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PERSONAL INFORMATION

- □ Born in Athens, Greece, on 9 March 1962.
- Citizen of Greece.
- □ Married, with three children.

AREAS OF SPECIALIZATION

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

EDUCATION

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

ACADEMIC ACTIVITIES AND DISTINCTIONS

- Professor, Institute of Steel Structures, Civil Engineering Department, National Technical University of Athens, Greece. He joined the NTUA faculty in 1994 as Lecturer (until 2000) and then served as Assistant Professor (2000-2004), Tenured Assistant Professor (2004-2007), Associate Professor (2007-2012) and Professor (since 2012). He serves as Director of the Institute of Steel Structures since 2020. His academic 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 cable and membrane 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 of 191 diploma theses, 71 graduate theses as well as 10 completed and 8 ongoing Ph.D. theses. Several of the theses he has supervised have received awards from NTUA, the Technical Chamber of Greece, the Greek Metal Structures Research Society, the Greek Association of Computational Mechanics and the Hangai Prize Committee. Several of these theses have led to journal and conference publications. Several of his former students are now faculty members, including at École Polytechnique Fédérale de Lausanne (EPFL), Delft University of Technology (TU Delft), University of Cyprus, University of Western Attica, Hellenic Air Force Academy and other Greek Educational Institutions.

- 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. Participation in and direction of several research projects.
- Author of one book on deployable structures (in English), one book on nonlinear behavior of steel structures (in Greek), one book on applications of special issues in structural steel design (in Greek), one set of class notes on tension structures (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.
- According to search engine <u>Scopus</u> he has more than 2100 citations of his research work and a value of h-index equal to 27. From <u>Web of Science</u> he has more than 1500 citations and h-index equal to 23, while from <u>Google Scholar</u> more than 3900 citations and h-index equal to 35.
- 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).
- 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 and co-organizer of Greek and international conferences.
- Invited speaker at several Greek and international Universities.
- Invited speaker at continuing education seminars in several cities of Greece and Cyprus.
- Recipient of research awards by Fulbright Foundation and the British Royal Society.
- Fulbright Alumni Outreach Ambassador.
- Member of the Tsuboi Award Selection Committee.
- Member of the Isler Prize Committee.

PROFESSIONAL EXPERIENCE

- Collaboration with design offices and construction companies for structural consulting and design of a variety of projects including:
 - Design of 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.

BOOKS AND CLASS NOTES

• Gantes, C.J., "Nonlinear Structural Behavior - Emphasis on Metal Structures", Hellenic Academic EBooks, 2016 (in Greek).

https://repository.kallipos.gr/handle/11419/5318

• Vayas, 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-eidika-8emata-metallikwn-kataskeywn

- Gantes, C.J., "Deployable Structures Analysis and Design", WIT Press, Southampton, 2001. <u>http://www.witpress.com/978-1-85312-660-4.html</u>
- Gantes, C.J., "Design of Cable and Membrane Structures", NTUA class notes (in Greek).

EDITORSHIPS

• Lazaro, C. Domingo, A., Abel, J., Kawaguchi, K. and Gantes, C.J. (Editors), "Mamoru Kawaguchi -Innovation and Tradition is Structural Design", published by IASS International Association for Shell and Spatial Structures, 2021.

https://iass-structures.org/bookshop/#Mamoru_Book

• 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

PARTICIPATION IN COLLECTIVE VOLUMES

• IASS WG 8 for Metal Spatial Structures, "Guide to Buckling Load Evaluation of Metal Reticulated Roof Structures", International Association for Shell and Spatial Structures (IASS), 2014.

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<u>structures.org/resources/Documents/WG%20Publications%20and%20Reports/WG_08/Draft-Guide-to-</u> <u>Buckling-Load-Evaluation-of-Metal-Reticulated-Roof-Structures_WG08_v20180103.pdf</u>

• IASS WG 8 for Metal Spatial Structures, "Guide to Earthquake Response Evaluation of Metal Reticulated Roof Structures", International Association for Shell and Spatial Structures (IASS), 2019.

