

Globalization, Sustainability and Engineering

Globalization is not a completely new trend. It is the result of recent advances of technology. When *homo sapiens* started to exist, the absence of any technology allowed humans to exist in small groups of about 20 people, like the other primates. Technology on farming (agriculture and livestock) finally permitted cities to develop around the first rural areas. Other examples of relevance of technology are the Roman Empire, the discovery of America, the first circumnavigation (on the turning of XVI century) and the industrial revolution. These events reshaped definitively the world. Globalization is a new word, which started to be used (and abused) in the late XX century. It is the direct consequence of the advances of Information and communication technology.

Along the XX century, Engineering and Engineering Education started to be discussed as a central mechanism for economic growth and became understood as a strategic asset. This ICEE series, started in 1990, became an important forum for these themes.

By the turning to the XXI century, social questions, mostly connected to globalization and (lack of) urban and rural infra-structure, besides the clear environmental limitations of our planet, posed new questions for Engineering, which became much more complex. The necessity of inclusion of billions of human beings needs modern Engineering, but also needs political will. Engineers must leave their typical areas of work and participate explicitly on the decision making processes of nations and multi-lateral organisms.