

Seferoglou, Konstantinos Civil-Geotechnical Engineer- Consultant, M.Sc.

Date of birth 23/08/1956

Nationality Greek



Language skills / linguistic proficiency

Mother tongue / native language Greek

Foreign Language	Language	Read	Speak	Write
	English	Excellent	Excellent	Excellent

Studies

Degree Award 1982

Academic Institution **RENSSELAER POLYTECHNIC INSTITUTE- R.P.I., (USA)**

Degree as Master of Science Degree in Civil Engineering

Degree Award 1979

Academic Institution **UNIVERSITY OF PATRAS, POLYTECHNIC SCHOOL, Department of Civil Engineering, (GREECE)**

Degree as Diploma in Civil Engineering (5 Years Curriculum Equivalent to Master's Degree)

Further qualifications

- American Society of Civil Engineers (ASCE), Member.
- International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), Member.
- International Association of Bridge and Structural Engineers (IABSE), Member.
- International Geosynthetics Society (IGS), Member.
- International Society of Rock Mechanics (ISRM), Member.
- Technical Chamber of Hellas-Greece (TEE), Member.
- Hellenic (Greek) Society of Soil Mechanics and Geotechnical Engineering (HSSMGE), Member.
- Hellenic (Greek) Society of Tunnelling and Underground Works (part of ITA), Member.
- Registered Civil Engineer in the Engineering Registry of the Greek Infrastructure Ministry.
- Registered Civil Engineer - Qatar Engineering & Consulting Offices Accrediting Committee - Expert Status.

Result-driven Civil Engineer & Geotechnical Expert with long (40years), experience and activity; able to combine a unique blend of formal engineering education with a solid, hands-on background in the civil – geotechnical engineering industry. Possess extensive geotechnical and structural experience in transportation infrastructure projects, geotechnical consulting, construction follow-up and value engineering. Led the design and consulting firm (www.odotechniki.gr) for over 25 years in providing functional, technical, and operational guidance to multiple geotechnical and structural activities; initiated, guided and reviewed detailed final designs of numerous tunnels, geotechnical works and bridges amongst various other projects.

Professional Development

- 12/1979 – present Civil & Geotechnical Engineering Consultant, M.Sc.
- 04/2014 – 10/2018 DEUTSCHE BAHN ENGINEERING & CONSULTING,GmbH, Qatar
Civil Engineer - Geotechnical Expert working with QATAR RAIL-Technical Department Civil (TDC)/QIRP
- 01/1991 – 03/2014 ODOTECHNIKI LTD-Consulting Engineers, Greece
Managing Director & Senior Partner
- 12/1994 – 12/1998 ODOTECHNIKI LTD-Consulting Engineers,Greece
Managing Director & Senior Partner.
Leader of Geotechnical&Structural Consulting Team for ATTIKO METRO SA,
(Company for Constructing and Operating Athens Metro).
- 04/1985 – 01/1990 Ministry of Public Works, Greece
Geotechnical Engineer for the Department of Bridges and Road Works
- 12/1983 – 04/1985 Geoerevna S.A., Greece
Geotechnical Engineer
- 12/1982 – 08/1984 Army Corps of Engineers, Greece
Civil Engineer
- 12/1979 – 12/1982 Domiki Ltd, Greece
Partner-Civil Engineer

Professional Experience

- 04/2014 – 10/2018 **DB ENGINEERING & CONSULTING, Qatar**
Doha metro-Geotechnical Expert working with QATAR RAIL-Technical Department Civil
 - Reviews geotechnical designs for , (a) deep excavations,(b) tunnels, (c) earthworks related with the Phase 1 Metro lines under construction in Doha.
 - Performs independent analysis and checks to support the decision making of the client (QATAR RAIL), on Geotechnical issues.
 - Evaluates proposals for Geotechnical investigations and supports Structural Engineers on Ground-Structure Interaction issues.
 - Evaluates monitoring results and proposes mitigation measures.
 - Reviews Building Risk Assessment reports along the lines.
 - Participates in workshops with the contractor to improve program delivery.
 - Participates in the preparation of tender designs and tender documents for the Long Distance Railway.
 - Participates in the preparation of tender documents for the Phase 1a of Doha Metro extension.
 - Participates in the preparation of tender designs and tender documents for the Red Line North Extension of Doha Metro.
 - Participates in the evaluation and review of third party developments for permitting requests.
 - Supports Alignment Department for technical interface issues with third party projects (Ashghal,etc.).

