

**UNIVERSITY OF SOUTH AUSTRALIA
GRADUATION CEREMONY**

**Monday, March 23, 2015
Adelaide Convention Centre**

**Professor Leanna Read, DUniv, FAICD, FTSE
Chief Scientist for South Australia**

Chancellor, Vice Chancellor, Members of Council, University staff, family and friends, and to the most important people here today – the graduands.

It is a real privilege to address you today.

Graduands, no doubt you are very excited by the occasion, but I expect also wondering with an element of trepidation where your careers will take you.

You probably have a good idea of your next step – be it a job or more study. Your degree at UniSA has positioned you very well for either.

You may not be aware, but you are graduating from the top university in SA for graduate employment. This is not by chance – it reflects the high priority that UniSA gives to preparing its graduates for the professions and industry.

The second reason you are poised for a rewarding career is your choice of education in the STEM field – Science, Technology, Engineering and Maths.

International research indicates that 75 per cent of the fastest growing occupations now require STEM skills and knowledge.

It is estimated, for example, that scientific and technological advances have produced over half of all Australian or US economic growth in the last 50 years.

The demand for your STEM skills will only continue to grow as we compete in the emerging global economy.

So where will your career path ultimately take you?

With some confidence, I would predict that your ultimate career has probably not been invented yet.

Mine certainly wasn't. I graduated with an Agricultural Science degree and PhD in biochemistry. I couldn't possibly have envisaged that one day I would found and head a biotechnology company - because the industry didn't exist then!

So it might be for you.

As Chief Scientist for South Australia, I spend a considerable amount of time thinking about where the jobs of the future lie. Let me give you some examples of where your degree could take you:

- **Apps for smart anything and everything:** When Apple introduced their iPhone software in 2008, no one would have predicted the revolution to come, with over two million apps now available for download on smartphones. Next generation apps will be for smart anything and everything.
- **Drones:** over the next 5 years, unmanned vehicles will generate over \$13 billion in economic activity and 34,000 new manufacturing jobs in the US alone.
- **3D printing** is predicted to be bigger than the Internet - there is already talk of using 3D printing to make foods!
- **Robotics** will include everything from automation, service robotics to mobile robotics and mimicking robotics.
- **Energy storage:** the transition from national or regional grids to micro grids has begun: houses of the future will be independent of the national energy grid.
- **Immunotherapy** as a new approach to treating cancer: Immunotherapy will train your own immune system to attack cancer cells – this approach can already achieve tumour response rates of 50%.
- **New ways to make rain** – on-demand water harvesters are already being developed, so we can extract rain at the very time and place we need it.

Don't limit your thinking to current career options – many have not yet been invented.

So my congratulations to all of today's graduands. As Nelson Mandela said "Education is the most powerful weapon which you can use to change the world".