

Dr A. Gasparre Dott. Ing. PhD DIC CEng FICE Senior Partner

Areas of expertise

Mechanical and geotechnical soil characterisation, laboratory testing, small strain behaviour of stiff clays, excavations, ground movements, deep and shallow foundations, slope stability.

Experience with GCG

Dr Gasparre joined GCG in January 2006, becoming an Senior Partner in 2021. She has a wide experience in geotechnical engineering that ranges from soil characterisation to design of foundations.

The work conducted during her PhD has allowed her to develop an expertise on sampling, soil characterisation and advanced laboratory testing, including the use of high resolution instrumentation, which she has applied on a variety of onshore and offshore projects in the UK and abroad. She has designed, supervised and interpreted a number of site investigations and field and laboratory tests to derive soil parameters for the numerical modelling and the design of foundations and slopes in high profile projects, including Crossrail and HS2.

She has a vast experience on redevelopments in urbanised areas also including the reuse of existing foundations. She has carried out assessments of ground movements associated with construction projects and their potential for damage on buildings and tunnels; she has designed and back-analysed piles and retaining walls and has carried out slope stability analyses, acting as designer and Category III checker for a series of railway embankment redevelopments. She has conducted numerous hydrogeological studies and has been involved in a research project on erosion and softening of stiff clays due to water flow, for which she carried out experiment studies and advanced laboratory tests. She has worked on award winning projects in London and in Italy, involving a construction above a London Underground station and a deep basement for a tower building.

She has been retained as an expert witness in various cases related to ground characterisation, groundwater leakage, construction of basements, design of working platforms, stability of slopes and marine engineering.

She is also acting as reviewer of technical papers for international journals.

Given her expertise on London Clay, she provides CPD courses for industry and young researchers. The results of her study are widely used in industry and in research.

Areas worked

UK, Italy, Ukraine, Norway, South Korea

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GEOTECHNICAL CONSULTING GROUP

Previous experience

Dr Gasparre has been Visiting Researcher at Imperial College between 2006 and 2012.

Between March 2002 and December 2005 Dr Gasparre worked as Research Assistant in the Department of Soil Mechanics at Imperial College, where, after completing her PhD, she became responsible for the management of the soil mechanics laboratory. Throughout her time at Imperial College she carried out research studies and laboratory tutorials. She supervised several projects and dissertations of undergraduate and MSc students. Her laboratory experience also includes testing of sands and transitional soils. Based on her experience as a Research Assistant, Dr Gasparre has published a number of technical papers on advanced laboratory testing techniques at very small strains and on the behaviour of London Clay at large and small strains in correlation to its lithology.

In 2001 Dr Gasparre carried out an internship at GCG. During this time she was involved in the interpretation of the results of a parametric study on the interaction between parallel tunnels performed using numerical analyses. This was part of a major project for the London Underground Engineering work (Infraco JNP).

Between November 1994 and April 2001 Dr Gasparre carried out her undergraduate studies in Civil Engineering at the Technical University of Bari, Italy, where she graduated with honours. For her dissertation thesis on "Creep in crushable sands" she spent nine months in the Geotechnical Engineering Research Centre of City University, London under the auspices of the Erasmus project sponsored by the European Union.

Education/Research

PhD and DIC, Imperial College, London, 2005.

Laurea in Civil Engineering, Technical University of Bari. Italy, 2001. Final mark 110/110 cum laude.

Diploma Liceo Classico D. Morea, Conversano, Bari, Italy, 1994. Final mark 60/60.

Scholarships/Awards

BGA Medal 2014, British Geotechnical Association

Geotechnical Research Medal 2007, Institution of Civil Engineers

Erasmus-Socrates (1999-2000) and Leonardo Projects (2001) sponsored by the European Union.

Five annual awards for best student in literature and classical studies, 1989 to 1994.

Professional Qualifications & Memberships

Fellow of the ICE, since July 2020

Chartered Member of the Italian Institution of Civil Engineers since 2002

Member of the BGA

Service on Technical/Professional Bodies

Member of the ISSMGE Technical Committee 101

Former member of the editorial panel of the ICE journal Geotechnical Engineering (2016 to 2020)

Languages (other than English)

Italian