■ 01/1991 – 03/2014

ODOTECHNIKI LTD-Consulting Engineers, Greece
Managing Director & Senior Principal

Tsakona 390m Arch Bridge – J/V Alpine Bau GmbH-TERNA S.A, (2010-14)
(www.terna.gr)

- Design Lead. Project designed to overpass a major landslide in South Peloponnese Highway. Duties included the Structural and Geotechnical design of the infrastructure to support and monitor the construction stage as well as to provide continuous consulting for the J/V on the Geotechnical Risks related to the slide during the construction. (Constructed/Operational)

High Speed Railway (Korinthos to Patras), ERGOSE S.A.(2003-06)
(www.ergose.gr)

- Design Lead. Scope of the project included the structural and geotechnical design of 40Km southern high speed railway from Korinthos to Patras harbor. Design included 5 Railway Bridges(up to 200m), 14 Underpasses, 2 Railway Tunnels(900m & 600m), 4 Cut & Cover structures (top down), deep excavations, 18 retaining structures,Foundation and Earthworks designs. (Constructed).

Derveni Slope Failure Analysis-Monitoring and Stabilization Works,(2012-13), Southern Peloponnese, Greece, J/V MOREAS.

- Design Lead. Project included the Geological,Geotechnical & Structural activities and design to investigate, analyse and stabilize a major slide along the National Road.(Constructed/Operational).

River Asopos Dam in Peloponnese Diversion Tunnel,IONIOS S.A.(2011-12)

- Design Lead. Project included the Geotechnical & Structural detailed design of the river 310m diversion tunnel and a 50m deep ventilation shaft for the construction of the dam.(Constructed).

Tripoli - Kalamata Highway, J/V Alpine Bau GmbH-TERNA S.A (2007- 10).
(www.terna.gr)

- Design Lead. Project involved complete Geological/Geotechnical & Structural design, construction follow up, geotechnical instrumentation programming and evaluation of 20km long highway. Also included a 500m twin bridge, overpass and underpass bridges, a 120m twin cut & cover, several high reinforced embankments design and monitoring, retaining structures, slope stability works,rockfall protection systems, hydraulic tunnels rehabilitation and strengthening design. (Constructed/Operational)

Igoumenitsa-Preveza (National road), Ministry of Infrastructure (2008-13).

- Design Lead. Scope of the project was to upgrade existing roads leading to the harbor of Igoumenitsa (main link to Italy). Project includes geotechnical-structural design of bridges, special retaining structures, foundations, high embankments, cuts, landslides rehabilitation, and soil improvement. (Constructed/Operational).
- Despo Massive Landslide. Design Lead. Project included the Geological,Geotechnical & Structural activities and design to investigate, analyse and stabilize a major slide along the National Road.(Constructed/Operational).

Egnatia Odos (Highway), (1996 to 2010).(www.egnatia.gr)

- Design Lead. Egnatia Highway is a 700km long road in Northern Greece part of the highway connecting Istanbul to the Western Europe. Led the Geotechnical and Structural design of 10 Road Tunnels over 10000m in total length, cut & covers, special retaining structures, embankments, cuts, slope stabilization works, and bridges. (Constructed/Operational).
- Thessaloniki External Peripheral Highway,EGNATIA ODOS S.A.(2008 – 10).Design Lead.Project designed for external peripheral expressway for the city of Thessaloniki. Geotechnical-Structural design of two 1500m long tunnels, and 500m long cut & covers, special retaining structures, were amongst the duties.(Designed)

Athens-Thessaloniki Highway, Ministry of Infrastructure (2005 – 07).

