

BIOGRAPHICAL SUMMARY

NAME	Panayotis Gr. CARYDIS	
PLACE & DATE OF BIRTH	Athens, 1940	
PROFESSIONAL TITLES	Civil Engineer since 1962	
NATIONALITY /	Greek	
TITLES & ACTIVITIES	<ul style="list-style-type: none">- Professor of Earthquake Engineering.- Professor Emeritus of the National Technical University of Athens since 2008.- Professor of Earthquake Engineering at the N.T.U.A, from 1977 until August 2007.- Founder and Director of the Laboratory for Earthquake Engineering of the N.T.U.A from 1978 until August 2007- Regular member of the European Academy of Sciences and Arts since 2004.- Vice President of the Institute of Engineering Seismology and Earthquake Resistant Structures from 2004 to 2011.- A' Vice President of the European Association of Earthquake Engineering, 2000÷2006.- Member of the Central Council for Newer Monuments by the Ministry of Culture 2000÷10.- Member of the Organization for the Construction of the New Museum of Acropolis since 2004.- President of the Non Governmental Organization "Centre for Risk Management Studies of Municipality of Athens" 2005÷11.- National delegate to the United Nations for the International Decade for Natural Disaster Reduction (IDNDR) 1990-2000 delivering the opening speech in the Yokohama world homonymous conference 2005.- Reserve officer of the Air Force of Greece 1962-1964 and 1973.	
KEY QUALIFICATIONS	<p>His subject of specialization is Engineering Seismology and Earthquake Engineering. Namely, he has experience on:</p> <p>Earthquake resistant design of structures. Repair and strengthening of structures against earthquakes. Microzonation studies of areas (populated or not). Earthquake resistant regulations. Earthquake Risk analysis of regions. Earthquake preparedness and Insurance. Dynamic testing and measurements-evaluation of dynamic response and of the earthquake vulnerability of structures. Earthquake and dynamic simulation of structures.</p>	
EDUCATION		
1962	M.Sc. in Civil Engineering, National Technical University, Athens Greece.	
1964 – 75	Attendance of more than 40 applied research seminars, and educational courses, around the world on the subject of his interest.	
1968	Doctor in Engineering (Earthquake Engineering Field, National Technical University of Athens).	
1968 – 70	Post Doctoral studies in the International Institute of Seismology and Earthquake Engineering, Tokyo, Japan. Member of the Advance Course of the same Institute with research and teaching duties.	
1975	Assistant Research Engineer at the Earthquake Engineering Research Center, University of California, Berkeley for a total of six (6) months	

DESIGN AND CONSULTING EXPERIENCE RECORD

1962-now: Owner and Head of the “Panayotis Gr. Carydis” Consulting Office and latter, from 1995, consultant to the “Carydis Partners, Earthquake Engineering, Consultants- Designers S. A.” He has designed numerous structures, tall buildings, house apartments, office buildings, hotels, National museums, auditoriums, factories, foundations and earth retaining structures in Greece and Abroad. Repair and strengthening of damaged buildings due to environmental hazards and due to earthquakes. Consultations, designs and issued specifications for various-mainly-special structures and subjects within his domain of specialization. Some of the structures of special characteristics he has designed are the Chalkis Shipyards (~50,000 m²), the Mytilini Archeological New Museum (~6,000 m²) on expanding soil, as well as the Thessaloniki Archeological Museum, which was especially designed and erected for housing the thesaurus of king Philippos-Macedonian metallurgy. He has also designed large Hotels and Shipyards of the Greek Yachting Club.

Other well-known cases of repairing and strengthening of structures are the following: the National Archeological Museum in Athens, (a medieval monument), the club of Military Officers in Athens (also a medieval monument), the club of Navy Officers in Crete, a great number of Hospitals some of which are the Central Eye Hospital (a medieval monument), the Elpis Hospital in Athens (a medieval monument), the Church of Presentation of the Virgin Mary in Aegion (a medieval monument) and St. Nicholas Church in Chalkis (a medieval monument).

After the Parnitha earthquake, the village of Ano Liosia was heavily destroyed. He proposed and his proposals were accepted to reconstruct 1200 independent houses on a special earthquake proof foundation system that he invented, designed and tested.

He has written the technical specifications, based on his preliminary designs, according to which the constructions for repair and strengthening of the Knight’s Palace of Rhodes ~1880 – 1940, (1986) and the Ancient Palaces of Michel and George in Corfu ~ 1820, (1993) have been carried out (stone masonry medieval monuments in which the convention of the European Committee’s Prime ministers took place respectively). He had performed the design for the new bridge connecting the Corfu historical town with old defence walls in replacement of the old one ~1920, (1993). He has carried out preliminary designs for the installation of Solar Power Stations (height of the central collector about 200 m) in numerous locations in Creta and Rhodes, within the project “Greek – German collaboration for the installation in Greece Solar Power Stations” under the Greek National Energy Administration, 1981.

