Saturday, April 28, 2018
Northwestern University
Evanston, IL

Professor Charles H. Dowding
Symposium and Retirement Celebration

DOWDING SYMPOSIUM REGISTRATION and BANQUET RESERVATION FORM

Name: ____________________________  Additional names in your party: ____________________________
Affiliation: _______________________
Address: __________________________
Voice/Mobile: _____________________
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<th>Event</th>
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<tr>
<td>Symposium, reception/dinner</td>
<td>$100</td>
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<td>Symposium only</td>
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<td>Reception/dinner</td>
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<td>Osterberg lecture donation</td>
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Please send completed form and check, payable to Northwestern University, to Dowding Symposium
Department of Civil and Environmental Engineering
2145 Sheridan Road, A236
Northwestern University
Evanston, IL 60208-3109

online registration/reservation: [https://www.eventbrite.com/e/charles-dowding-symposium-and-retirement-celebration-tickets-43315949170](https://www.eventbrite.com/e/charles-dowding-symposium-and-retirement-celebration-tickets-43315949170), deadline: 18 April 2018 online or by mail
Technical Program
Technological Institute, Room L361
2145 Sheridan Road, Evanston, IL
5 PDH will be awarded for this symposium

10:00 – 12:00 am
Welcome

Ground Vibrations
Kenneth Stokoe, University of Texas at Austin
Charaterizing Geotechnical Materials with Seismic waves: Static and Dynamic Applications
Catherine Aimone-Martin, Aimone-Martin Associates, LLC,
Having a Blast with Chuck
Robert Langan, MEQ Geo Inc,
Induced Seismicity in the Oil Patch and Chuck Dowding’s Contribution to its Mitigation
Alek Zubelwicz, University of New Mexico
Precursors of Dynamic Fracture in Rocks
Sebastian Bryson, University of Kentucky
Underwater Explosion Energy Dissipation near Waterborne Infrastructure
David Kosnik, CTL Group
Autonomous Monitoring of Dynamic Response of Infrastructure: Lessons Learned from Professor Charles Dowding

Lunch 12:00 – 1:00 pm

1:00 – 2:30 pm
Infrastructure
Thomas O’Rourke, Cornell University
Lessons Learned from Resilient Infrastructure
Andrew Graettinger, University of Alabama
Learning from Extreme Events
Brett Gitskin, ECS Midwest, LLC
Northwestern University: Ten years of Growth from the Bottom Up
Kevin O’Connor, GeoTDR, Inc,
Remote monitoring of the Threat of Sinkhole Formation under a Portion of US 18 in Cerro Gordo County, Iowa
David Hendron, SCS Engineers
Pore Pressure – The Forgotten Geotechnical Parameter

3:00-4:45 pm
Underground construction and rock mechanics
Aron Rozen
Tunneling in the City of Jerusalem – History and Present
Yoram Soffrin, Israteam, Ltd
Optimal use of Underground Construction in Jerusalem Railway Station
William Hansmire, WSP
Legacy of University Research on the Washington DC Metro
Gary Brierley, Doctor Mole Incorporated,
Intelligent Tunnel Design
Joseph Labuz, University of Minnesota,
Enhanced Pyramidal Failure Surfaces for Rock
Roman Hryciw, University of Michigan,
Stereophotography without Glasses and Other Lessons Learned from Professor Charles Dowding

Reception and Dinner
Allen Center, Northwestern University
2169 Campus Drive, Evanston
Reception: 5:30 pm – 6:30 pm
Dinner: 6:30 pm – 9 pm

Costs
Symposium $50 – includes USB drive of technical presentations, break, and lunch
Reception & Dinner $50 – includes open bar, hors d’oeuvre and dinner

Accommodation Information
Visit http://www.mccormick.northwestern.edu/civil-environmental/events/department-seminars/dowding-retirement.html

Charles H. (Chuck) Dowding has been a Professor in the Department of Civil & Environmental Engineering at Northwestern University since 1976, with a BS from the University of Colorado in 1967, a PhD from the University of Illinois, a post doc at the Norwegian Geotechnical Institute, and an assistant professorship at MIT.

Professor Dowding is recognized for his contributions to geotechnical engineering that revolutionized remote monitoring of soil and rock worldwide and for contributions to engineering education. He is best known for his four books: Construction Vibrations, Blast Vibration Monitoring and Control, Micro-Meter Crack Response to Vibration and Weather and GeoMeasurements by Pulsing TDR Cables and Probes.

He was a member of the board of directors of the International Society of Explosive Engineers; chair of the ASCE Rock Mechanics Committee; board of directors of the American Rock Mechanics Association; a member of the US Bureau of Mines team that developed the basis for federal guidelines for allowable blasting vibrations. Professor Dowding co-founded Digital Vibration, Inc., the first company to perfect remote, digital, blast vibration and crack monitoring by computer, a technology which remains in use worldwide. He was also the principal investigator in the development of the commercially available miniaturized Time Domain Reflectometry (TDR), to expand its capabilities for the geotechnical profession.

Professor Dowding’s consulting engagements have involved projects in Alaska, Panama, Hong Kong, Italy and some 30 of the United States. He has consulted for many governmental agencies including the National Park Service, U.S. Department of Transportation, U.S. Department of Energy, and companies, including IBM, MWH, Stone & Webster, Sargent & Lundy, CH2M Hill, Shell and Fina oil.

During his 40-year tenure at Northwestern he mentored 62 M.S. and 18 Ph.D. students who have gone on to have distinguished consulting careers, and lead other civil, mining, and environmental engineering departments. He is also active in public service and is currently the Chair of the Environmental and Forestry Commission in Winnetka, IL.

In 2017, Professor Dowding was bestowed with ASCE’s highest honor – Distinguished Member. In addition, he was also recognized with the ASCE’s Illinois Section Civil Engineer of the Year Award in 2014, the International Society of Explosives Engineers President’s Distinguished Service Award in 2011, the Applied Research Award from the National Rock Mechanics Committee, Fellow of the American Rock Mechanics Association, in 2008, the University of Illinois at Champaign-Urbana’s Distinguished Civil Engineering Alumni Award in 2006, Distinguished Engineering Education Alumnus, University of Colorado in 2003 and more.