörpfeld Gymnasium, June 1979.

ACADEMIC ACTIVITIES

- Professor and Director of the Institute of Steel Structures, Civil Engineering Department, National Technical University of Athens, Greece. Activities and distinctions include:
  - Teaching of the compulsory courses “Steel structures I” (6th semester), “Steel structures II” (7th semester), the elective course “Nonlinear behavior of steel structures” (9th semester) and the graduate courses “Design of tension structures” and “Steel structures for marine applications”.
  - Teaching of “Steel structures” in the 1st, 2nd and 3rd year in the School of Technical Education of the Hellenic Greek Army Corps of Engineers (2018-2022).
  - Supervision (since 1994) of 191 diploma theses, 71 graduate theses as well as 10 completed and 8 ongoing Ph.D. theses.
  - Research activity in the area of structural behavior, analysis and design under extreme loads, including seismic, wind and blast, leading structures to nonlinear response, with emphasis on steel structures. Author of one book in English, two books in Greek, one set of class notes (in Greek), editor of two collective volumes and author in two more, author of 11 book chapters, 117 technical papers published or accepted in international journals, 192 technical papers published in proceedings of international conferences, and several technical reports. Participation in and direction of several research projects.
  - Member of the Greek mirror Committee of CEN/TC250, ELOT/TE67 Committee on “Eurocodes”, Coordinator of the Greek mirror Group of CEN/TC250/SC3, ELOT TE67/OE3 “Eurocode 3” and representative of Greece in Committee CEN/TC250/SC3 for Eurocode 3 of the European Committee for Standardization, CEN.
  - Member of CEN Project Team SC3/T1 of EN1993-1-1 (Part 1-1 of Eurocode 3), General rules and rules for buildings, Mandate M/515 phase 1 tasks for the development of the second generation of Eurocodes.
  - Member of CEN Project Team SC3/T11 of EN1993-3 (Part 3 of Eurocode 3), Masts, towers and chimneys - Consolidation and rationalisation of EN 1993-3, Mandate M/515 phase 4 tasks for the development of the second generation of Eurocodes.

- Member of CEN/TC250/SC3/WG14 (Technical Committee 250 on Structural Eurocodes, Subcommittee 3 on Eurocode 3 - Design of steel structures, Working Group 14 on Evolution of EN 1993-3 - Towers, masts and chimneys).
- Editor-in-Chief of the *Journal of the International Association for Shell and Spatial Structures* (IASS), Associate Editor of *Frontiers in Built Environment* and Member of the Editorial Boards of the *International Journal of Space Structures* and of *WIT Transactions*.
- Section Editor of *Structural Analysis for Earthquake Resistant Design* of the *Encyclopedia of Earthquake Engineering* by Springer Verlag.
- Correspondent for Greece of *Structural Engineering International* (SEI), the journal of the International Association for Bridges and Structural Engineering (IABSE).
- Research awards from Fulbright Foundation and the British Royal Society.
- According to search engine Scopus he has more than 2100 citations of his research work and a value of h-index equal to 27. From Web of Science he has more than 1500 citations and h-index equal to 23, while from Google Scholar more than 3900 citations and h-index equal to 35.
- Member of the Executive Council of the International Association for Shell and Spatial Structures (IASS).
- Vice-President of the Greek Steel Structures Research Society.
- Member of IASS (International Association for Shell and Spatial Structures) Working Groups WG4: Technical Expert Group on Masts and Towers and WG8: Metal Spatial Structures.
- Member of several Greek and international scientific and professional organizations and working groups, reviewer for more than 50 international journals, member of publishing boards and co-organizer of Greek and international conferences.
- Fulbright Alumni Outreach Ambassador.
- Member of the Tsuboi Award Selection Committee.
- Member of the Isler Prize Committee.

