



Dr. Nick ZYGOURIS

Technical Chamber of Greece Nominated National Member Candidate for the Executive Council of WFEO for the year 2025 elections

Personal message to the WFEO GA

Dear Colleagues,

I represent a small country that has made a great contribution not only to human civilization but also to engineering development.

At present period the world is facing great challenges, and engineers have a major mission to face them. The pace of technological development is accelerating every day, demanding engineers to continuously update their skills and knowledge, being always the tip of the spear.

The role of engineering organizations is now more than ever demanding, since they are responsible for identifying the problems and then inventing and proposing solutions aimed at enhancing living standards, reducing inequalities and improving the overall quality of people's daily lives.

For these reasons, it's essential for all of us to collaborate, regardless of where we come from. Our goal is to motivate, to inspire and support engineers worldwide in embracing the challenges of this new era.

For these reasons, the **Technical Chamber of Greece** decided to participate in this initiative and nominated me as a candidate for the Executive Council of WFEO.

My mission is to contribute with all my efforts to promoting the engineering profession and to work for a better world.

Thank you! Dr. Nick ZYGOURIS Technical Chamber of Greece





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Short CV

Nick ZYGOURIS was born in 1968 in Greece. He graduated from the Civil Engineering Department of the National Technical University of Athens (1991). He holds an MSc degree from UMIST and a PhD from National Technical University of Athens specializing in the seismic design of reinforced concrete structures.

As the founder and key stakeholder of LITHOS Consulting Engineers, Dr. ZYGOURIS has led the design of numerous complex and large-scale projects, including metro stations, bridges, and industrial facilities, both in Greece and internationally.

He is also an adjunct Professor at the National Technical University of Athens (MSc Course on Management and Construction of Projects) and the School of Pedagogical & Technological Education, where he teaches concrete structures and bridge design.

In parallel with his professional activities, Nick ZYGOURIS has written several books and scientific papers in his field and has been an active member of various National and International scientific committees such as the Earthquake Planning and Protection Organization of Greece, the European Centre on Prevention and Forecasting of Earthquakes, the Federation International du Beton e.tc.

He was elected to the Executive Board of the Association of Civil Engineers of Greece in 2000 and served as President from 2010 to 2012.

He has served as member of the General Assembly of the Technical Chamber of Greece (TCG) and he has represented the Technical Chamber of Greece (TCG) in organizations such as the European Council of Civil Engineers (ECCE) and the Engineering Association of Mediterranean Countries (EAMC).

Athens 14-4-2025



Short Curriculum Vitae of **Dr. Nick Zygouris** Civil Engineer, MSc, PhD, PE

Personal Data	Date of birth: 26.09.1968 Place of birth: Komotini, Greece
Contact details	Address: 34 Anagirountos Av., 16672, Vari, Greece
	Phone: +30-6944-414079
	Email: NSZ@lithos.com.gr
Education	PhD National Technical University of Athens
	Laboratory of Reinforced Concrete Structures, National Technical University of Athens (2021)
	Master of Science in Structural Engineering
	University of Manchester Institute of Science and Technology (1992)
	Civil Engineering Diploma
	National Technical University of Athens (1991)
	Computer Analysis and Programming
	Hellenic Centre of Productivity (1988)
Academic	National Technical University of Athens (NTUA)
	Position: Adjunct professor
	MSc Course, Management and Construction of projects
	School of Pedagogical & Technological Education
	Position: Adjunct professor
	Course: Special topics on reinforced concrete.
	Reinforced concrete
	Repair and strengthening of concrete structures

Bridge structures

Professional Experience	LITHOS Consulting Engineers
	Position: Manager and Director
	Consulting company on the subject the structural and seismic design, supervision and management of civil engineering projects such as complex structures, rehabilitation of old monumental buildings, steelwork and concrete structures - <u>www.lithos.com.gr</u>
	Professional certification
	Professional Engineer, Technical Chamber of Greece
	Officially registered Engineer with the Class C degree as structural designer in the Public Works Consulting Record
Languages	Greek (Native)
	English (Very Good)
	French (Working Level)
Scientific committees and organizations	Earthquake Planning and Protection Organization of Greece
	Momber of the eclentific committee for the emploation of
	Member of the scientific committee for the application of the Greek Seismic Design Code (2004 – today)
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National organizations	Association of Civil Engineers of Greece (ACEG)
	Elected member of Board (2000-2012)
	President (2009-2012)
	Technical Chamber of Greece
	Elected member of the General Assembly (2012-2016)
	Member of the Special Technical Committee of Mechanics, (2000-2012)
	Greek Cadastre Organization
	Executive Vice President (2012-2015)
International organizations	European Council of Civil Engineers (ECCE)
	National representative in General Assembly (2000- 2014)
	Elected member of Executive Board (2012-2014)
	Engineering Association of Mediterranean Countries (EAMC)
	Elected member of the Executive Board (2020-today)
	President of the working committee of Construction & Infrastructure (2016- 2020)
	Engineers EUROPE
	Member of the Hellenic National Monitoring Committee
	(2020- today)
Research	National Technical University of Athens, 1995
programs	Title: "Automatic design and seismic analysis of reinforced concrete structures according to the new codes"
	Greek Ministry of Education and Religion, 2014
	Title: "Software development for the assessment of reincorced concrete structures using modern methods"
Scientific Books	 «Practical Manual for Construction», Verlag Dashofer, 2006
	 Hummar G, Zadnik B., Zygouris N., «Civil Engineering Heritage», European Council of Civil Engineers (ECCE), 2009
	• «Technical Directive 1: Concreting under with low environmental temperature», ed. Association of Civil Engineers of Greece, 2011, (member of editorial board)