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BOOK CHAPTERS

• Gantes, C.J., "Fire Protection of Steel Structures", *Steel in Buildings*, Ktirion Editions, Thessaloniki, 2023.

• Melissianos, V.E. and Gantes, C.J., "Numerical Modeling Aspects of Buried Pipeline - Fault Crossing", *Computational Methods in Earthquake Engineering - Vol. 3*, edited by M. Papadrakakis, V. Plevris and N.D. Lagaros, Computational Methods in Applied Sciences 44, Springer Verlag, 2017.

doi: http://dx.doi.org/10.1007/978-3-319-47798-5_1

- Gantes, C.J., Bouckovalas, G.D., Melissianos, V.E. and Valsamis, A., "Pipeline Fault Crossing: Structural Considerations on the Use of Flexible Joints for Mitigating a Potential Failure", Jubilee Volume - Andreas Anagnostopoulos: 50 Years of Service at the National Technical University of Athens, pp. 127-139, Athens, 2015.
- Gantes, C.J., "Seismic Analysis of Steel Buildings: Numerical Modeling", *Encyclopedia of Earthquake Engineering*, edited by M. Beer, E. Patelli, I. Kougioumtzoglou and I. Siu-Kui Au, Springer Verlag, 2015.

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• Papageorgiou, A.V. and Gantes, C.J., "Mixed in-height Concrete-Steel Buildings under Seismic Actions: Modeling and Analysis", *Encyclopedia of Earthquake Engineering*, edited by M. Beer, E. Patelli, I. Kougioumtzoglou and I. Siu-Kui Au, Springer Verlag, 2014.

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• Pnevmatikos, N.G. and Gantes, C.J., "Actively and Semi-Actively Controlled Structures under Seismic Actions: Modeling and Analysis", *Encyclopedia of Earthquake Engineering*, edited by M. Beer, E. Patelli, I. Kougioumtzoglou and I. Siu-Kui Au, Springer Verlag, 2014.

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• Gantes, C.J., "Nonlinear Finite Element Analysis", *Encyclopedia of Earthquake Engineering*, edited by M. Beer, E. Patelli, I. Kougioumtzoglou and I. Siu-Kui Au, Springer Verlag, 2014.

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• Vassilopoulou, I. and Gantes, C.J., "Nonlinear Dynamic Response of MDOF Cable Nets Estimated by Equivalent SDOF Models", *Computational Methods in Earthquake Engineering, Computational Methods in Applied Sciences*, Vol. 30, edited by M. Papadrakakis, M. Fragiadakis and V. Plevris, Springer Verlag, pp. 345-379, 2013.

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• Gantes, C.J., "Numerical Evaluation of Ultimate Bearing Capacity of Steel Structures", *Civil and Structural Engineering Computational Technology*, edited by B.H.V. Topping and Y. Tsompanakis, Saxe-Coburg Publications, Chapter 8, pp. 219-242, 2011.

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• Gantes, C.J., "Deployable Structures", Fifty Years of Progress for Shell and Spatial Structures: 50th Jubilee of the IASS, edited by I. Mungan and J.F. Abel, pp. 373-390, 2011.

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 Gantes, C.J., "Nonlinear Structural Behavior, Analysis and Design of Deployable Structures", NATO Science Series, Series III: Computer and Systems Sciences, Vol. 179, Computational Aspects of Nonlinear Structural Systems with Large Rigid Body Motion, edited by J. Ambrosio and M. Kleiber, IOS Press, pp. 215-235, Jan. 2001.

https://www.iospress.nl/book/computational-aspects-of-nonlinear-structural-systems-with-large-rigid-body-motion/

JOURNAL PUBLICATIONS

• Ioannou, O., Rigoutsos, G., Vamvatsikos, D. and Gantes, C.J., "A Baseline Approach for Probabilistic Blast Risk Analysis of Building Cladding under External Explosions", *Structural Safety*, available online, 102472, 2024.

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• Gantes, C.J., Vernardos, S.M., Koulatsou, K.G. and Gül, S., "Nonlinear Finite Element Analysis of Tubular Steel Wind Turbine Towers near Man Door and Ventilation Openings to Optimize Design against Buckling", *Vibration*, Vol. 7(1), pp. 212-228, 2024.