Design of the existing static and earthquake capacity of the General Hospital at Syros Island (2010).

Design of the base isolation of the Historical hotel Mont Parnes in Parnitha (2010).

Pre-earthquake evaluation of about 5,000 office and school buildings around Greece (historical and not historical) 2000 – now.

Restoration – repair and strengthening of over 100 small to medium size historical buildings 1995 –2011.

Restoration – repair and strengthening of more than 1,000 non historical building 1985 – 2011.

Restoration – repair and strengthening of the Achillion Complex in Corfu, 2008-9.

Restoration – repair and strengthening of the Weiler building in Acropolis of Athens (~1830) 2009.

Tenth of expertises on structural and earthquake capacity of historical and modern structures as expert to the Public Property Organization (K.E.Δ.) (2004 – 2009).

Similar work for the Greek Touristic Estate Company (2005–2009).

Design of the static and earthquake capacity of the large Synodic Palace in Athens (2008)

Restoration – repair and strengthening of a historical factory of total area 10,000 m² in Nafplion (2008)

Restoration – repair and strengthening of the historical theater Phoenix Corfu (~1830-1840) (2008)

Structural design and supervision of the construction of a six storied commercial centre with six underground stories in the Centre of Athens, with a total area of 25,000 m² (2007 – 2008).

Structural design of the repair of an historical commercial building in the centre of Athens of a surface of about 4000 m² (~1910) due to foundation settlements (2009–2011)

Consultant to the supervising body for the rehabilitation of the National Theater (~1890) in Athens (2007–2010).

Measurements and evaluation of environmental vibrations in numerous historical buildings as f.e.: The Central Metropolitan Church (~1880) of Athens, The Central Eye Hospital in Athens (~1840), The Weiler building (~1830), The Ancient Palaces of Michel and George in Corfu (~1820), the Knights Palace of Rhodes (~1880–1940).

Member of at least eight (8) professional and scientific associations or societies (Technical Chamber of Greece, Association of Greek Civil Engineers, International Association of Earthquake Engineering, European Association of Earthquake Engineering, American Association for the Advancement of Science, Earthquake Engineering Research Institute, e.tc).

He is President of the Technical Council of the Ionian University since 2008.

He is Member of various engineering code–preparation committees since 1978.

He was Technical Consultant at the Municipality of Athens on earthquake protection and preparedness (2005–2010).

SCIENTIFIC CONTRIBUTION

He is the author or co-author of more than 150 scientific papers or books, on various subjects of Engineering Seismology and Earthquake Engineering. One of these reports is the: “The Central Greece Earthquakes of February-March 1981. A reconnaissance and Engineering Report”, published by the National Research Council and Earthquake Engineering Research Institute, National Academy Press, Washington, D.C. 1982, p.p. 160.

He is also the author, or co-author of more than 70 applied research reports, like microzonation studies, measurements of buildings and bridge vibrations etc.

He is the founder of the Laboratory for Earthquake Engineering and co-innovator of the 6 DOF Earthquake Testing Facility. This Laboratory was included at the “Large Installations” of the European Union program.

He has delivered more than 300 lectures on the subject in Greece and Abroad (Japan, El Asnam, Bulgaria, European Communities etc.), after a special invitation.

He has visited either as a member or leader of post earthquake reconnaissance engineering teams, many earthquake stricken areas (Tokachi-oki 1968, San Fernando 1971, Bucharest 1997, EL Asnam 1980, Thessaloniki 1978, Central Greece 1981, Kalamata 1986, Tirana 1988, Armenia 1988, Dynar-Turkey 1995, Cyprus 1995, Aegio 1995, Kozani 1995, Konitsa 1996, Turkey 1999, Athens 1999, Leukas 2003, Iliia-Achaia 2008, L’ Aquila 2009, Haiti 2010, Christchurch New Zealand 2011 etc.), Van-Turkey 2012, Emilia Romagna-Italy 2012, Fthiotida 2013, Cephalonia 2014, Nepal 2015.

He has undertaken numerous (more than 40) research Programs from national or European Committee resources (Large Facilities, H.C. and Mobility Environment).