- Design Lead. Project included development of a 25km central highway to bypass the town of Stylida, in Greece. Led the project right from inception to the final design of 18 bridges, 3 twin tunnels (total length of 3500m), and retaining structures. (Constructed/Operational).

Ancient Olympia Ring Road, J/V Alpine Bau GmbH-TERNA S.A, (2001-04).

- Design Lead. Project included 5 cut & cover tunnels, roads and railway bridges, embankments, cuts, retaining walls and culverts. (Constructed /Operational)

Attiki Odos (Athens Peripheral Expressway),(1993 – 2000).(www.aodos.gr)

- Design Lead. Project included Structural and Geotechnical Design of 10 bridges(60 to 110m), 2 major cut & cover projects combined with urban redevelopment works, retaining walls, underground constructions, deep excavation and foundations. (Constructed/Operational).

■ 12/1994 – 12/1998

ATHENS METRO-Leader of Geotechnical/Structural Consulting team to Attiko Metro SA (www.ametro.gr)

- Geotechnical & Structural Consulting Services to support the **ATTIKO METRO S.A.** during the construction of lines 2 & 3 of the Athens Metro. Work included design reviews, and independent analysis & checks for underground works including tunnels, stations and ventilation shafts. (Constructed/Operational).

■ 04/1985 – 01/1990

Ministry of Public Works, Greece

Geotechnical Engineer for the Department of Bridges and Road Works

- Specialist Geotechnical Engineer, responsible for performing geotechnical analysis, check/review geotechnical designs and calculations for bridge projects, tunnelling, embankments, and cuts.
- Evaluated proposals for Geotechnical investigations campaigns, and supported structural engineers.
- Assisted in the coordination and control of the operating and capital improvement budgets; evaluated development plans and schedules for long-range Public Works projects.

Curriculum vitae

- 12/1983 – 04/1985 **Georevna S.A., Greece**
Geotechnical Engineer
 - Appointed by Georevna S.A. to be a part of their geotechnical design and investigation team. Projects included Geotechnical investigations for Buildings, Bridges, Dams, etc.
- 12/1982 – 08/1984 **Army Corps of Engineers, Greece**
Civil Engineer
 - Served as a Civil Engineer in several positions of Hellenic Army Designing and Supervising Construction of Military Installations.
- 12/1979 – 12/1983 **Domiki Ltd – Design Office**
Civil Engineer
 - Design Office for house and office buildings structural design and permitting.

Civil Engineering & Geotechnical Expertise

Tunneling, Cut & Cover and Metro Works:

- ✓ Directed, planned and designed more than 15000m of road, railway and hydraulic tunnels including the design of excavation and support, final lining, portals, shafts and escape tunnels. (Egnatia Highway, Central Highway, Peloponnesus High-Speed Railway, Asopos Dam, etc.). Led the design of structural and geotechnical repair and strengthening of water tunnels and conduits.
- ✓ Led Consulting Services for Athens Metro Lines 2&3.
- ✓ Participates in design review and management as expert by the client for DOHA METRO.
- ✓ Led the design of numerous Cut and Cover projects.

Technical Consulting Services in Geotechnical & Structural Projects

- ✓ Head the of the Geotechnical Consulting Team (1994-98) for Athens Metro(ATTIKO METRO S.A., 1994-1998).
- ✓ Head of consulting for TERNA S.A. & AKTOR S.A. for Tripoli-Kalamata Highway (2006-to 2015).
- ✓ Head of consulting services for various projects of the Ministry of Public Works & Egnatia Odos S.A. (1997-2010).

Earth work design:

- ✓ Design head for high reinforced embankments, embankments on soft soil, ground improvement, high cuts design in soil or rock, slope protection and support, rock fall protection systems, erosion control systems, repair of damaged embankments or cuts.

Slope stability& Land Slides rehabilitation & Monitoring:

- ✓ Head of Slope Analysis and Design, Slope failure investigation, assessment, rehabilitation and support.

Value Engineering & Construction Follow Up:

- ✓ Led several expert consulting in close cooperation with contractors and J/Vs , to support design optimization, value engineering solutions and construction follow up operations.