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• Rossetos, I., Gantes, C.J., Kazakis, G., Voulgaris, S., Galanis, D., Pliarchopoulou, F., Soultanis, K. and Lagaros, N.D., "Numerical Modeling and Nonlinear Finite Element Analysis of Conventional and 3D-Printed Spinal Braces", *Applied Sciences*, Vol. 14(5), 1735, 2024.

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• Karvelis, A.C., Dimas, A.A, and Gantes, C.J., "Unsteady Numerical Simulation of Two-Dimensional Airflow over a Square Cross-Section at High Reynolds Numbers as a Reduced Model of Wind Actions on Buildings", *Buildings*, Vol. 14(3), 561, 2024.

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• Li, B., Peng, A.Q., Wang, M.S., Zhu, H.J., Rong, K. and Gantes, C.J., "Modeling and Analysis of Flexible Deployable Structure with Scissor-Like Elements Using a Novel Non-locking Beam Element", *Mechanika*, Vol. 29, No. 6, pp. 462–475, 2023.

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• 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.

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• 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.

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• 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.

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• Ioannou, O., Hadjioannou, M. and Gantes, C.J., "A 2DOF Method to Study the Influence of Cladding Characteristics on the Response of the Supporting Structure under Blast Loading", ASCE Journal of Structural Engineering, Vol. 148, Issue 12, 04022191, Dec. 2022.

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• Thanasoulas, I.D. and Gantes, C.J., "Analysis and Design of Steel Arches / Analyse und Bemessung von Stahlbögen", *Bauingenieur*, Vol. 97, Issue 4, pp. 91-98, 2022.

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• Li, B., Wang, S.-M., Gantes, C.J. and Tan, U.-X., "Modeling and Simulation for Wear Prediction in Planar Mechanical Systems with Multiple Clearance Joints", *Nonlinear Dynamics*, 2022.

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• Filograno, M.L., Piniotis, G., Gikas, V., Papavasileiou, V., Gantes, C.J., Kandyla M. and Riziotis, C., "Comparative Assessment and Experimental Validation of a Prototype Phase Optical Time Domain Reflectometer for Distributed Structural Health Monitoring", *Journal of Sensors*, Vol. 2022, Article ID 6856784, 2022.

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• Ioannou, O. and Gantes, C.J., "Membrane Action of Cladding Subjected to Blast Loading and Effects on the Supporting Structure", *Vibration*, Vol. 4, pp. 768-786, 2021.

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• 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.

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• 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.

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• Li, B., Wang, S.-M., Gantes, C.J. and Tan, U.-X., "Nonlinear Dynamic Characteristics and Control of Planar Linear Array Deployable Structures Consisting of Scissor-Like Elements with Revolute Clearance Joint", *Advances in Structural Engineering*, Vol. 24, Issue 7, pp. 1439-1455, May 2021.

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• 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.

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• Melissianos, V.E., Vamvatsikos, D. and Gantes, C.J., "Methodology for Failure Mode Prediction of Onshore Buried Steel Pipelines Subjected to Reverse Fault Rupture", *Soil Dynamics and Earthquake Engineering*, Vol. 135, 106116, August 2020.

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• Koulatsou, K.G., Kazakis, G., Gantes, C.J. and Lagaros, N.D., "Resonance Investigation and its Effects on Weight Optimization of Tubular Steel Wind Turbine Towers", *Procedia Manufacturing*, Vol. 44, pp. 4-11, 2020.

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• 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, December 2019.

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• 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, October 2018.

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• 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.

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• Vassilopoulou, I., Kaymenaki, V., Gantes, C.J. and Bouckovalas, G., "Criteria for Preliminary Design of an Arched Steel Bridge on Shallow Foundation under Soil Liquefaction Conditions", *The Open Civil Engineering Journal*, Bentham Open, Vol. 11, Suppl-5, M10, pp. 1170-1190, 2017.

