It has become an SAIMM tradition to present a Student Colloquium every year. This year’s Student Colloquium took place in early November at the Vaal University of Technology in Vanderbijlpark. The Colloquium is organized to create an opportunity for young engineers entering the industry to stand in an open forum and test their ideas. For industry it is an opportunity to look at the quality and depth of what students are producing. Traditionally it was an event that included only South African universities, since other institutions in Southern Africa were not included for practical reasons. For this reason the SAIMM envisages that the growing regional branches are the best vehicle to replicate this experience outside South Africa.

Recently much has been made of the sustainability of mining, but the universities in our region need recognition since it is they who bring into being the capability of minds that can conceive ideas, create, and implement solutions. Look at the remarkable people that have come from these institutions and are now the lifeblood of business, industry and government and that help to ensure that all those involved in mining in Southern African can look forward to a better future.

Young engineers are now entering industry at a time when commodity demand is booming. At the same time they are facing a world that is increasing in complexity and population growth. The seven billion mark is just around the corner. For the next generation this means that what a decade or two ago was taken for granted has now become scarce: water to live from, food for nourishment, energy, a clean environment for good living and wide open spaces to sustain a healthy soul.

What is becoming abundantly clear for us is that increasing exposure to different values, cultures, ideas and influences is creating dissatisfaction. Our society’s preoccupation with material wealth, therefore, asks the question whether engineering as a career delivers the trappings of wealth.

Carly Fiorina said with prescience way back in 2004:
‘There is no question that you have chosen the right disciplines to succeed. Science and engineering and technology are the language of the 21st century. I honestly believe that for all the scientific advancements that we have seen the past 100 years, we will look back on the 20th century as a warm-up act for the era we are moving into now. From biomedicine, to telecommunications, to information technology, to digital entertainment, we are moving into the main event of science and innovation and engineering, a time when these disciplines can change lives and solve fundamental problems that have plagued humanity for centuries. The capabilities you take away from here will help define this era.’

The question is: how will future engineers in Southern Africa sustain and build their capabilities for the benefit of a wider Southern Africa and indeed the world? In my opening address to the Colloquium I said to the students: ‘I encourage you to constantly work on expanding your knowledge. Use your work environment to build capabilities and use mentors where available to test ideas, get advice and shape your thinking. At the same time, be active in professional organizations such as the SAIMM, since it is exposure in this sphere that allows new ideas to be conceived and discussed. Follow this route and the world will become your oyster.’
1Carly Fiorina, ‘Embracing true reality’, UCLA Henry Samuei School of Engineering and Applied Science Commencement Address, San Jose, California, 19 June 2004.