BRIEF BIODATA: NICK BARTON

Dr Nick Barton has more than 50 of years of experience from hundreds of rock mechanics and rock engineering projects in a total of 41 countries. After obtaining his Ph.D. on rock slope stability from Imperial College, London in 1971, he worked for 25 years in the Norwegian Geotechnical Institute, part of the time as Division Director, and later as Technical Adviser. He is author/co-author of 360 papers in technical journals and conference proceedings, and author of a book on TBM Tunnelling in Jointed and Faulted Rock in 2000, and of a textbook on Rock Quality, Seismic Velocity, Attenuation and Anisotropy in 2006.

Dr. Barton developed the well-known Q-system of rock mass characterization in 1974, and a non-linear shear strength criterion for rock joints in 1973/1982, now known as the Barton-Bandis criterion. Further empirical methods linked to Q are: the QTBM prognosis method since 1999, the QSLOPE method (for safe slope angles) since 2015, and the QH2O method (for estimating permeability with depth) since 2007.

He received the 6th ISRM Müller Award, given only once every four years for distinguished contributions to rock mechanics and rock engineering. He has an Honoris Causa (Honorary Doctorate) award from the University of Cordoba, Argentina (2004), and is an ISRM Fellow since 2015. He has received thirteen international awards between 1975 and 2021.