



### Professional summary

Dr Apollonia Gasparre is a geotechnical engineer with 20 years of experience in research and practice in the UK and abroad. Fellow of the Institution of Civil Engineers, Dr Gasparre's areas of expertise include ground characterisation, onshore and offshore ground investigation, laboratory testing, design of shallow and deep foundations, including the re-use of foundations, basement and retaining wall design, slope stability and earthworks and hydrogeology. She provides expert opinion in legal cases.

### Education and Career

Since 2006: GCG, London  
2006-12: Visiting Researcher, Imperial College London  
2002-05: Research Assistant and PhD, Imperial College London  
1994-2001: Laurea in Civil Engineering (Final mark 110/110 cum laude), Technical University of Bari, Italy  
1989-94: Diploma Liceo Classico D. Morea (Final mark 60/60), Conversano, Bari, Italy

### Professional Qualifications and Memberships

Since 2020: Fellow of the Institution of Civil Engineers, FICE (Member 2010-2020).  
Since 2002: Chartered Member of the Italian Institute of Civil Engineers  
Since 2000: Member of the British Geotechnical Association

### Scholarships / Awards

2014: BGA Medal, British Geotechnical Association  
2007: Geotechnical Research Medal, Institution of Civil Engineers  
2001: Leonardo Project, sponsored by the European Union

### Experience with GCG

Dr Gasparre joined GCG in January 2006, becoming a Senior Partner in 2021. She has advised on a wide range of geotechnical engineering problems 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 deep basements, pile design and the re-use 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 cases related to ground characterisation, ground movements and subsidence, pile, basement and retaining wall design, slope stability and the design of levee structures.

She is also acting as reviewer of technical papers for international journals and is working on the update of a book on design and construction of piles.

1999-2000: Erasmus-Socrates, sponsored by the European Union

1989-94: Annual awards for best student in literature and classical studies

### Service on technical / professional bodies

Since 2021: Member of the Steering Group of the CIRIA Piling Guide

Since 2020: Member of the CIRIA (Construction Industry Research and Information association) Geotechnical Engineering Advisory Panel

Since 2010: Member of the ISSMGE Technical Committee TC101 (Laboratory Testing)

2016-20: Member of the editorial panel of the ICE journal Geotechnical Engineering

### Countries worked

UK, Italy, Ukraine, Norway, and South Korea

### Languages (other than English)

Italian

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.

### 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 (Infracore 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.