

OBITUARY, JOHN ANTHONY HUDSON 1940-2019

The 12th President of the ISRM, Emeritus Professor John Hudson BSc, PhD, DSc, FEng, passed away in London on 13 February 2019 from complications following a severe stroke. ISRM members offer their heartfelt condolences to Carol, John's devoted wife of 53 years, their children Miles, Jonathan and Jenifer, and their five grandchildren.

John Anthony Hudson was born in Cardiff, Wales, on 9 May 1940. Following his schooling in Welwyn Garden City where he met his future wife, Carol, and then St Albans, England, where his interest in mathematics developed, his earlier interest in geology led him to start a degree course in Geology in Cardiff. However, it soon became clear that his mind and heart were elsewhere. His early indecision about his career direction, was resolved by the presence of Carol in Edinburgh, Scotland, studying Dentistry at the University of Edinburgh, and so John undertook a BSc degree in Mining Engineering at Heriot-Watt University, also in Edinburgh, graduating in 1965. After marrying Carol in 1966, he joined Professor Charles Fairhurst's rock mechanics research group at the University of Minnesota, having been attracted to rock mechanics because it appeared to offer a combination of his earlier interests in geology and mathematics. John obtained his PhD in 1970. Interestingly, as part of the course-work associated with the University's PhD requirements, John did a minor in statistics, something that always appeared to me to give him an advantage in dealing with some elements of our discipline. He then spent two further years in Minneapolis as a Post-Doctoral Fellow in Charles Fairhurst's group. It was during this period in early 1971 that I first met, worked with, and became friendly with John.

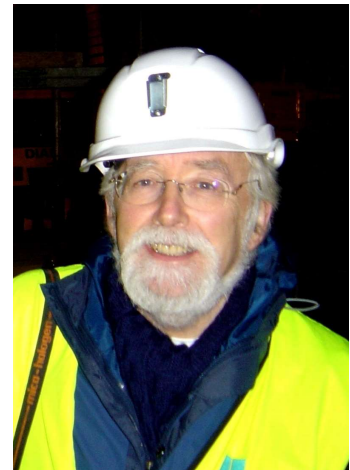


Back in England, John, Carol and their family settled back in Welwyn Garden City in Hertfordshire just north of London. From 1972 to 1977 John did research in the Tunnels Division of the Transport and Road Research Laboratory within the UK Department of the Environment. In that period, he published his seminal series of papers on rock mass statistics which have stood the test of time. He then spent two years from 1977 to 1979 in the Department of Strategic Research Operations in the Department of the Environment. After a year as a Visiting Professor at the University of Wisconsin, USA, he worked at the UK's Building Research Station from 1980 to 1983. During this period he was awarded a higher doctorate, the DSc, by Heriot-Watt University.

One of the crucial appointments in John's career occurred in 1983 when he joined the Rock Mechanics Section in the then Department of Mineral Resources Engineering at Imperial College of Science & Technology, London, as Reader in Rock Mechanics. (At that point, I was Professor of Rock Mechanics and Dean of the Royal School of Mines, and must admit to having had more than a little to do with John's appointment.) John became Professor of Rock Mechanics in 1988 and remained associated with Imperial College as a Professor (later in the Department of Earth Science and Engineering) and then Emeritus Professor for most of the remainder of his life. As well as teaching and supervising research students, from 1985 John was also an active consultant working on more than 150 projects around the world. He was elected a Fellow of the Royal Academy of Engineering, UK, in 1998.



