TUESDAY 3rd July 2012

19:00  SFGE 2012 Welcome Reception  College Bar, NUI Galway

WEDNESDAY 4th July 2012

All sessions in ENGINEERING BUILDING, all plenary sessions in ENG-G017, unless otherwise stated

08.30  Welcome from Prof. Gerry Lyons, Dean of Engineering and Informatics, NUI Galway

08:40  Welcome and Introduction from Dr. Bryan McCabe, SFGE 2012 Chair

09:00  KEYNOTE Lecture 1: What should geotechnical professionals be able to do?  
        Prof. John Atkinson, Coffey Geotechnics, U.K.  (introduced by Prof. Iacint Manoliu)

09:45  Lecture Session 1: WHAT SHOULD WE TEACH?  
        Session Chair: Prof. Vlasta Szavits-Nossan

1. Geotechnical engineering education – removing the barriers David Muir Wood
2. Geotechnical-structural integration in US foundation engineering curricula Bill Kitch and Donald Coduto
3. Key skillsets for use in geotechnics (a contractor’s view) Matthew Baldwin
5. Rethinking aspects of theory and tradition in soil mechanics teaching Laurie Wesley

10:50  Tea/Coffee Break
11:15  Facilitated Discussion 1: WHAT SHOULD WE TEACH?

11:15-12:05  Group A (ENG-2001)  Facilitator: Prof. David Muir Wood
Group B (ENG-2002)  Facilitator: Dr. Brian Simpson
12:05-12:15  Plenary session (ENG-G017)  Rapporteur: Prof. David Muir Wood

12:15  Lecture Session 2: THE USE OF CASE HISTORIES IN GEO-ENGINEERING EDUCATION
Session Chair: Prof. Colin Leung

6. Teaching the importance of engineering geology using case histories Rafael Jimenez and Salvador Senent
7. Use of case studies in geotechnical courses: learning outcomes and suitable cases Trevor Orr and Marina Pantazidou
8. The use of case histories to encourage reflection by civil engineering design students Kenneth Gavin
9. Use of project-based learning to teach geotechnical design skills to civil engineering students Kenneth Gavin

13:00  Lunch  Zinc Restaurant, Engineering Building

14:00  KEYNOTE Lecture 2: Quandry in geomaterial characterization: new versus the old
Prof. Paul Mayne, Georgia Tech, U.S.A.  (introduced by Prof. David Frost)

14:45  Lecture Session 3: LABORATORY WORK IN GEO-ENGINEERING
Session Chair: Prof. Dominique Ngan-Tillard

10. Activities to raise students’ understanding of pore water pressure, seepage and total head David Nash
11. The use of online resources to support laboratory classes in soil mechanics David Airey, Peter Café and Helen Drury
12. Reinventing geotechnical engineering laboratory classes Mark Jaksa, David Airey, Jayantha Kodikara, Mohammed Shahin and Sam Yuen / Interactive learning modules in geotechnical engineering Mark Jaksa
13. Soil mechanics laboratory classes as an integral part of the learning process Waldemar Hachich

15:40  Tea/Coffee Break
16:00 Lecture Session 3 (cont.): FIELDWORK IN GEO-ENGINEERING  
Session Chair: Prof. Margarida Pinho-Lopes

14. The BMG Ignimbrite quarry; case study of an undergraduate field exercise in engineering geology Stephen Fityus and John Gibson
15. The use of field visits in graduate geotechnical teaching Rafael Jimenez and Wenceslao Martin-Rosales
16. TU Delft Spain fieldwork and other outdoor activities Dominique Ngan-Tillard, Leon van Paassen, Pieter Michiel Maurenbrecher and Aline Concha i Dimas

16:40 Facilitated Discussion 2: LABORATORY AND FIELDWORK IN GEO-ENGINEERING

16:40-17:30 Group A (ENG-2001)  Facilitator: Prof. Waldemar Hachich  
Group B (ENG-2002)  Facilitator: Dr. Declan Phillips
17:30-17:45 Plenary session (ENG-G017)  Rapporteur: Prof. Waldemar Hachich

17:45 End
09:00  KEYNOTE Lecture 3: Equilibrium, strength, strain, dilation and superposition  
Dr. Brian Simpson, Arup Geotechnics, U.K. (introduced by Mr. Paul Quigley)

09:45  Lecture Session 4: COMPUTING AND TECHNOLOGY IN GEO-ENGINEERING  
Session Chair: Prof. Rafael Jimenez
17. Dunmore Bridge case study: an introduction to geotechnical engineering via finite element analysis Andrew Abbo, Stephen Fityus and Sam Mackenzie
18. Learning issues related to basic concepts in geotechnics: a teacher’s perspective Vlasta Szavits-Nossan
19. Implementation of computing and software in undergraduate soil mechanics courses Margarida Pinho-Lopes
20. Integrating a major excel exercise into an introductory soil mechanics course David Airey, Peter Café and Abbas Elzein
21. The use of electronic voting systems to enhance deep learning Daniel Barreto

