

Canterbury Branch Meeting

Wednesday, 4 August, 2010

University of Canterbury



A Collaborating Technical Group
of The Institution of Professional
Engineers New Zealand

Eurocode 7 Harmonising Geotechnical Design in Europe and Worldwide

Dr. Trevor L.L. Orr

**Director of the Graduate School of Professional Engineering Studies
Trinity College Dublin**

Eurocode 7, the new European standard for geotechnical design, and one of the set of Structural Eurocodes published by CEN was implemented on 31st March 2010 and has superseded the existing national standards in Europe. The three major challenges in preparing Eurocode 7, harmonising geotechnical design with structural design, taking account of the special features of soil and geotechnical design, and being acceptable to European geotechnical engineers, will be explained. The key features of Eurocode 7 and how they affect geotechnical design will be described. In addition, information will be provided about the large number of related new CEN standards for testing and for the execution of geotechnical work which will replace former national standards, such as BS 1377 and BS 5930 for soil testing and site investigations. Eurocode 7 and the related CEN standards provide a very comprehensive framework for geotechnical design in Europe for the future and are likely to serve as the basis for geotechnical designs for the future in many countries worldwide. How the different European countries are implementing and adapting Eurocode 7 will be outlined, together with some experiences gained since its implementation.

Trevor Orr is the Director of the Graduate School of Professional Engineering Studies at Trinity College Dublin. He has been closely involved in the development of Eurocode 7, the new European standard for geotechnical design. He has been chairman of the European Technical Committee for the Evaluation of Eurocode 7 from 2003 to the present time and is the co-author of two books on Eurocode 7; the first book, with E. Farrell and entitled Geotechnical Design to Eurocode 7, was on the ENV version of Eurocode 7 and was published by Springer in 1999. The second book, with six other co-authors and entitled Designers' Guide to EN 1997-1, was on the EN version of Eurocode 7 and was published by Thomas Telford in 2004. This book, which is one of a set of Designers' Guides to the Eurocodes, has proved to be extremely popular and a new, updated, edition is currently being planned.

He was a founder member of the Geotechnical Society of Ireland and was secretary of the IX European Conference for Soil Mechanics and Foundation held in Dublin in 1987. He was chairman of the 15th European Young Geotechnical Engineers' Conference held in Dublin in 2002. He was a member of the Advisory panel for the journal Geotechnique from 2006 – 2009 and is currently a member of the Advisory panel for the journal Geotechnical Engineering.

Light refreshments kindly provided by [Maccaferri NZ Ltd](#) from 5:30pm in Civil Engineering Common Room, School of Engineering

The presentation will commence at 6:00pm in Room E10

For any enquiries: **Nick Harwood, 021 896 360, nick_harwood@coffey.com
Joyce Seale, 021 419 946, joyce.seale@pdp.co.nz**