SELECTED RESEARCH PUBLICATIONS

- Ioannou, O., Hadjioannou, M., Gantes, C.J. and Lignos, X.A., "Experimental and Numerical Investigation of Cladding-Girt Systems subjected to Blast Loading", *ASCE Journal of Structural Engineering*, Vol. 149, Issue 5, 04023030, May 2023.
- Gantes, C.J., Koulatsou, K.G. and Chondrogiannis, K.-A., "Alternative Ring Flange Models for Buckling Verification of Tubular Steel Wind Turbine Towers via Advanced Numerical Analysis and Comparison to Code Provisions", *Structures*, Vol. 47, pp. 1366-1382, Jan. 2023.
- Papavasileiou, V.D., Gantes, C.J., Thanopoulos, P. and Lignos, X.A., "Dynamic Response Identification of a Triple-Single Bailey Bridge Based on Vehicle Traffic-Induced Vibration Analysis", *Infrastructures*, Vol. 7(10), 139, 2022.
- Ioannou, O., Hadjioannou, M. and Gantes, C.J., "Evaluation of the Potential of Cladding to Mitigate Blast Effects on the Supporting Structure", *Practice Periodical on Structural Design and Construction*, Vol. 27, Issue 3, 04022022, Aug. 2022.
- Gantes, C.J., Villi Billi, M., Güldogan, M. and Gül, S., "A Novel Tripod Concept for Onshore Wind Turbine Towers", *Energies*, Vol. 14, Issue 18, 5772, 2021.
- Vernardos, S.M., Gantes, C.J., Badogiannis, E.G. and Lignos, X.A., "Experimental and Numerical Investigation of Steel-Grout-Steel Sandwich Shells for Wind Turbine Towers", *Journal of Constructional Steel Research*, Vol. 184, 106815, Sep. 2021.
- Thanasoulas, I.D. and Gantes, C.J., "Stability Criteria for Roller-Bent Circular-Hollow-Section Steel Arches", *Journal of Constructional Steel Research*, Vol. 176, 106431, Jan. 2021.
- Sakka, E.G., Bilionis, D.V., Vamvatsikos, D. and Gantes, C.J., "Onshore Wind Farm Siting Prioritization Based on Investment Profitability for Greece", *Renewable Energy*, Vol. 146, pp. 2827-2839, Feb. 2020.
- Valsamis, A.I., Bouckovalas, G.D. and Gantes, C.J., "Alternative Design of Buried Pipelines at Active Fault Crossings Using Flexible Joints", *International Journal of Pressure Vessels and Piping*, Vol. 180, 104038, Jan. 2020.
- Vernardos, S. and Gantes, C.J., "Experimental Behavior of Concrete-Filled Double-Skin Steel Tubular (CFDST) Stub Members under Axial Compression: A Comparative Review", *Structures*, Vol. 22, pp. 383-404, Dec. 2019.