10:45  Tea/Coffee Break

11:10  Facilitated Discussion 3: COMPUTING AND TECHNOLOGY IN GEO-ENGINEERING  
11:10-12:00  Group A (ENG-2001) Facilitator: Prof. Stephen Fityus  
Group B (ENG-2002) Facilitator: Prof. Mark Jaksa
12:00-12:10  Plenary session (ENG-G017) Rapporteur: Prof. Stephen Fityus

12:10  Lecture Session 5: RESEARCH AND TEACHING EXPERIENCES IN ENGINEERING EDUCATION  
Session Chair: Prof. William Kitch
22. Challenges in teaching geomechanics to the next generation Stephen Fityus
23. A tour through education sites for an engineering instructor: major stops and impressions Marina Pantazidou and David Frost
24. Lecturers’ perceptions of students’ learning needs Rafael Monroy, Francisco Javier Torrij and Fuensanta Hernandez-Pina
26. The LARAM School: teaching LANDslide Risk Assessment and Mitigation to PhD students Leonardo Cascini, Giuseppe Sorbino, Michele Calvello and Sabatino Cuomo

13:15 Lunch  Zinc Restaurant, Engineering Building
14:15 KEYNOTE Lecture 4: Using Questioning to enhance student engagement
Prof. Stephen Ressler, U.S. Military Academy at Westpoint, U.S.A.
(introduced by Dr. Declan Phillips)
15:00 Tea/Coffee Break
15:20 ASCE ExCEEd (Excellence in Civil Engineering Education) Workshop
Delivered by Prof. Robert O'Neill and Prof. Tanya Kunberger, Florida Gulf Coast University, U.S.A.
ENG-G047, Engineering Building
18:00 End
20:00 SFGE 2012 Conference Dinner
Aula Maxima, The Quadrangle, NUI Galway
09:15  KEYNOTE Lecture 5: Engineering education: A tale of two paradigms  
   *Prof. Richard Felder, North Carolina State University, U.S.A.*  
   *(introduced by Prof. David Elton)*

10:00  Lecture Session 6: STUDENT-CENTRED LEARNING IN GEO-ENGINEERING  
   Session Chair: *Prof. David Airey*

   27. Experiences from revising a course to promote significant learning  
      *Tanya Kunberger*
   28. Context, rigour and enjoyment in geotechnical education  
      *Declan Phillips*
   29. Sport and soil mechanics – analogies to aid student learning  
      *Bryan McCabe and Mark Jaksa*

10:45  Tea/Coffee Break

11:15  Lecture Session 6 (cont.): STUDENT-CENTRED LEARNING IN GEO-ENGINEERING  
   Session Chair: *Dr. Laurie Wesley*

   30. Promoting active learning in geotechnical engineering  
      *Colin Leung*
   31. Some reflections on the use of a co-operative learning model in soil mechanics courses  
      *Margarida Pinho-Lopes*
   32. Integrating professional practice into the curriculum  
      *David Nash*

12:00  Facilitated Discussion 4: STUDENT-CENTRED LEARNING IN GEO-ENGINEERING

   12:00-12:50  Group A (ENG-2001)  
   Facilitator: *Prof. Marina Pantazidou*
   Group B (ENG-2002)  
   Facilitator: *Dr. David Nash*
   12:50-13:00  Plenary session (ENG-G017)  
   Rapporteur: *Prof. Marina Pantazidou*

13:00  Lunch  
   *Zinc Restaurant, Engineering Building*
FRIDAY  
6th July 2012

all sessions in ENGINEERING BUILDING, all plenary sessions in ENG-G017, unless otherwise stated

14:00  **SFGE 2012 SPECIAL INVITED LECTURE**
Keep it engaging, keep it simple, keep it rigorous
*Prof. John Burland*, Imperial College London, U.K.  (introduced by *Prof. Trevor Orr*)

15:00  Tea/Coffee Break

15:20  **CLOSING SESSION**
Lessons learned from SFGE 2012 – the way forward?
*Prof. Mark Jaksa and Dr. Bryan McCabe*

16:00  **END OF CONFERENCE**

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16:00  Option tour of New Engineering Building

17:30  **Meeting of ISSMGE TC 306 Technical Committee on Geo-engineering Education**
Boardroom ENG-3052, Engineering Building, NUI Galway

SATURDAY  
7th July 2012

09.00  **Conference Tour of Connemara**

17.00  **Return to Galway City**
www.sfge2012.com

For further information contact:

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