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FOREWORD	3
GIOVANNI BARLA	4
HERBERT H. EINSTEIN	5
JOHN A. HUDSON	6
MILTON ASSIS KANJI	7
CHUNG-IN LEE	8
QIAN QIHU	9
DICK STACEY	10
OVE STEPHANSSON	11



## ISRM Fellows

# In line with enhancing the recognition of ISRM members' high-level achievements,

the status of ISRM Fellows acknowledges select individuals who have achieved outstanding accomplishments in the areas of rock mechanics/rock engineering and have contributed significantly to the work of the ISRM. The title of ISRM Fellow carries a clear Society recognition in addition to that which an individual has attained through his or her own reputation.

The title and position of ISRM Fellow is a lifetime appointment. ISRM Fellows can be called upon as appropriate for ISRM activities, and would be expected to provide reasonable advice namely in the ISRM Advisory Forum, which meets every two years. Thus, the induction of ISRM Fellows creates a group of high-level experts who can provide strong support to the ISRM as necessary.

The initial group of Fellows was inaugurated in the ISRM Beijing Congress in 2011.

Photographs and abbreviated CVs of the second group of Fellows being inaugurated at the ISRM International Symposium Banquet, in Wroclaw, Poland, September 2013, are included in the following pages—in alphabetical order of surnames.

Xia-Ting Feng, ISRM President, 2011-2015

Xiatris Fong

#### GIOVANNI BARLA



Professor Giovanni Barla obtained his MSEng from Politecnico di Torino in 1965. He also obtained the MSEng and DSEng from Columbia University - School of Engineering and Applied Science, New York, in 1967 and 1970. He has been Professor of Rock Mechanics at Politecnico di Torino from 1980 to 2012.

His research activities are connected to laboratory and in situ testing, rock mass characterization, numerical modeling, slopes, tunnels and caverns, surface and underground mining. He has authored many research papers published in journals and conference proceedings. He has edited continuum education courses in Rock Mechanics and Rock Engineering.

Giovanni is currently Editor of the Rock Mechanics and Rock Engineering Journal and Member of the Torino Science Academy. He has been Department Head from 2003 to 2011, Vice President of ISRM from 1995 to 1999, and President of the Italian Geotechnical Society from 1997 to 2003.

Giovanni has been Principal of Golder Associates and Member of the International Board from 1991 to 1995. He is consultant and member of advisory panels on science and engineering projects. He has been working on major international projects. Currently Giovanni is involved in tunnels, underground caverns and rock slopes design studies in Italy and abroad.



### HERBERT H. EINSTEIN

Professor Herbert H. Einstein received his Dipl. Ing. and Dr. sc. tech. degrees from ETH Zürich. At present he is Professor of Civil and Environmental Engineering at the Massachusetts Institute of Technology. He has been active both in the ISRM (First VP 1995 to 1999, several commissions) and in the American Rock Mechanics Association and its predecessor, the U.S. National Committee for Rock Mechanics. He gave the ISRM Müller Lecture 1999, and he is a Fellow of ARMA and of ASCE.



Herberts research interests involve experimentation and modeling of fractured rock and of swelling rocks. They also include tunnel modeling, as well as risk prediction and management of underground structures and landslides. He is also involved in professional consulting activities in these areas that include, for instance, many of the new transalpine rail tunnels. Herbert was fortunate to spend sabbaticals at NGI, EPF-Lausanne and ETH Zürich.

Very importantly, Herbert has contributed to teaching innovation at MIT through developing a design oriented curriculum, bringing in advanced information technology and by teaching a large number of courses. He has received a number of teaching awards for this work.

### JOHN A. HUDSON



Emeritus Professor John A. Hudson obtained his BSc degree in Mining Engineering from the Heriot-Watt University in Edinburgh, Scotland, in 1965 and his PhD in rock mechanics as applied to both civil and mining engineering from the University of Minnesota, USA, in 1970. He later also obtained a DSc from the Heriot-Watt University. Following work in several UK governmental research organisations, he joined Imperial College in London in 1983, as Reader, then Professor, and now Emeritus Professor in the Department of Earth Science and Engineering where he has supervised 17 PhD students and 50 MSc students.