- Thanasoulas, I.D., Douthe, C.E., Gantes, C.J. and Lignos, X.A., "Influence of Roller Bending on RHS Steel Arches: Experimental and Numerical Investigation", *Thin-Walled Structures*, Vol. 131, pp. 668-680, Oct. 2018.
- Thanasoulas, I.D., Vardakoulias, I.K., Kolaitis, D.I., Gantes, C.J. and Founti, M.A., "Coupled Thermo-Mechanical Simulation for the Performance-based Fire Design of CFS Drywall Systems", *Journal of Constructional Steel Research*, Vol. 145, pp. 196-209, June 2018.
- Vassilopoulou, I., Petrini, F. and Gantes, C.J., "Nonlinear Dynamic Behavior of Cable Nets Subjected to Wind Loading", *Structures*, Vol. 10, pp. 170–183, May 2017.
- Melissianos, V.E., Vamvatsikos, D. and Gantes, C.J., "Performance Assessment of Buried Pipelines at Fault Crossings", *Earthquake Spectra*, Vol. 33, No. 1, pp. 201–218, Feb. 2017.
- Melissianos, V.E., Lignos, X.A., Bachas, K.K. and Gantes, C.J., "Experimental Investigation of Pipes with Flexible Joints under Fault Rupture", *Journal of Constructional Steel Research*, Vol. 128, pp. 633-648, Jan. 2017.
- Melissianos, V.E. and Gantes, C.J., "Evaluation of Seismic Protection Methods for Buried Fuel Pipelines Subjected to Fault Rupture", *Frontiers in Built Environment*, Vol. 2, Article 34, 2016.
- Olmati, P., Petrini, F., Vamvatsikos, D. and Gantes, C.J., "Simplified Fragility-Based Risk Analysis for Impulse Governed Blast Loading Scenarios", *Engineering Structures*, Vol. 117, pp. 457–469, June 2016.
- Kalochairetis, K.E. Gantes, C.J. and Lignos, X.A., "Experimental and Numerical Investigation of Eccentrically Loaded Laced Built-Up Steel Columns", *Journal of Constructional Steel Research*, Vol. 101, pp. 66–81, October 2014.
- Gantes, C.J. and Bouckovalas, G.D., "Seismic Verification of High Pressure Natural Gas Pipeline Komotini – Alexandropoulis – Kipi in Areas of Active Fault Crossings", *Structural Engineering International*, Vol. 23, Number 2, pp. 204–208, May 2013.
- Gantes, C.J. and Kalochairetis, K.E., "Axially and Transversely Loaded Timoshenko and Laced Built-up Columns with Arbitrary Supports", *Journal of Constructional Steel Research*, Vol. 77, pp. 95–106, Oct. 2012.
- 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.
- Akgün, Y., Gantes, C.J., Sobek, W., Kalochairetis, K.E. and Korkmaz, K., "A Novel Adaptive Spatial Scissor-Hinge Structural Mechanism for Convertible Roofs", *Engineering Structures*, Vol. 33, pp. 1365-1376, Apr. 2011.
- Pnevmatikos, N.G. and Gantes, C.J., "Control Strategy for Mitigating the Response of Structures Subjected to Earthquake Actions", *Engineering Structures*, Vol. 32, pp. 3616-3628, Nov. 2010.
- Papageorgiou, A.V. and Gantes, C.J., "Decoupling Criteria for Inelastic Irregular Primary/Secondary Structural Systems Subject to Seismic Excitation", *Journal of Engineering Mechanics ASCE*, Vol. 136, No. 10, pp. 1234–1247, Oct. 2010.
- Gantes, C.J., and Fragkopoulos, K.A., "Strategy for Numerical Verification of Steel Structures at the Ultimate Limit State", *Structure and Infrastructure Engineering*, Vol. 6, pp. 225–255, 2010.
- Lemonis, M.E. and Gantes, C.J., "Mechanical Modeling of the Nonlinear Response of Beam-to-Column Joints", *Journal of Constructional Steel Research*, Vol. 65, pp. 879-890, 2009.
- Dimopoulos, C.A. and Gantes, C.J., "Design of Circular Steel Arches with Hollow Circular Cross-Sections According to EC3", *Journal of Constructional Steel Research*, Vol. 64, pp. 1077-1085, 2008.
- Kouretzis, G.P., Bouckovalas, G.D. and Gantes, C.J., "3-D Shell Analysis of Cylindrical Underground Structures under Seismic Shear (S) Wave Action", *Soil Dynamics and Earthquake Engineering*, Vol. 26, pp. 909-921, Oct. 2006.
- Gantes, C.J., *Deployable Structures – Analysis and Design*, WIT Press, Southampton, England, 2001.

PROFESSIONAL EXPERIENCE

- Collaboration with design offices and construction companies for structural consulting and design of a variety of projects including:
  - Steel and reinforced concrete buildings.
  - Condition assessment and strengthening of old steel, reinforced concrete and masonry structures.
  - Large-span steel structures for athletic, industrial and commercial facilities.

- Power plant and waste treatment plant structures and other energy related industrial facilities.
- Wind turbine towers and foundation.
- Buried pipelines transporting oil and natural gas.
- Port and marine facilities.
- Guyed towers.
- Temporary bracing for deep excavations.
- Structures for the 2004 Athens Olympic Games.
- Highway infrastructure projects including structures for "Attiki Odos", the Athens peripheral highway.
- Underground structures including tunnels and stations for "Attiko Metro", the Athens subway.

❑ Participation in expert committees for the resolution of technical differences.

SELECTED DESIGN AND CONSULTING PROJECTS

❑ Structural condition assessment of existing steel structures (toll stations, salt storage buildings, sign bridges) along ATHE, E-65 and Ionia Odos Highways, Greece (2023-2024).

