SKEMPTON MEDAL
The BGA criteria state:
*The Skempton Medal is awarded to a BGA member who has made an outstanding contribution to the practice of geotechnical engineering over a sustained period of time. The individual will not normally have received other comparable recognition in this country. The individual’s work should be closely associated with, though not necessarily carried out in, the United Kingdom. It is expected that not more than four awards would normally be made per decade.*

CITATION FOR DAVID HARTWELL
David Hartwell is recognised world-wide as a leading authority on groundwater and tunnelling and the interaction between the two. He has over forty years of experience investigating and developing practical solutions to groundwater related geotechnical issues for tunnels, heavy civil engineering and mining projects.

He has been extensively involved in developing state of the art solutions to major groundwater problems including the undersea Storebælt tunnels in Denmark, the recovery of the Docklands Light Railway (DLR) tunnels under the River Thames in London and collapsed Metro tunnels in Cairo. He has served on several review panels as a Groundwater Expert for international tunnel and excavation projects and litigation cases involving serious groundwater problems.

David graduated in Civil Engineering from Hatfield Polytechnic in 1969 and took a Master’s degree at Newcastle in Water Resource Engineering in 1970. He then worked with the Essex River Authority until 1973, when he joined Soil Mechanics Ltd. Since then he has specialised in groundwater and its impact on underground work – mainly construction, but also mining. At Soil Mechanics, groundwater studies were undertaken for Sizewell and Heysham nuclear power stations, as well as projects in Abu Dhabi, Macau, Hong Kong and Australia. A number of groundwater control contracts were undertaken for major civil engineering and tunnel projects including a new mine drift, pumping stations at Beckton in London, Ringsend in Dublin and Sandon Dock, Liverpool; slope stabilisation in Devon; Gas liquefaction project at Skikda in Algeria. Water resource studies were undertaken in Ireland, Sierra Leone, Iran, Afghanistan, Algeria and UK.

Since 1984, he has worked as a consultant on a range of projects across the globe. Some of the better-known projects have been:
- Denmark - Storebælt Eastern railway tunnels
- Sweden - Malmoe Citytunnel
- Hong Kong - SSDS tunnels under the sea
- Denmark - Copenhagen 1st metro
- Dublin Port tunnel
- London - Jubilee line extension
- Cairo Metro, Line 3
- New York, U.S.A. Review of freezing project for Northern Boulevard tunnel crossing
- Qatar Doha Metro tunnels
• South Africa - Gautrain railway tunnels. Member of International Expert panel reviewing grouting works
• Vietnam, Hanoi Metro

He has at least 22 published papers and has given invited lectures including at the launch of the publication Groundwater control: design and practice, 2nd edition (CIRIA C750).

He is an excellent communicator and extremely practical. In the UK, he is probably the first person that clients turn to when they have a difficult groundwater problem on a construction or engineering project.

Referring back to the award criteria, in relation to groundwater control David has clearly ‘made an outstanding contribution to the practice of geotechnical engineering over a sustained period of time’ and is a worthy recipient of the Skempton Medal.

PUBLISHED PAPERS AND INVITED LECTURES


Hartwell, D.J. Ground Freezing for Tunnelling: Case histories, Invited lecture to the Egyptian Tunnelling Society, 26th January 2011.