Bridges Foundation design:

- ✓ Led foundation Geotechnical design of bridges including deep foundation.

Retaining Structures:

- ✓ Design head for retaining structures (pre-stressed anchored walls, cantilever pile walls, strut supported pile walls, simple gravity walls, slope supporting structures, deep excavation retaining structures).

Geotechnical Instrumentation Design & Assessment

- ✓ Design head for geotechnical instrumentation programs to monitor active slope failures, retaining structures, etc. State of the art Automatic Continuous Monitoring Systems proposal, installation and assessment.

Publications

- Michalis, I, **Seferoglou, K.**, Geotechnical challenges encountered during the design and construction of Doha Metro, an underground project of mega scale. 8th Hellenic Conference in Geotechnical Engineering, Athens, November 2019.
- **Seferoglou, K.**, Vassilopoulou, I., Chrysohoidis, F. Geotechnical and Structural Challenges over an Active Landslide, International Journal of Geoengineering Case Histories, Vol. 4, Issue 3, March 2018.
- I. Vassilopoulou and **K. Seferoglou**, "Design of temporary deep foundation and monitoring for the erection of an arched bridge over an active landslide", 5th International Workshop on Design in Civil and Environmental Engineering, Sapienza University of Rome, October 2016.
- **Seferoglou, K.** and Chrysohoidis, F., "Bridging over Tsakona Landslide, Geotechnical challenges and management of geotechnical risk during construction", Hellenic Society of Soil Mechanics & Geotechnical Engineering, Vol.88, March 2016.
- **Seferoglou, K.** and Vasilopoulou, I., "Bridging over Tsakona Landslide, Geotechnical and structural design of piers within the sliding soil mass", Hellenic Society of Soil Mechanics & Geotechnical Engineering, Vol.89, April 2016.
- **Seferoglou, K.**, Prountzopoulos, G., Chrysochoidis, F., Fortsakis, P., Vasilopoulou, I. and Perleros, V. "Rehabilitation of a Landslide in NW Greece – From the Investigation to the Geotechnical Design". Proceedings of the 15th European Conference on Soil Mechanics and Geotechnical Engineering "Geotechnics of Hard Soils – Weak Rocks", (ECSMGE), Athens, Greece, 12-15 September 2011, Vol. 3. pp. 435-440.
- Vassilopoulou I., **Seferoglou K.** and Vayas I. "Composite railway Underpass Bridge in the Tripoli - Megalopoli Highway". Proceedings of the 6th National Conference on Metal Structures, Ioannina, Greece, 2-4 October 2008, Vol. 1, pp. 418-425.
- **Seferoglou, K.**, Ntoulis, G., Alexiadou, M., Perleros, V., Kavvadas, M. and Mihalidis, I. "Tunnels of Section 5.1 in gneiss rocks". Scientific Meeting: "The Tunnels of Egnatia Odos", Ioannina, Greece, 15-16 October 1999.
- Kavvadas, M., Psicharis, I. and **Seferoglou K.** "Nonlinear finite element analysis of the excavation of an underground station for the Athens METRO". Proceedings of the 3rd Hellenic Conference on Geotechnical Engineering, Patras, Greece, 20-22 March, 1997, Vol. 2, pp. 161-168.
- Kavvadas, M., Hewison, L.R., Laskaratos, P. G., **Seferoglou, K.** and Mihalidis, I. "Experiences from the construction of the Athens Metro". Proceedings of the International Symposium "Geotechnical Aspects of Underground Construction in Soft Ground", City University, London, United Kingdom, 15-17 April 1996, pp. 273-278.
- **Seferoglou, K.** and Laskaratos, P. "Geotechnical Design of Dangerous Waste Disposal Sites". Proceedings of the 1st Hellenic Conference on Geotechnical Engineering, Athens, Greece, 3-5 February 1988.
- Laskaratos, P. and **Seferoglou, K.** "Systematic Analysis OF Liquefaction Potential". Proceedings of the 1st Hellenic Conference on Geotechnical Engineering, Athens, Greece, 3-5 February 1988.