❑ Consultant for the structural design of reefer racks at the Port of Piraeus, Greece (2023).

❑ Structural condition assessment of loading/unloading offshore platform of Hellenic Petroleum, Thessaloniki, Greece (2023-2024).

❑ Consultant for the seismic assessment of existing buildings in British Force Cyprus (BFC), Cyprus (2023).

❑ Consultant for the independent review of structural design of industrial building complex of ATES Wind Power for the fabrication of wind turbine towers in Bergama, Turkey (2022-2023).

❑ Consultant for the third-part review of structural design of a composite steel – reinforced concrete vehicular bridge linking the roofs of two buildings acting as parking garages in Patra, Greece (2022-2023).

❑ Consultant for the structural strengthening design of an existing reinforced concrete building to be transformed into a boutique hotel in Mets, Athens, Greece (2022-2023).

❑ Experimental investigation of 18 full-scale L-stub specimens extracted from an actual wind turbine tower ring flange connection, to investigate the root cause of a tubular steel wind turbine tower collapse (2022).

❑ Consultant for the structural condition assessment of four existing pedestrian bridges over Nea Odos Highway, Greece (2022).

❑ Consultant for the preliminary structural design of a steel roof for the Metamorfosi Municipality Swimming Hall, Greece (2022).

❑ Assessment of the influence of wall dents on the strength of Interconnector Greece-Bulgaria Pipeline (ICGB) (2022).

❑ Consultant for the seismic assessment of existing buildings in British Force Cyprus (BFC), Cyprus (2021-2022).

❑ Consultant for the structural condition assessment of Pythio railway bridge over river Evros between Greece and Turkey (2021).

❑ Experimental investigation of perforated thin-walled purlin specimens of photovoltaic panels (2021).

❑ Consultant for the preliminary structural condition assessment of the tensile structure consisting of a membrane roof and supporting cables protecting the Temple of Apollo Epicurius at Bassae, Greece (2021).

❑ Consultant for the preliminary structural design of an iconic steel canopy in Masdar City, Abu Dhabi (2021).

❑ Consultant for quantifying the effects of a dent caused by a falling blade on a tubular steel wind turbine tower by means of nonlinear finite element analyses, in central Greece (2020).

❑ Evaluation of mechanical characteristics of typical steel specimens of old steel structures in airplane parking and maintenance hangar at the old Hellinikon Airport in Athens, Greece, by means of on-site measurements, experimental tests and statistical evaluation (2020).

❑ Consultant for evaluating the damage of a wind turbine tower foundation caused by the collapsed tower and the weight of the falling turbine, Greece (2020).