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• Melissianos, V.E., Vamvatsikos, D. and Gantes, C.J., "Performance-Based Assessment of Protection Measures for Buried Pipes at Strike-Slip Fault Crossings", *Soil Dynamics and Earthquake Engineering*, Vol. 101, pp. 1-11, Oct. 2017.

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- Nikos Pnevmatikos (Jul. 2007), "Design of Steel Structures with Automatic Control Methods". http://dx.doi.org/10.12681/eadd/16903
- Minas Lemonis (Dec. 2006), "Beam to Column Joints in Steel Frames".

http://dx.doi.org/10.26240/heal.ntua.422

PARTICIPATION IN EDITORIAL BOARDS AND WORKING GROUPS

- CEN Project Team SC3/T11 of Part 3 of Eurocode 3 (Mandate M/515 phase 4 tasks for the development of the second generation of Structural Eurocodes) Member (2018-2022).
- Journal of the International Association for Shells and Spatial Structures (IASS Journal) Editor-in-Chief (since 2016).

- Frontiers in Civil and Environmental Engineering and Built Environment Member of the Editorial Board (since 2015).
- International Journal of Space Structures Member of the Editorial Board (since 2015).
- CEN Project Team SC3/T1 of Part 1-1 of Eurocode 3 (Mandate M/515 phase 1 tasks for the development of the second generation of Structural Eurocodes) Member (2015-2018).
- Working Group 8 of the International Association for Shells and Spatial Structures on Metal Spatial Structures (IASS WG8) Member (since 2012).
- SEI (Structural Engineering International) Correspondent for Greece (since 2010).
- ISCCBE (International Society for Computing in Civil and Building Engineering) Member of the Board (2008-2015).
- International Association for Bridges and Structural Engineering (IABSE) Member of the E-Learning Board (2007-2015).
- Advances in Structural Engineering, WIT Press (since 1998).

REVIEWER FOR INTERNATIONAL JOURNALS

International Journal of Space Structures, Zeitschrift für Angewandte Mathematik und Mechanik, International Journal of Solids and Structures, Computers & Structures, International Journal of Non-Linear Mechanics, Journal of the American Institute of Aeronautics and Astronautics, Mechanics Research Communications, Nonlinear Dynamics, International Journal of Impact Engineering, Japan Journal of Industrial and Applied Mathematics, Structural Engineering and Mechanics, Journal of Intelligent Materials, Systems and Structures, Journal of Engineering Mechanics, Journal of Structural Engineering, Journal of the International Association for Shell and Spatial Structures (IASS Journal), Journal of Sound and Vibration, Engineering Structures, Materials Today, Mathematical and Computer Modelling, Structure and Infrastructure Engineering, Soil Dynamics and Earthquake Engineering, IEEE Transactions on Aerospace and Electronic Systems, ISET Journal of Earthquake Technology, International Journal of Steel Structures, Journal of Pipeline Systems - Engineering and Practice, Advances in Structural Engineering, International Journal of Mechanical Sciences, Architectural Science Review, Arabian Journal for Science and Engineering, Journal of Civil Engineering of the Korean Society of Civil Engineers, Scientific Research and Essays, International Journal of Design & Nature and Ecodynamics, Bulletin of Earthquake Engineering, Steel and Composite Structures, Smart Structures and Systems, Journal of Mechanics of Materials and Structures, ASME Journal of Pressure Vessel Technology, Earthquakes and Structures, Structural Engineering International, Journal of Vibration and Control, Journal f Zhejiang University-Science A (Applied Physics & Engineering), Journal of Engineering Design, Scientia Iranica, Case Studies in Structural Engineering, American Journal of Engineering and Applied Sciences, Structures, International Journal of Pressure Vessels and Piping, Journal of Natural Gas Science & Engineering, Journal of Building Engineering, Renewable Energy, Structures and Buildings, Automation in Construction, Stahlbau, Mechanism and Machine Theory, Marine Structures, Applied Ocean Research, Journal of Natural Gas Science & Engineering, Journal of Facade Design and Engineering, Journal of Aerospace Engineering, Advances in Engineering Software, ASME Journal of Computational and Nonlinear Dynamics, The Structural Design of Tall and Special Buildings, Journal of Architectural Engineering.