THE LATEST 21 MOST IMPORTANT PUBLICATIONS

1. **Carydis P.**, Giannopoulos V., Athanasiou E., Lebesis N., (2013): "Seismic protection of monuments and historical buildings by a sustainable reduction system of the seismic input motion", COMPDYN 2013, 4th Eccomas Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Kos Island, Greece, 12-14 June.
2. **P. Carydis**, E. Lekkas, T. Kritikos, (2012): "The Mw 7.1 Sept 4 2010 and Mw 6.3 Febr 22 2011, New Zealand Eqs. Comparison of EMS1998 and ESI2007 Data", 15th WCEE, 190, Lisbon.
3. **Carydis P.**, A. Pomonis and K. Goda, (2012): "Fukushima Daiichi Nuclear Power Plant: A Retrospective Evaluation", 15WCEE, 24-28 Sept., Lisbon, Portugal.
4. **Carydis P.**, Castiglioni C., Lekkas E., Kostaki I., Drei A., Lebesis N., (2012): "The Emilia Romagna, May 2012 earthquake sequence. The influence of the vertical earthquake component and related geoscientific and engineering aspects", International Journal of Earthquake Engineering, Year XXIX, Vol. No. 2-3, April-September, p.p. 30-58.
5. **Carydis P.**, Lekkas E., Papaioannou C., Tsokos A., Delakouridis J., (2012): "The October 23 (MW = 7.2) and November 9 (MW = 5.7), 2011 Van, Turkey earthquakes. A geoscientific and engineering report", International Journal of Earthquake Engineering, Year XXIX, Vol. No. 1, January-March, p.p. 13-37.
6. **Carydis P.**, Lekkas E., (2011): "The Haiti Earthquake Mw=7.0 of January 12th 2010: structural and geotechnical engineering field observations, near-field ground motion and interpretation of the damage to buildings and infrastructure in Port-au-Prince area", International Journal of Earthquake Engineering, Year XXVIII, Vol. No. 3 – July-September, p.p.24-42.
7. **Carydis P.**, (2011): "A sustainable seismic input reduction system for monuments, for existing and new structures by creating large, stiff and strong foundations – practical applications", International Journal of Earthquake Engineering, Year XXVIII, Vol. No. 2 – April-June, p.p.7-24.
8. **Carydis P.**, A. Sali, A. Petsa, (2008): "Guidelines for the mitigation of earthquake hazards in industrial facilities", Editorial section of the Documentation and Information centre of the Greek Institute for Hygienic and Security in Laboratory, p.p 240.
9. Castiglioni C.A., H. Mouzakis and **P. Carydis**, (2006): "Constant and variable amplitude cyclic behavior of welded steel beam – to column connections", Journal of Earthquake Engineering
10. Elghazouli Ah, B. Broderick, J. Goggins, H. Mouzakis, **P. Carydis**, J. Bouwkamp and A. Plumier, (2005): "Shake table testing of tubular steel bracing members", Structures & Buildings, 158, Issue SB4, 229-241
11. **P. Carydis**,(2004). "The effect of the vertical earthquake motion in near field". 8th International Conference on Structures Under Shock and Impact, SUSI VIII, N. Jones & C.A.Brebbia (Editors), WIT Press, 267-282
12. Elghazouli Ah, B. Broderick, J. Goggins, H. Mouzakis, **P. Carydis**, J. Bouwkamp and A. Plumier, (2004): "Shake-table testing and seismic performance evaluation of bracing members", 13th WCEE, 2561, Vancouver.
13. Benedetti D., **P. Carydis** and M.P. Limongelli, (2002): "Evaluation of the seismic response of masonry buildings based on energy functions", Earthquake engineering and Structural Dynamics, 1681-1698
14. **Carydis P.**, (2002): "The vertical seismic component 'The Columbus' egg in earthquake engineering", 12th European Conference on earthquake Engineering.
15. Mouzakis H., I.N. Psycharis, D.Y. Papastamatiou, **P. Carydis**, C. Papantonopoulos and C. Zambas, (2002): "Experimental investigation of the earthquake response of a model of a marble classical column", Earthquake Engineering and Structural Dynamics, 31, 1681-1698.
16. Plakas A., J. Bouwkamp, **P. Carydis**, H. Mouzakis, (2002): "Composite Behaviour Under Quasi Static and Dynamic Loading" European Earthquake Engineering Vol. XVI, 31-39.

17. Lu Y., H. Hao, **P. Carydis** and Mouzakis H., (2001): "Seismic performance of RC frames designed for three different ductility levels", Engineering Structures, 23, 537-547.
18. Castiglioni C.A., C. Bernuzzi, **P. Carydis**, (2001): "Dynamic Behaviour of steel moment-resisting frames with a concrete slab on metal sheeting" Construzioni Metalliche, LII.n.3.
19. Benedetti D. and **P. Carydis**, (1999): "Influence of the vertical component on damage during shallow-near field earthquakes", European Earthquake Engineering, 3, 3-12.
20. **Carydis P.**, H. Mouzakis, D. Benedetti, P. Pezzoli, (1998): "Repair and strengthening of seismically damaged traditional buildings, proc. XI ECEE, Sept. 6-11, Paris, France.
21. Benedetti D., **P. Carydis**, P. Pezzoli, (1998): "Shaking table tests on 24 simple Masonry buildings", Earthquake Eng. And Struct. Dynamics, 27, 67-90.
22. **Carydis P.**, H. Mouzakis, G. Zhang, (1997): "Shaking table tests of Reinforced Concrete frames" European Commission – "Human Capital and Mobility" Programme PRENORMATIVE RESEARCH IN SUPPORT OF EUROCODE 8, Report No. 8, Part A, 7-132.

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