- Consultant of the Greek Ministry of Culture for the structural design of a shelter to cover the remnants of Peisistratus bulwark in the archaeological site of Elefsina, Greece (2020-2022).
- Consultant for the structural condition assessment of old steel structure supporting the deck of the historical bridge providing access to the Old Fortress of Corfu (2020).
- Consultant for the review of structural design of Keppel Seghers for project Wte Plant, of an industrial steel building housing a power plant, fabricated in the Netherlands and transported by vessel for installation in Hong Kong (2020).
- Consultant for the structural design of the logistics and office facilities of SENEKA LOGISTICS SA in Kifisia, Greece (2020-2021).
- Consultant for the structural condition assessment of existing self-standing and guyed telecommunication towers in Akrotiri Base, Cyprus (2020-2021).
- Evaluation of mechanical characteristics of typical steel specimens of old steel structures at the Educational Center of the Greek Fire Department in Nea Makri, Greece, by means of on-site measurements, experimental tests and statistical evaluation (2020).
- Consultant of ATES Wind Power for optimization of wind turbine towers (since 2020).
- Assessment of the influence of wall dents on the strength of Trans Adriatic Pipeline (TAP), Greece (2019).
- 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 replacement of the guyed tower “Steel Cross” in the Old Fortress of Corfu due to severe deterioration of the old structure (2019).
- Consultant for the structural design of the new passengers’ terminal in Souda Harbor, Crete, Greece (2018-2020).
- Evaluation of bearing capacity and design of strengthening measures of the steel structure of the “French Dock”, dating back to 1885, serving loading purposes on ships of the French Lavrion Mining Company, in Lavrio, Attica, Greece (2018-2019).
- Consultant for the structural design of the industrial, storage and office facilities of STOP AEBE in Piraeus, Greece (2018-2019).
- Consultant for the structural design of steel structures providing temporary support for the excavations associated with cut-and-cover construction of the Bombay Metro, India (2017-2018).
- Consultant for the structural assessment and evaluation of necessity of strengthening of old steel structures of ore storage facilities and loading dock in industrial facilities of “Hellas Gold” in Stratoni, Chalkidiki (2017).
- 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 structural design of extensions of Kavala Airport in Greece (2017-2018).
- Consultant for the structural assessment and evaluation of necessity of strengthening of the steel roof of Corfu Airport in Greece (2016).
- 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 final structural design of industrial facilities of “Hellas Gold” in Olympias, Chalkidiki (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 assessment of retractable membrane roofs and supporting steel structures of Avenue Mall, in Athens, Greece (2015).
- Preliminary structural design of steel scaffolding and auxiliary structures for the reconstruction of the old historical Plaka stone bridge in Epirus, Greece (2015).
- 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 stations and viaducts of “Red Line South Elevated and at Grade” of Doha Metro in Qatar (2014-2017).
- Consultant for the structural design of a 590.726MW Power Plant Project in Hassi R’Mel, Algeria (2014-2016).
- Consultant for the final structural design of industrial facilities of “Hellas Gold” in Stratoni, Chalkidiki (2014).
- 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 a 368.152MW Power Plant Project in Hassi R’Mel, Algeria (2012-2015).
- Consultant for the evaluation of the causes and consequences of large amplitude vibrations of wind turbine towers in Koryfi, Serres, Greece (2013).
- Participation in the structural design of industrial facilities of “Hellas Gold” in Perama Hill, Thraki (2012-2013).
- 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).
- Forensic investigation of the collapse of a steel sign bridge on the National Highway Schimatari-Chalkida (2012).
- Consultant for the design of steel superstructure supporting the heat recovery steam generators in power plant project in Denizli, Turkey (2012).
- Consultant for the tender structural design of Mechanical Biological Treatment plant (MBT) in Sofia, Bulgaria (2012).
- Consultant for the evaluation of available bearing capacity and strengthening of old steel cement loading tower damaged due to corrosion and ship impact in Vasilikos, Cyprus (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).
- Consultant for the structural design of a seawater supply pipeline network, part of a power generation and water desalination facility at Yanbu, Kingdom of Saudi Arabia (2011-2014).
- Consultant for the tender structural design of steel trestles, platforms and other harbour facilities in Vasilikos, Cyprus (2011).
- Evaluation of available bearing capacity and structural strengthening design of power production facility of the Greek Public Power Corporation on the island of Syros (2011).
- Participation in the preliminary structural design of industrial facilities of “Hellas Gold” in Stratoni, Chalkidiki (2010-2011).
- Consultant for the seismic upgrading of steel grandstand structures in outdoor Petra Theater in Petroupoli (2010).
- Participation in the preliminary structural design of the new football stadium (22,000 seats) of the A-League Greek football team PAS Giannina, in Giannina, Greece (2009-2010).
- Participation in the construction structural design of several reinforced concrete buildings for the Blue City project in Oman (2009-2010).
- Consultant for the tender structural design of steel trestles, platforms and other harbour facilities in Azzawiya, Libya (2009).
- Consultant for the construction structural design of power plant project in Thisvi, Greece (2009).
- Checking of structural design for all steel structures (toll booths, sign bridges, safety barriers etc.) associated with three major highways in Greece: PATHE, Ionia Odos and E65 (2008-2015).
- Structural strengthening of indoor sports hall in the Olympic Village, Thrakomakedones, Greece (2008).
- Consultant for the structural design of a steel building used as wind turbine tower fabrication yard of EMEK S.A. in Aghioi Theodoroi, Korinthia, Greece (2008).