PARTICIPATION OF FUNDED RESEARCH PROJECTS

- "AMOSS Additively Manufactured Optimized Steel Structures", Hellenic Foundation for Research & Innovation HFRI (2022-2025).
- "OrThOP3Dics Topology Optimization of 3D Printed Patient-Specific Spinal Braces", Search-Create-Innovate, Greek Secretariat of Research and Technology (2022-2024).
- "Investigative Works and Strategies for the Strengthening and Renewed Operation of Gkini Building in the Framework of Promotion of NTUA Patision Complex", National Technical University of Athens (2022-2023).
- "Technical Support Services for the Execution and Evaluation of Site Measurements to Assess the Structural Condition of the Steel Superstructure of the Greek Part of Pythion Railway Bridge", Greek Railway Organization (2021-2022).
- "ADDOPTML ADDitively Manufactured OPTimized Structures by means of Machine Learning", H2020-MSCA-RISE-2020 (2021-2025).

- "HP-OCP High Performance Holistic Computational Optimization Platform", Search-Create-Innovate, Greek Secretariat of Research and Technology (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 (2018-2021).
- "Lavrion Mines French Dock", contract between the Municipality of Lavrion and NTUA, budget 120,000.00€ (2018-2019).
- "OptArch Optimization Driven Architectural Design of Structures", H2020-MSCA-RISE-2015 (2016-2020).
- "Divas DIstributed Vibrational and Acoustic Sensing technology", H2020-MSCA-IF-2015 Marie Skłodowska-Curie actions (2016-2018).
- "Buckling of Large Diameter Steel Chimneys", CICIND International Committee for Industrial Chimneys (2015).
- "ELISSA Energy Efficient LIghtweight-Sustainable-SAfe-Steel Construction", FP7-NMP E2B (2013-2016).
- "ENSSTRAM Novel Design Concepts for Energy Related Steel Structures using Advanced Materials", Aristeia II program, Greek Secretariat for Research and Technology (2013-2015).
- "SeaWind Performance Based Engineering of Offshore Wind Turbines", Program of Bilateral R&D Greece-Chine Cooperation 2012-2014 (2013-2015).
- "BridgeCloud Model-Based Aeroelastic Analysis of Long-Span Bridges on the HPC Cloud", Eurostars Program (2013-2015).
- "AIOLOS Resolution of Complex Problems in the Analysis of "Next Generation" Wind Turbine Towers", Thalis program (2012-2015).
- "NAT-SEI-ISO Innovative design of bridge piers on liquefiable soils with the use of natural seismic isolation", Thalis program (2012-2015).
- "Nonlinear behavior of built-up steel columns", NTUA PEVE-2011 (2012-2013).
- "DeReStAr-Development of structural DEsign REcommendations for Steel ARches", Marie Curie Intra-European Fellowships (2009-2010).
- "Dynamic wind-cable interaction", NTUA PEVE-2007 (2007-2009).
- "Development of flexible E-learning platform for the application of the Eurocodes by design engineers", Leonardo da Vinci/NFATEC, funded by the European Commission (General Directorate EAC) (2007-2008).
- "Seismic design of mixed concrete-steel structural systems", PENED-2003, Greek Secretariat of Research and Technology (2005-2008).
- "Beam to column joints in steel frames", Heraclitus program, Greek Secretariat of Research and Technology (2004-2006).
- "Analytical and experimental investigation for the development of new and the improvement of existing methods for the design and strengthening against explosions of fortification buried in the ground", Greek Army (2004-2007).
- "Flexural-torsional buckling of homogeneous or composite bars with constant or varying crosssection of arbitrary shape", Pythagoras program, Greek Secretariat of Research and Technology (2004-2006).
- "A new and flexible approach for continuing education of engineers in the construction sector", Leonardo da Vinci/NFATEC, European Commission (General Directorate EAC) (2003-2004).
- "Educational exchange with Germany", Educational Exchange Program of 2003, Greek Secretariat for Education (2003).
- "Mobility and continuing education in Civil Engineering", Leonardo da Vinci, funded by the European Commission (General Directorate EAC), cooperation of research groups from Greece, Sweden and Romania (2001-2002).

