

Geotechnical Consulting Group

## Professor H St John BSC PhD DSC Senior Consultant

#### Proven experts in a geotechnical world



### **Professional summary**

Prof. Hugh StJohn is a geotechnical engineer with more than 45 years of experience in practice around the world. His areas of expertise include deep excavations, retaining wall design, deep and shallow foundations, ground movements, earthworks, hydrogeology and groundwater flow, field studies, slope stability and soil properties. He has been involved in numerous forensic investigations and has given evidence to evidentiary hearings.

### **Education and Career**

2014: DSc (Honorary), City University, London.

Since 1985: GCG, London.

1982-85: Ove Arup & Partners, Hong Kong.

1970-82: Building Research Establishment (BRE), Geotechnics Division, UK.

1975: PhD, Cambridge University.

1970: BSc (1<sup>st</sup> Class), University College London.

# Service on technical / professional bodies

1995-97: Chairman of the British Geotechnical Association (formerly British Geotechnical Society).

2011-2014: Chairman of the "Ground Engineering" Editorial Advisory Panel.

2004-2007: Chairman of a steering committee for the CIRIA report on the reuse of piles.

Member of the Institution of Structural Engineers Working Party, on design and construction of deep basements.

### Scholarships / Awards

2014: Inaugural Fujita Lecture.

2009: BGA Skempton Medal.

Visiting Professor, City University, London.

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### Experience with GCG

Since joining GCG in 1985 Prof. St John has worked with a wide range of clients, advising them on a variety of geotechnical issues from tender stage through to project completion. Much of his early work has drawn on his previous experience in fieldwork with the Building Research Establishment UK, BRE (formerly Building Research Station) and his work experience in Hong Kong.

He has acted as geotechnical advisor to structural consultants and contractors on a large number of projects involving deep foundations and basements. He has over the years done much work with specialist piling contractors, looking at comparative performance of different techniques and the development of new techniques and designs. This links with his continuing interest in pile and retaining wall design and with the reuse of existing building substructures.

He has been involved in a number of award winning and high profile projects in recent years, such as the redevelopment of Cannon Street Station, The Infinity Bridge at Stockton and the Intesa Sanpaolo Tower in Turin. He was also involved in the preliminary design of the Thames Cableway and has assisted the contractor in recent years with problems arising on the foundations for the Lekki-Ikoyi bridge in Nigeria.

For many years Prof. St John has had involvement in construction litigation, particularly with foundation problems and also with issues arising from construction of retaining walls, fills, slopes and harbour works. He is an experienced expert witness.

Prof. St John has published technical papers on in-situ testing, field studies and design of foundations and basements and foundation reuse. He has served on the Géotechnique Advisory Panel, various national and international committees and is a past Chairman of the British Geotechnical Association, BGA (formerly British Geotechnical Society) and was Chairman of the "Ground Engineering" Editorial Advisory Panel. He also acted as Chairman of a steering committee for the CIRIA report on the reuse of piles.

He was a visiting Professor in the Geotechnical Engineering Research Centre at City University. In 2009, Prof. St John was awarded the BGA Skempton Medal in recognition of his long

### **Countries worked**

UK, North Sea, Norway, Poland, Italy, Ukraine, Hong Kong, Singapore, China, Pakistan, Nigeria. standing contribution to the practice of geotechnical engineering. He was awarded an honorary DSc by City University in 2014. He gave the Inaugural Fujita Lecture in 2014 which is awarded to "a renowned expert of international experience, reputation and impact in the field of underground construction in soft ground".

### Previous experience

On graduation Prof. St John worked for 12 years for the BRE's Geotechnics Division. During this period he was engaged in applied research, principally concerning excavations in soft ground, foundations for offshore structures, and ocean disposal of hazardous waste. His PhD, based on field observations of ground movements around deep excavations, was undertaken whilst on secondment to Cambridge University.

He was also seconded to the Norwegian Geotechnical Institute in 1976 and British Petroleum in 1977, where he undertook a variety of research and project-oriented tasks related to offshore structures. In 1980 he became Section Head at BRE, responsible for a number of projects on offshore geotechnics. These included the development of an offshore pressuremeter, research into the design of tension piles, and the initiation of a UK research programme into the deep sea disposal of nuclear waste.

In 1982 Prof. St John joined Ove Arup & Partners and worked in their Hong Kong office as a senior geotechnical engineer. During this period he was responsible for a variety of geotechnical projects, including slope protection works, excavations in soil and rock, and foundation design for high-rise buildings and building on reclaimed land. He was also involved in advising departments of the Hong Kong Government on technical aspects in litigation and he carried out design of foundations and temporary works for a high-rise hotel in Shanghai.

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