- Structural design of steel structuress for the entrance canopies of Argyroupoli and Ellinikon metro stations (2008).
- Failure investigation of steel scaffolding during construction of Chamezi Bridge, Crete (2008).
- Consultant for the influence of tunnel boring for the Thessaloniki metro on the buildings of the Aristotle University (2007-2008).
- Participation in the construction structural design of steel structures covering 50,000m^2 of the Athens Metropolitan exposition center next to the Athens International Airport (2007-2008).
- Investigation of bearing capacity of existing garage buildings of the Athens Trolley Company in Sepolia, Attica, Greece (2007).
- Participation in the structural design of three office buildings with 35 floors and 5 basements in Sofia, Bulgaria (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 for the 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 shading membranes between office buildings of Piraeus Bank in Cairo, Egypt (2006).
- Consultant for the structural design of the indoor sports gymnasium “Theseus” in Antikira, Viotia (2006).
- Member of special working group of the Greek Ministry of Public Works to investigate the reasons and consequences of a failure due to fire in a cable of the Rion-Antirion Bridge (2005).
- Checking of structural and foundation design of 49m tall wind turbine towers of type NEG-Micon 952 for a wind park in Xirolimni, Lasithi, Crete, Greece (2005).
- Foundation design of 41 44m tall wind turbine towers of type Vestas in a wind park on Panachaikon Mountain, in Greece (2004).
- Member of special working group of the Greek Ministry of Defense to prepare technical guidelines for designing new and strengthening existing fortification works buried in the ground (2004-2007).
- Verification of existing carrying capacity and evaluation of need for seismic strengthening of 3-story masonry building housing the offices of the Organization of Public Transportation of the city of Athens (2004).
- Checking and modification for construction of the structural design performed by S. Calatrava Design Office for steel structures of Entrance Canopies of the Athens 2004 Olympic Complex (2003-2004).
- Verification of existing carrying capacity and design of interventions for seismic strengthening of 2-story preservable masonry building dating from 1870, of the Corinthian Grapes Association in Korakochori, Ilia, Greece (2004)
- Consultant for the structural design of the steel roof of spectators’ stands in the new A.E.K. football stadium in Nea Philadelphia, Athens, Greece (2003).
- Structural verification of seismic performance of Natural Gas Pipeline (Section Kipi-Alexandroupoli-Komotini) subjected to possible landslides and seismic fault activation, in Thrace, Greece (2003).
- Structural design of the cable-suspended steel roof at the archaeological site of “Aristotle’s Lyceum” in Athens (2002-2009).
- Structural design of spectator stands steel structure for outdoor theatre and pedestrian arch bridge in the archaeological site of Ancient Olympia, in Greece (2002).
- Structural design of 49m tall Vestas wind turbine towers of “Plastika Kritis” and their foundation (2002).
- Structural design of steel hangar for Intralink factory in Thessaloniki (2002).
- Evaluation of carrying capacity and strengthening design of a 250 m tall guyed tower of the Greek Navy in Kato Souli, Greece (2000-2001).
- Seismic structural design of the “Thessaloniki-Skopia Oil Pipeline” in areas of potential faults and landslides (2000-2001).
- Design of technical works for the new Athens peripheral highway “Attiki Odos” (1999-2002).
- Qualitative and quantitative assessment of the analysis and design against earthquake actions of the underwater tunnel connecting Aktion and Preveza, in Greece (1999).

- Checking of structural design of temporary and permanent structures for cut & cover stations Panormou, Attiki, Neos Kosmos, Analatos, Megaro Mousikis and Evangelismos of the Athens subway (1994-1997).
- Participation in structural design of DELTA S.A. industrial facilities (steel structure used as yoghurt and ice-cream factory) in Agios Stefanos, Attica (1992-1994).
- Structural failure analysis of a 1800 ft tall guyed tower that collapsed under wind and ice loads in Tulsa, Oklahoma, U.S.A. (1989-1990).
- Checking of structural designs of bridges, culverts and conduits with total budget of 308.580.000 drh. and airport facilities in Karpathos, Lamia and Mitilini with total budget of 178.600.000 drh., as member of the design department of the Military Office for the Construction of Public Works (SYKEA), Athens (1985-1987).