- "Documentation and analysis of aging factors in buildings, influence on the bearing capacity and solutions", Foundation for the Advancement of Research of Cyprus (1999-2001).
- "Studies of dynamic instabilities and postcritical behavior of deformable systems", INTAS cooperation with research teams from Russia (1999-2001).
- "A safety study about explosives in the vicinity of natural gas transmission systems and a draft of safety rules", Greek Public Gas Corporation (DEPA) (1998).
- "Dynamics of multi-degree-of-freedom and continuous mechanical systems with application to aerohydroelastic systems and smart engineering structures", INTAS cooperation with research teams from Russia (1996-1998).
- "Seismic fragility of ancient monuments", Greece-Cyprus Research Cooperation (1996-1998).
- "Optimal design of smart structures", Greece-Italy Research Cooperation (1993-1995).
- "Eurocode No. 8 in the form of expert system", Council of Europe (1992-1993).

PROFESSIONAL AND SCIENTIFIC SOCIETIES MEMBERSHIP

International Association for Shells and Spatial Structures (member of the Executive Council), Greek Metal Structures Research Society (Vice-President), International Association for Bridges and Structural Engineering (member of the board of the Hellenic section), American Society of Civil Engineers, Structural Stability Research Council, Association of European Civil Engineering Faculties, Technical Chamber of Greece, Greek Society of Civil Engineers, Greek Society of Earthquake Engineering, Greek Association of Computational Mechanics, Greek Association of Theoretical and Applied Mechanics, Greek Scientific Society of Wind Engineering, Society for the Study of Ancient Greek and Byzantine Technology, Greek Scientific Society of Wind Energy.

SELECTED AWARDS AND FELLOWSHIPS

Fulbright Foundation scholarship for graduate studies, Alexander S. Onassis Foundation scholarship for graduate studies, MIT teaching and research assistantships, Fulbright Foundation senior research grant, British Royal Society Fellowship.

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).
- 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).
- Consultant for the 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 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).
- Consultant for the structural design of the industrial, storage and office facilities of STOP AEBE in Piraeus, Greece (2018).
- 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 with peripheral cables 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 three elevated stations in "Red Line South Elevated and at Grade" of Doha Metro, Qatar (2014-2018).
- 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 (2013-2014).
- Consultant for the detection of causes of large amplitude vibrations of wind turbine towers at the location Koryfi, in 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 (2011-2013).
- Consultant for the tender structural design of steel trestles, platforms and other harbour facilities in Vasilikos, Cyprus (2011).
- Structural condition assessment and seismic upgrading design of a power plant facility of the Public Power Corporation on the island of Syros, Greece (2011).
- Participation in the structural design of industrial facilities of "Hellas Gold" in Stratoni, Chalkidiki (2010-2011).
- Consultant for the seismic strengthening of the grandstand steel structures of the 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 a 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 50,000m² 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 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 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).

