

Keynote Speaker of Session 03

ENERGY STORAGE



Robert M. McMeeking FREng, FRSE, NAE, earned a B.Sc. (with 1st Class Honours) at the University of Glasgow, Scotland in 1972, and in 1976 he completed his Ph.D. in solid mechanics at Brown University under the supervision of Professor James R. Rice. He was at Stanford University for 2 years as Acting Assistant Professor, and then was appointed Assistant Professor, and subsequently Associate Professor, at the University of Illinois at Urbana-Champaign, in the Theoretical and Applied Mechanics Department. McMeeking moved to the University of California, Santa Barbara (UCSB) in 1985 as Professor of Materials and of Mechanical Engineering. He was

Chair of the Department of Mechanical Engineering at UCSB 1992-1995 and again during 1999-2003. He has published over 250 scientific papers on such subjects as plasticity, fracture mechanics, computational methods, glaciology, tough ceramics, composite materials, materials processing, powder consolidation and sintering, ferroelectrics, microstructural evolution, nanotribology, actuating structures, blast and fragment protection of structures, fluid structure interactions arising from underwater blast waves, the mechanics of the cell and its cytoskeleton, lithium-ion batteries and fuel-cells. In 1998 he was advanced to Fellow grade in the American Society of Mechanical Engineers and in 2002 was recognized by the Institute for Scientific Information as a Highly Cited Researcher in the fields of Materials Science and Engineering. McMeeking was elected to the U.S. National Academy of Engineering in 2005, and held a Humboldt Award for Senior Scientists in 2006 and again in 2013. He was given the Brown Engineering Alumni Medal by Brown University in 2007, and elected Fellow of the U.K. Royal Academy of Engineering in 2012. McMeeking was Editor of the Journal of Applied Mechanics for the term 2002-2012. In addition to his appointment at UCSB, McMeeking is Sixth Century Professor of Engineering Materials (Part-time) at the University of Aberdeen, Scotland, and External Member of the Leibniz Institute for New Materials, Saarbruecken, Germany.