He was Editor of the International Journal for Rock Mechanics and Mining Sciences for 23 years from 1983 to 2006, President of the ISRM Commission on Testing Methods from 1987 to 2007, Chairman of the first ISRM EUROCK Symposium—held in Chester, UK, 1992, and Co-Chairman of all of the ISRM SINOROCK Symposia, held in Yichang, China in 2004, in Hong Kong, China in 2009 and in Shanghai, 2013. Professor Hudson was President of the ISRM from 2007 to 2011.

He became a Fellow of the UK Royal Academy of Engineering in 1998 and the American Rock Mechanics Association in 2009. He is also an Adjunct and Visiting Professor in the Chinese Academy of Sciences and an Honorary Professor at the University of Hong Kong

Since 1985, he has acted as an independent consultant on more than 150 projects around the world and is currently Chairman of the international DECOVALEX project on coupled numerical modelling.



## MILTON ASSIS KANJI

Professor Milton Assis Kanji is the Chairman of the ISRM Commission of Soft Rocks and is a former ISRM Vice President for South America (1974-1979). He was active in several Technical Commissions, mainly the Field and Laboratory Testing in the 70s and General Reporter at the 4th ISRM Congress.

He is an Associate Professor at the Structures and Geotechnics Department of the Polytechnical School of the University of São Paulo, Brazil. He taught graduate courses in Rock Mechanics, Ground Treatment and Engineering Geology.

Milton has worked in large engineering design firms, having participated in the design of several major dams, including Itaipu Main Dam. He has acted as an independent consultant in specific problems for many dams, tunnels, slopes and in forensic activities for insurers or adjusters. He participates in diverse Boards of Consultants for hydroelectric power plants and other projects in Brazil and abroad.

Graduated Geologist in 1960, Milton started working in Engineering Geology with Prof. Victor F. B. de Mello, studying slopes, tunnels and dam sites. Milton got his Masters Degree at the University of Illinois under the orientation of Prof. Don U. Deere, with emphasis in Engineering Geology and Rock Mechanics. He obtained his Doctor's degree in Geology with research in Rock Mechanics and has a post doctoral title in Earth Works by the Polytechnical School, both at the University of São Paulo. He has more than a hundred papers published.



## CHUNG-IN LEE



Professor Chung-In Lee obtained his B.E. and M.S. degree in Mining Engineering at Seoul National University and his Ph.D. degree majoring in Rock Mechanics at Tohoku University, Japan. He is currently a Professor Emeritus at Seoul National University and a member of the National Academy of Engineering of Korea.

During his professorship at Seoul National University for 32 years, he introduced rock mechanics to Korea since he began his career at Seoul National University just after he returned from Japan in 1975 and educated 29 Ph.D. students, 82 Masters students and lots of undergraduate students, who are currently playing key roles at universities, national institutes, construction companies and government agencies in Korea and abroad.

Professor Lees vigorous research activity covers the mechanical/hydrological properties of rock, design and stability analysis of discontinuous rock structures such as tunnel and cavern, and blasting vibration. His research work was published in more than 230 technical articles. He has served in many professional societies as a leader including the Korean Society for Rock Mechanics, Korean Institute of Mineral and Energy Resources Engineers, Korean Geotechnical Society and International Society for Rock Mechanics. He was the Vice-President for Asia of the ISRM from 1999-2003. Especially, he established Asian Rock Mechanics Symposium and ARMS Award. Professor Lee received many awards including "Hyeoksin Medal" of Order of Science and Technology Merit from Korean Government in 2005 for his outstanding achievements.



#### QIAN QIHU

Professor Qian Qihu, was born in 1937 in Kunshan, Jiangsu Province and is Professor and doctoral advisor of PLA University of Science and Technology and Fellow of the Chinese Academy of Engineering.

