

Sedicesima Conferenza annuale “Arrigo Croce” dell’Associazione Geotecnica Italiana

Si riporta qui di seguito il testo dell'intervento conclusivo del professore Nicola Moraci, Presidente dell'Associazione Geotecnica Italiana, alla Sedicesima Conferenza annuale “Arrigo Croce”, tenutasi a Roma il 13 dicembre 2017 presso il Centro Congressi Antonianum.

On behalf of the Italian Geotechnical Society, it was a great pleasure to invite professor Ronald Kerry Rowe, one of the most prominent geotechnicians, to deliver the Sixteenth Croce Lecture. The Croce Lecture is the most prestigious annual event to be organized by the Italian Geotechnical Society. Its alternation of speakers from both Italy and abroad has done much to enhance the strong reputation of the Italian geotechnical engineering.

Professor R.K. Rowe studied at the University of Sydney in Sydney, Australia where he was awarded a BSc in Computer Science in 1973, BE in Civil Engineering and the University Medal in 1975, a PhD in 1979.

He was awarded a Doctor of Science *honoris causa* by Western University in 2016 in recognition of his contribution to the advancement of science and engineering practice in the environmental protection.

Professor R.K. Rowe worked as a geotechnical engineer with the Australian Government Department of Construction prior to moving to Canada in 1978.

He spent 22 years as a professor, including 8 years as Chair of the Department of Civil and Environmental Engineering at The University of Western Ontario in Canada. From 2000-2010 he served as Vice-Principal (Research) at Queen's University in Kingston, Canada, where he was responsible for the administration of all research programs (in Business, Education, Humanities, Law, Social Sciences, Physical and Biological Sciences, Engineering and Applied Sciences, Health Sciences and Medicine) conducted at Queen's.

He is presently a Professor and he holds the Canada Chair and the Canada Research Chair in Geotechnical and Geoenvironmental Engineering in the Department of Civil Engineering at Queen's. He is the lead author of the book *Barrier Systems for Waste Disposal Facilities*, as well as the editor of the *Geotechnical and Geoenvironmental Engineering Handbook* for Kluwer Academic Publishers. He has signed more than 340 refereed journal papers, 3 books, 14 book chapters, and 340 full conference papers.

His research and consulting has been in contaminant migration



Fig. 1 – Left to right, R.K. Rowe, N. Moraci and D. Cazzuffi.



Fig. 2 – Prof. Ronald Kerry Rowe receives the commemorative Croce Lecture plaque from Prof. Nicola Moraci, President of the AGI.

through soil and rock; landfill design; containment of contaminated sites; geosynthetics (including geotextiles, geomembranes, geogrids, geonets etc.); tailings storage facilities, heap leach pads and dams; reinforced embankments and walls; tunnels in soft ground; failure of slopes and excavations.

A winner of both the University of Western Ontario (1996) and the Ontario Confederation of University Faculty Associations (1997) Excellence in Teaching Awards, as well as the Queen's University Award for Excellence in Graduate Student Supervision (2013), he has supervised over 100 graduate students, many of whom

have won prizes for their research work.

He has been recognized by over 90 awards for his research work, including an NSERC Steacie Fellowship, the Killam Prize, the Killam Fellowship, the R.F. Legget Medal, the Sir John Kennedy Medal, The Queen Elizabeth II Diamond Jubilee Medal, the Queen's University Excellence in Research Prize, the ICE's Thomas Telford Gold Medal, and the RSC's Miroslaw Romanowski Medal.

He has presented a number of prestigious lectures including the Giroud Lecture (2002), The Rankine Lecture (2005), The Manuel Rocha Lecture (2006), The Casagrande Lecture (2011), and the Ferroc-Terzaghi Oration (2012). In 2013, the International Society for Soil Mechanics and Geotechnical Engineering created the R. Kerry Rowe Lecture to honour his seminal contributions to the development of geoenvironmental engineering.

He has been elected to the world's oldest and most prestigious scientific society recognizing fundamental contributions to science, the Royal Society of London, UK. He has also been elected a foreign member of the US National Academy of Engineering, a fellow UK Royal Academy of Engineering and both the Royal Society of Canada and the Canadian Academy of Engineering as well as being a fellow of the Engineering Institute of Canada, the Australian Institution of Engineers, the Canadian Society for Civil Engineering, and the American Society of Civil Engineers. He is past President of the International Geosynthetics Society, the Canadian Geotechnical Society and the Engineering Institute of Canada.

He has been involved in the design for more than 50 landfills in Canada, US and many other countries, has performed expert reviews of municipal solid waste landfills for the US EPA, US Dept. of Justice, Ontario Ministry of Environment, and Victorian Environmental Protection Authority, and of low level radioactive waste landfills for the Canadian Nuclear Safety Commission. He was the only non-US member of the U.S. National Academies Committee appointed to assess the performance of engineered waste containment barriers.

He is Editor of the highly regarded International Journal Geotextiles and Geomembranes, subject Editor of Royal Society Open Science, Associate Editor of the Canadian Geotechnical Journal and Waste Management, presently serves on the Editorial Board of ten other journals, and in the past has served ten years on the Editorial Board of ASCE Journal Geotechnical and Geoenvironmental Engineer-

ing and 4 years on the Board of Géotechnique, amongst others. He is one of the only two non-UK members on the committee that selects the three (out of over 100 nominations per year) individuals who get presented for election to the Royal Society of London from the Engineering and Applied Science community worldwide.

Today's conference, masterfully held by Professor Ronald Kerry Rowe, focused on "Environmental Geotechnics: looking back, looking forward".

His excellent presentation has clearly shown his deep knowledge in the field of geotechnical, geosynthetics, and geo-environmental engineering. Professor Rowe has excellently shown how complex geo-environmental problems can be solved using sound and advanced theoretical and numerical models based on accurate interpretation of advanced laboratory tests and field trials. Moreover, the information contained in his Croce Lecture allows a more reliable and safe design and use of geosynthetics, in different engineering applications with particular reference to barrier systems of landfills where contaminants are to be contained. I think this Croce Lecture will stand as a fundamental contribution to environmental geotechnical engineering research and practice.

It is thus a great honour and a pleasure to introduce Professor Kerry Rowe, on the occasion of this interesting and complete Croce Lecture and I would like to express, with renewed acclamation, our sincere gratitude for his excellent and instructive work.

Nicola Moraci