# Dr A. Grammatikopoulou
# Dipl. Eng. MSc DIC PhD CEng MICE
# Senior Partner

**Areas of expertise**
Advanced constitutive modelling and numerical analysis, Soil characterisation, Impact assessments, Slope stability assessments, Mine waste disposal.

**Experience with GCG**
Dr Grammatikopoulou joined GCG in 2004 and became a Senior Partner in 2021. Following on from her PhD work at Imperial College, on the constitutive modelling of stiff overconsolidated clays, she has developed an expertise in soil characterisation, advanced constitutive modelling and numerical analysis.

Since joining GCG she has undertaken finite element analyses of complex geotechnical problems, including foundations (onshore and offshore), retaining walls, deep excavations, tunnels, dams and embankments. In many of these projects she has led the derivation and calibration of parameters for sophisticated constitutive models covering a variety of soil conditions. Examples of offshore foundation projects include her work on monopile foundations for a number of offshore wind farms in the Irish and North Sea, as well as the installation of spudcans. Major onshore projects include London's Crossrail bored tunnels and an embankment dam at Abingdon (South-East England). She has also aided GCG's work in expert witness legal cases.

Dr Grammatikopoulou has managed site investigations, including specification, supervision and interpretative reporting and provided advice on geotechnical issues and design for projects in the UK and abroad. She has worked on slope stabilisation for embankments on soft and stiff clays and over the last years has been working extensively on mine waste disposal.

Dr Grammatikopoulou has project managed and technically led many projects, including deep basements for prestigious redevelopments in London and projects related to the effects of excavation and construction on existing London Underground Limited, Network Rail and Thames Water tunnels. As part of the Bank Station Capacity Upgrade project she has technically led the Phase 3 building damage assessments for all the heritage buildings. Further assessment work included the effects of the Tottenham Court Road Station Upgrade and the combined effect of the Victoria Station Upgrade and the adjacent Land Securities Nova Victoria project, on existing LUL tunnels.

Dr Grammatikopoulou has published a number of journal and conference papers on soil constitutive models and their application in boundary value problems, including tunnels, retaining walls, embankments and offshore foundations. She has also been acting as a reviewer for journal publications.

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GEOTECHNICAL CONSULTING GROUP

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**Areas worked**
UK, Spain, Serbia, Australia, Greece, Brazil

**Previous experience**
Prior to joining GCG, Dr Grammatikopoulou was a member of the Soil Mechanics research group at Imperial College. Initially she was a research student and thereafter was employed as a Research Assistant in the Department of Civil and Environmental Engineering. Her research focused on the study of elasto-plastic constitutive models for clays. As part of her work, two kinematic hardening models were improved, two new models were developed, and all four were implemented into the finite element code ICFEP. Dr Grammatikopoulou applied the models in the analyses of two problems, an embankment founded on a soft clay deposit and the construction of tunnels within the stiff London Clay. The latter part of the project included finite element analyses of the twin tunnels constructed at St. James's Park, London, as part of the Jubilee Line Extension. Dr Grammatikopoulou was awarded her PhD degree in August 2004.

Between 1998 and 1999 Dr Grammatikopoulou completed her MSc degree on "Soil Mechanics and Engineering Seismology" at Imperial College from which she graduated with distinction. Her dissertation investigated the effect of soil anisotropy on the behaviour of sheet pile retaining walls and involved finite element analyses using ICFEP. For this work she was awarded the Soil Mechanics Prize for the best MSc dissertation.

From 1993 to 1998 Dr Grammatikopoulou studied Civil Engineering at the Aristotle University of Thessaloniki, Greece, where she graduated as the top student. During the summer of 1997 she worked through IAESTE (International Association for the Exchange of Students for Technical Experience) for "Ingenieria del Suelo" in Madrid, Spain.

**Education/Research**
PhD and DIC, Imperial College, London, 2004
MSc (Distinction) and DIC, Imperial College, London, 1999
Diploma of Engineering, Aristotle University of Thessaloniki, 1998

**Awards**
Imperial College Soil Mechanics Prize, 1999
Greek State Scholarship for Top Student 1998, 1997, 1996, 1995
Award of the Greek Chamber of Civil Engineers (TEE) for top student 1998, 1997, 1996

**Qualifications & Memberships**
Member of the Institution of Civil Engineers (ICE)
Member of the Greek Chamber of Civil Engineers (TEE)
Member of the British Geotechnical Association (BGA)

**Service on Technical/Professional Committees**
BGA Executive Committee, 2015-2018

**Languages (other than English)**
Greek