He graduated from Harbin Military Engineering Institute with an engineering degree in 1960, from Moscow Military Engineering Academy with a doctor degree in 1965. He was Vice-President of the ISRM (2003-2007) and is Director of the Associated Research Center for Urban Underground Space for Asia and President of Chinese Society for Rock Mechanics and Engineering. He is Honorary President of Jiangxi East China Institute of Technology, Honorary Dean of School of Engineer of Shandong University of Science and Technology, and Honorary Professor or concurrent Professor in Tsinghua University, Tongji University and Southwest Traffic University.

Professor Qian made outstanding achievements in theories of rock dynamics and engineering. In 1992, he directed the great blasting of Paotai Mountain in Zhuhai, which used the largest amount of explosives in the world. He took part in the check and bidding evaluation of the design proposal of many significant projects of subway engineering, urban underwater tunnels and submarine projects. As director and committee member of the experts committee, he assisted the construction of the Nanjing, Shanghai and Wuhan Yangtze River Tunnels. He carried out pioneering research in the key technologies of deep rock mechanics and deep underground protective engineering and the utilization of underground space.

He led several national consultative subjects, like the "Development strategies and measures of Chinas urban underground space in 21st century" and "Protecting strategies and measures of Chinas important economic targets". He published 15 books and over 100 papers. Several technical achievements were awarded the National Science and Technological Progress Award.



#### **DICK STACEY**



Professor Emeritus Dick Stacey graduated initially as a mechanical engineer, and then gained an MSc in the stress analysis field. He worked under Prof Z T Bieniawski at CSIRs Rock Mechanics Division in South Africa, during which time he gained his doctorate, before spending a year at the Imperial College of Science and Technology as an Academic Visitor in the Engineering Geology Department. He spent 25 years with SRK Consulting, and was Chairman of the South African Company, before joining the School of Mining Engineering at the University of the Witwatersrand in 2000 as Centennial Professor of Rock Engineering. He retired officially at the end of 2008, but continues to be involved with the University, running postgraduate courses and supervising research students.

His consulting activities have included many mining assignments. He has had an ongoing review board involvement with El Teniente Mine in Chile, the largest underground mine in the world, for a number of years; more recently he had a similar activity with Bingham Canyon Mine in the USA, the deepest open pit in the world. In the civil engineering area, he participated in the investigation and design of the Lesotho Highlands Water Project from 1986 to 2000 in both technical and management positions. This project involved about 100kms of bored tunnels, two major dams and two smaller dams.

He has served as Chairman of the South African National Group on Rock Mechanics (now the South African National Institute of Rock Engineering), Chairman of South African National Council on Tunnelling, Vice President for Africa of the ISRM, and President of the Southern African Institute of Mining and Metallurgy. He has attended the last nine ISRM Congresses.



## OVE STEPHANSSON

Emeritus Professor Ove Stephansson obtained his academic degrees in Mineralogy and Petrology from Uppsala University in Sweden. His major career appointments have been as Docent of Tectonics and Structural Geology at Uppsala University, Professor of Rock Mechanics at Luleå Technical University and as Professor of Engineering Geology at The Royal Institute of Technology (KTH) in Stockholm. Since 2002 he is Visiting Professor at GFZ German Research Centre for Geosciences of Helmholtz Centre Potsdam beside his work as a Consultant.

Ove has more than 40 years international experience as teacher, writer, researcher and research leader on rock mechanics and rock engineering and their applications in mining and civil engineering. He served as ISRM Vice president from 1991 to 1995 and has served many years in the ISRM Commission on Testing and initiated and lead ISRM Commission on Rock Joints. Ove has been arranging several international conferences and symposia in rock mechanics and often with a strong support of ISRM.

Rock stress and rock stress measurements, mechanical characterization and testing of the jointed rock mass and physical and numerical modelling are some of his research interests. The problems related to deep geological disposal of spent nuclear fuel and radioactive waste has been an important and long-term research interest by Ove. He has advised many licentiate and doctoral students in the rock mechanics aspects of that field of research and he ranks supervision as the most interesting work at universities besides teaching. For the last two decades Ove is working as a rock engineering Consultant for the governmental radiation and nuclear safety authorities in Sweden and Finland.



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