Throughout his life, John had a love of books which he collected. He was also a prolific and skilled author of technical papers and books. His books must surely represent one of the greatest individual contributions ever made to our discipline. In chronological order, they are: *Rock Mechanics Principles in Engineering Practice*, CIRIA/Butterworths, 1989; *Rock Engineering Systems – Theory and Practice*, Ellis Horwood, 1992; *Engineering Rock Mechanics Parts I and II* (with J P Harrison), Pergamon Press/Elsevier, 1997 and 2000; *Rock Failure Mechanisms: Explained and Illustrated* (with C A Tang), Taylor & Francis, 2010; *Rock Engineering Design* (with X-T Feng), Taylor & Francis, 2011; *Rock Engineering Risk* (with X-T Feng), Taylor & Francis, 2015; *Structural Geology and Rock Engineering* (with J W Cosgrove), Imperial College Press, 2016; and *Understanding Building Stones and Stone Buildings* (with J W Cosgrove), Taylor & Francis, 2019 (currently in press).



In addition, John served as the Editor or Co-editor of a number of volumes of conference proceedings and as Editor-in-Chief of the monumental 5-volume *Comprehensive Rock Engineering*, published by Pergamon Press in 1993, and as Co-Editor of *The Complete ISRM Suggested Methods for Rock Characterization, Testing and Monitoring: 1974-2006* (with R Ulusay), ISRM Turkish National Group, 2007, and the *ISRM 50th Anniversary Commemorative Book 1962-2012*, (with L Lamas), ISRM, 2012. Furthermore, he served as Editor-in-Chief of the *International Journal of Rock Mechanics & Mining Sciences* for a remarkable 23 years from 1983 (when he had the task thrust on him by one of his grateful friends) until 2006 when he only gave up the role when preparing to assume the Presidency of the ISRM.

To my mind, one of the outstanding features of John's research, teaching, consulting and writing was his remarkable capacity for innovative thinking. He could think up more bright ideas than he ever had the time to follow up fully. He also had a great love of, and facility with, the English language, reflected in the clarity and elegance of his technical writing. On a friend's death, the American columnist, Red Smith, once wrote: "*This is a loss to the living, to everyone with a feeling for written English handled with respect, taste and grace.*" He could have been writing about our friend and colleague, John.

Even with all of this, John found, or made, large amounts of time to devote to the work of the ISRM. One of his first major involvements in ISRM matters was as Chair of the Technical Programme Committee for the ISRM Rock Mechanics Symposium held in Cambridge, England, in September 1984. (Here again, one of his friends pressed that role upon him.) Among other things, he subsequently served as President of the ISRM Commission



on Testing Methods for 21 years (1987-2006), as Vice President at Large (1995-99), as President (2007-11), as President of the Commission on Rock Engineering Design Methodology (2007-15), as a member and co-chair of several other Commissions over a great many years, and as Chairman or Co-Chairman of the Organising Committees of a number of ISRM international symposia, notably the Eurock and Sinorock series of symposia. I cannot think of any other person who has given such devoted and



distinguished service to our Society over such an extended period of time, since our Founding Father, the late Professor Leopold Müller. John's service to the ISRM and to the discipline were recognised by his induction as an ISRM Fellow, in 2013, and by the award of the Society's highest honour, the Müller Award, in 2015.

In our early times together, John used to refer to his origins in what he called the Celtic fringe of Great Britain. As the years progressed, particularly after he and Carol returned to live in England, John displayed a typically British persona and was proud of his British heritage. In company, he was generally quiet and urbane with a sometimes wicked sense of humour, showing friendship and kindness to a wide range of people, particularly those involved with our Society and discipline. The only group of people who I can recall him having a less than friendly disposition towards were university and college managers!

Finally, on behalf of the ISRM, I would like to acknowledge the support that Carol gave John during his rich (Carol's most apposite word) life and career, including his work for the ISRM. ISRM members will recall that she often accompanied John to our meetings over the years. I first met Carol soon after I had started working with John in Charles Fairhurst's laboratory at the University of Minnesota in early 1971, when she used to drop in from the nearby Dental School to pick up John after work. I'm most grateful to her for the unstinting assistance that she graciously gave me in assembling this obituary at what must have been a very painful time for her. I also wish to thank our long-serving Secretary-General and one of John's 17 PhD students, Dr Luis Lamas, for his advice and assistance.

E T Brown
President 1983-87
Brisbane, Australia
19 March 2019