•	«Technical Directive 2: Concreting under with high environmental temperature», ed. Association of Civil Engineers of Greece, 2011, (member of editorial board)
	«Technical Directive 3: Concreting under with normal environmental temperature», ed. Association of Civil Engineers of Greece 2012, (member of editorial board)
	«Technical Directive 4: Concrete Floors», ed. Association of Civil Engineers of Greece, 2013, (member of editorial board)
	«Technical Directive 5: Self-Compacting Concrete», ed. Association of Civil Engineers of Greece, 2014, (member of editorial board)
	«Technical Directive 6: Concrete Durability», ed. Association of Civil Engineers of Greece, 2015, (member of editorial board)
	«Technical Directive 7: Corrosion of steel reinforcement», ed. Association of Civil Engineers of Greece, 2016, (member of editorial board)
•	«Technical Directive 8 : Repair of concrete cracks », ed. Association of Civil Engineers of Greece, 2019, (member of editorial board)
·	McCarthy T.J., Zygouris N ., Lamb M.R., "Learning through Computer Assisted Design and Detailing of Reinforced Concrete Beams", Developments in Artificial Intelligence for Civil & Structural Engineering, Topping, B (Ed), Civil Comp. Press, 1995, pp 247-253.
	Chronopoulos M., Zygouris N. , "Problems of seismic design of traditional buildings, examples of rehabilitation and strengthening", One day Seminar Seismic Design of traditional Buildings», Athens, December 2008.
	Chronopoulos P., Zygouris N., Asteris P., "Investigation-Documentation and Aspects of Seismic Assessment and Redesign of Traditional Masonry Buildings in Greece", EACS 2012 – 5th European Conference on Structural Control, Genoa, Italy – 18-20 June 2012.
	Chronopoulos P., Zygouris N. , Panagiotakos T., "Secondary structural elements in new and existing buildings", Journal of the Association of Civil Engineers of Greece No. 403, July-August 2012
•	N.St.Zygouris , <u>G.M. Kotsovos</u> , <u>M.D. Kotsovos</u> , " <u>Effect</u> of transverse reinforcement on short structural wall <u>behaviour</u> ", Magazine of Concrete Research, July 2013, Vol. 65(17), pp.1034 –1043

- **N.St.Zygouris**, <u>G.M. Kotsovos</u>, <u>D.M. Cotsovos</u>, <u>M.D.</u> <u>Kotsovos</u> "Design for earthquake-resistant reinforced concrete structural walls", Mechanica 2014
- **N.St.Zygouris**, <u>G.M. Kotsovos</u>, <u>M.D. Kotsovos</u> "Design for earthquake-resistant short RC structural walls", (to be published)
- Chatzipanos P., Lykouropoulos L., <u>Zygouris</u> N. <u>"Complexity in Projects of Greek State Reforms:</u> <u>National Cadastre</u>", 2014 PMI Global Congress Proceedings, At Phoenix, Arizona, USA
- G.M. Kotsovos, **N.Zygouris**, "Reinforced concrete frame analysis with mode of failure prediction capability", Magazine of Concrete Research, Dec 2017
- Ali Benzaamia, Mohamed Ghrici, Redouane Rebouh, Nikos Zygouris, Panagiotis G. Asteris (2024) "Predicting the shear strength of rectangular RC beams strengthened with externally bonded FRP composites using constrained monotonic neural networks", Engineering Structures 313 (2024)
- E.Koutras, **N. Zygouris**, K.Repapis, A. Drougkas, K.Pilakoutas, P.Asteris "Shear strength of reinforced concrete beams without stirrups by using Machine Learning", 19th Hellenic Concrete Conference, Thessaloniki, 2024
- A. Zeyad, A. Mahmoud, A. El-Sayed, A. Aboraya, I. Fathy, **N. Zygouris**, P. Asteris, I. Agwa, "Compressive strength of nano concrete materials under elevated temperatures using machine learning", Scientific Reports 14 (1), 24246
- A. Mahmoud, A. El-Sayed, A. Aboraya, I. Fathy, **N. Zygouris**, A.Sadollah, B. Tayeh, P. Asteris, "Synergizing machine learning and experimental analysis to predict post-heating compressive strength in waste concrete", Structural Concrete 2025; pp 1–35.
- P. Asteris, D. Armaghani, A. Gandomi, A. Mohammed, Z. Bousiou, I. Batsis, N. Spyridis, G. Karavalakis, A. Vardi, E. Yannaki, L. Triantafyllidis, E. Koutras, N. Zygouris, G. Drosopoulos, N. Fountas, N. Vaxevanidis, A. Bardhan, P. Samui, G. Hatzigeorgiou, J. Zhou, K. Leontari, P. Evangelidis, I. Sakellari, E. Gavriilaki, "Pretransplant and Transplant Parameters Predict Longterm Survival after Hematopoietic Cell Transplantation Using Machine Learning", Transplant Immunology, Volume 90, May 2025