Forum on Innovation in Geotechnical Engineering Research, Practice & Education

INTRODUCTORY SLIDES
by Session Co-Chairs:
Dimitrios Zekkos
Michael Lisyuk
“For most of human civilization, the pace of innovation has been so slow that a generation might pass before a discovery would influence your life, culture or the conduct of nations.”

Neil deGrasse Tyson

NOT ANYMORE!
Innovation is the central issue in economic prosperity.
Michael Porter, Harvard Business School

Waves of Innovation

1st wave: Iron, Water power, Mechanisation, Textiles, Commerce
2nd wave: Steam power, Railroad, Steel, Cotton
3rd wave: Electricity, Chemicals, Internal combustion engine
4th wave: Petrochemicals, Electronics, Aviation, Space
5th wave: Digital Networks, Biotechnology, Software
6th wave: Sustainability, Radical resource productivity, Whole system design, Biomimicry, Green chemistry, Industrial ecology, Renewable energy, Green nanotechnology

Source: The Natural Edge Project
http://www.naturaledgeproject.net/
"If you're not riding the wave of change... you'll find yourself beneath it"
A Profession that does not innovate is destined to become a commodity.
CHANGE

It’s a short trip from riding the waves of change to being torn apart by the jaws of defeat.
“Innovation is hard. It really is. Because most people don't get it. Remember, the automobile, the airplane, the telephone, these were all considered toys at their introduction because they had no constituency. They were too new.”

Nolan Bushnell
QUESTIONS TO INVITED SPEAKERS

• What are the Barriers for geo-Innovation? How do we overcome them?

• What are the Opportunities for geo-Innovation? Do you see specific areas representing a great opportunity for innovation and the future of the Profession?

• What are the strategies to promote geo-innovation at the research, practice or education?
Outline of Session

• Four 8-min (!) presentations from invited speakers
  – Representing the four pillars of our profession (education, research, consulting, construction)

• Discussion from the floor
  Please tell us what you think!
  Please tell us what you think what needs to be done!
  We will be taking notes (and action)!