- Participation in the special working group set up by the Greek Ministry of Public Works to investigate the reasons and consequences of a failure due to fire in one of the cables of the cable-stayed Rion-Antirion Bridge (2005).
- Structural design of new steel roof for the replacement of an old one and strengthening design of reinforced concrete substructure in the 3,630m² repair base of the Athens Bus Company (2005).
- Structural design of 60m tall guyed tower for wind measurements (2005).
- Checking of structural and foundation design of three 49m tall wind turbine towers of type NEG-Micon 952 for a wind park in Xirolimni, Lasithi, Crete, Greece (2005).
- Foundation design of fourty one 44m tall wind turbine towers of type Vestas for a wind park in Panachaiko, Achaia, Greece (2004).
- Development of draft guidelines for the design of new and strengthening of existing fortification works that are buried in the ground, Infrastructure Division of the Greek Army (2004-2008).
- 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 of the structural design performed by S. Calatrava Design Office for the steel structure of Neratziotissa Railway Station (intersection of Metro Line 1, the Athens Suburbian Railway Line and Attiki Odos Highway) in Athens (2004).
- Checking and modification of the structural design performed by S. Calatrava Design Office for the steel structure of the Entrance Canopies of the Athens 2004 Olympic Complex (2003).
- Verification of existing carrying capacity and design of interventions for seismic strengthening of 2story 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. Soccer Stadium in Nea Philadelphia, Athens, Greece (2003).
- Participation in the verification of seismic performance of the Natural Gas Pipeline (Section Kipi-Alexandroupoli-Komotini) subjected to possible landslides and seismic fault activation, in Thrace, Greece (2003).
- Checking of structural design of space-truss steel towers of the Greek Navy on the island of Skyros, Greece (2003).
- Structural design of 50m tall guyed tower for wind measurements (2003).
- Checking of structural and foundation design of 53m tall wind turbine towers of type NEG-Micon of "TERNA Energy S.A." for a wind park in Servouni, Evia, Greece (2002-2003).
- 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).
- 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).
- Structural design of steel hangar for Nireas factory in Koropi (2002).
- Consultant for the tender structural design of the grandstands roof of the "Panpeloponisiakon" Stadium in Patra (2001-2002).
- Consultant for the tender structural design of the grandstands roof and lighting towers of the "Panthessalikon" Stadium in Volos (2001).
- 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).

- Evaluation of carrying capacity, modification and strengthening design of a 250 m tall guyed tower of the Greek Navy in Kato Souli, due to nearby construction of rowing facilities for the Athens 2004 Olympic Games (2000-2001).
- Seismic design of the "Thessaloniki-Skopia Oil Pipeline" in areas of potential faults and landslides (2000-2001).
- Structural design of steel structures carrying traffic signs and signals along National Highway No 1 (2000).
- Consultant of structural and foundation design of a pile system to support the facilities of the Lefkas island marina (2000).
- Design of a variety of technical works serving the Athens peripheral highway "Attiki Odos" (1999-2002).
- Consultant on the qualitative and quantitative assessment of the analysis and design against earthquake action of the underwater tunnel connecting Aktion and Preveza (1999).
- Design of a composite steel and reinforced concrete industrial building of "Feedus" in Patra (1998).
- Checking of structural steel connections capacity in new facilities of the Greek Refineries in Aspropyrgos (1998).
- Preliminary design of a 9-span composite bridge at the intersection of Athens-Patra and Athens-Thessaloniki highways (1998).
- Determination of reasons for excessive deflections of a 60 m span, Vierendel-type, steel pedestrian bridge over Kifisos River in Athens (1997).
- Checking of structural design of 40m to 65m high conical steel towers supporting wind generators made by Zond, subjected to wind and earthquake loads (1997).
- Participation in an investigation of the effects of a potential landslide on the pipeline of the Greek natural gas transmission system at location Antinitsa (1996).
- Design of a composite steel and reinforced concrete building of "VIANOX-Svolos" covering an area of 11,000m² in Mandra, Attica, Greece (1996).
- Loading specifications for the steel towers of the mobile radio system set up for the maintenance of the Greek natural gas transmission system (1995).
- Checking of structural design of the temporary and permanent structures for the stations Panormou, Attiki, Neos Kosmos, Analatos, Megaro Mousikis and Evangelismos of the new Athens subway system (1994-1997).
- Structural design of seawater purification station for electric power plant on the island of Kos (1994).
- Structural design of steel structure used as yoghurt storage facility of DELTA A.E. near Patra (1994).
- Structural design of steel structure used as extension of an existing reinforced concrete ice-cream factory of DELTA S.A. in Tavros, Attica (1994).
- Checking of structural design of reinforced concrete electric power plant on the island of Kos, redesign of some parts (1993-1994).
- Checking of load bearing capacity and structural strengthening design of composite steel-reinforced concrete storage facilities of K.A.L. S.A. in Peiraias (1993-1994).
- 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).

MILITARY SERVICE

Greek Airforce, 2nd Lieutenant, 1985-1987.

LANGUAGES

Greek (native), English, German.

REFERENCES

Available upon request.