# **'URDUE** Lyles School of Civil Engineering IVERSITY

## 14th C.W. Lovell Distinguished Luncheon/Lecture

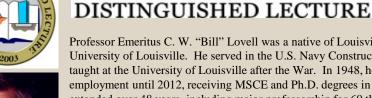
11:30 am to 1:30 pm, Friday, November 4, 2016 Ross Ade Pavilion, Shively Media Center, Purdue University

# **Professor Richard Jardine**

#### **Geotechnics and Energy**

Geotechnical Engineering has matured sufficiently to contribute to some of society's grand challenges. This lecture considers the pressing problem of ensuring vital energy supplies while also recognizing, mitigating and dealing with the climate consequences of fossil fuel consumption. The Lecture's three main sections report recent geotechnical research relating to these wide ranging topics, illustrating some aspects of each with specific examples from the Speaker's portfolio. The first focuses on research to support offshore hydrocarbon production, considering platform foundations on the continental shelf and large landslide geohazards in deeper water. The second considers research into climate change impacts in warming permafrost regions and engineering to raise flood defenses founded on difficult organic soils. The final section reports on current research that is having a major impact on offshore wind turbine foundations and hence renewable energy economics. The Lecture emphasizes that integrating geology and rigorous analysis with advanced laboratory and field experiments is the key to resolving the complex geotechnical problems raised; careful full-scale field monitoring is also essential to checking reliability in practice. A collaborative approach is vital to such multi-faceted research.





C. W. LOVELL



Professor Emeritus C. W. "Bill" Lovell was a native of Louisville, Kentucky, and received his BCE from the University of Louisville. He served in the U.S. Navy Construction Battalions (SeaBees) during World War 2, and taught at the University of Louisville after the War. In 1948, he came to Purdue University, and he remained in that employment until 2012, receiving MSCE and Ph.D. degrees in the process. His service in Civil Engineering extended over 48 years, including major professorship for 60 theses and authorship for almost 200 papers. During his distinguished career at Purdue University, Prof. Lovell was major professor to 112 students, 60 of whom wrote research theses, and published in excess of 200 papers. His research interests were broad and varied including soft rocks (shales), compaction and compacted properties, soil fabric and pore size distribution, slope stability and erosion, cold regions, pavements, and uses of waste materials in geotechnical engineering. In 1994, Bill became a facilitator/coach in Human Resources Services at Purdue. He specialized in delivering a variety of FranklinCovey leadership/personal development seminars, and received a "Facilitator of the Year" award from FranklinCovey. Bill was active in community volunteer organizations, and continued to be an avid fly fisherman.

Detailed information on the 14th C. W. Lovell Distinguished Lecture can be found at the following website: https://engineering.purdue.edu/CE/Academics/Groups/Geotechnical/Details/seminar/Lovell

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## **Professor Richard Jardine**

Geotechnics and Energy



Richard Jardine is Professor of Geomechanics at Imperial College London, where he has been a member of staff since 1981, taking his Chair in 1998. He acted as Head of Geotechnics until 2011, Consul for Engineering and the Business School until 2015 and is currently Deputy Head of Civil and Environmental Engineering. His research covers offshore geotechnics, soil characterisation, field instrumentation, soft ground engineering, geohazards and climate change impact. He has also consulted on many major onshore and offshore projects and has been an Associate of Geotechnical Consulting Group since 1985. He is a Fellow of the Royal Academy of Engineering, the ICE and the City and Guilds Institute. He has worked as a visiting professor in Singapore, Japan and China and where he is currently a Ministry of Education distinguished overseas scholar at Zhejiang (ZJU) and Wenzhou Universities. He has published over 200 papers and won 17 UK and International research prizes. His named talks include the Geotechnique, Coulomb, Zeng, Bishop and Sowers Lectures.

Beginning in 2003, the C. W. Lovell Distinguished Lecture series was established through the generosity of Professor Bill and Mary Ellen Lovell, who expressed an interest in creating a lecture series at Purdue that will have staying power - one in which a track record of scholarship is clearly established. Thus, each year, lecturers with outstanding accomplishments in geotechnical engineering research are invited to Purdue University. The lecture series creates an excellent opportunity for our graduate students to meet and interact with some of the most important names in geotechnical engineering in person at Purdue.

A luncheon/lecture combination will be held at the Ross Ade Pavilion, Shively Media Center. Reservations to attend both events are required by 3:00 pm on October 28, 2016. For more information please contact Susan Bales (sbales@purdue.edu); ph: 765-494-5025

