

Speech at ANU graduation ceremony – 14 December 2011

Chancellor, Vice-Chancellor, distinguished guests and, most particularly, graduands.

Firstly, can I thank you Chancellor for the honour you have given me today.

I was always pleased to be a part of this great university with the privilege it brought of working with many of the best staff and students in the country. It was exciting to be part of a university where nearly everyone was always trying to do better – to understand more, to learn more, to use their skills and their knowledge – to do in fact what the ANU motto proclaims our purpose to be – first to understand the nature of things.

It was great to be part of Australia's National University – a University whose place in our community is special – a privilege given to us by legislation but a privilege earned because of the quality of the work – indeed the commitment to the role – of virtually the entire University.

So I greatly appreciate an award that connects me to the University permanently and makes me part of it again – a place I'll always value very highly.

Let me now offer my congratulations to all of you graduating today. It is a great achievement; the culmination of a great deal of effort and the result of a great deal of commitment. You can all be proud of what you have achieved - you have earned that right.

You science graduates are a rather special group. You have talents and skills and knowledge that our world desperately needs if it is to survive, and if all who live on it are able to enjoy a safe, secure and sustainably prosperous future.

You are prepared now for the next steps in your life, and the next steps in your career. It is an exciting time. I know it is because if I try really, really hard I can just remember my level of excitement when all those years ago I took the step that you are taking today.

Simply put, my cohort all thought that it was fantastic, a real high - much better than any other type of high commonly experienced in the '60s and '70s – or so I am told. We had finished what we set out to do; we were going out there to face the world; we knew with the certainty of youth that we could change that world and we knew that it needed to be changed; we were tolerant, idealistic and wise beyond our years. We thought. The world was indeed our oyster - and we were filled with anticipation – no challenge could not be met, we thought.

And when you look back on it, even using the reality-tinged rear vision mirror, we did achieve a bit, my generation. The world **is** a different place from then – much better in some respects though certainly not better in all.

If the world was **our** oyster then, it is **yours** today. You, too, have completed what you set out to do in this phase of your life. Like ours in those earlier days, your excitement will stem partly from that achievement and even sense of relief, and partly from the fact that not everything ahead of you is predictable – and many of you will feel the same thrill of nervous anticipation that we did.

There are challenges out there; some big ones. But you are well equipped to meet them.

Because of your fine education, you will be confident in the value of the scientific method – you will know that hypotheses are there to be tested; that evidence is the basis of science; that being sceptical is at the core of science; that robust debate and the contest of evidence-based ideas, not belief, is the foundation of scientific knowledge. You will know that science, and the uses to which scientific knowledge is put, must be acceptable to our communities so we must work within an ethical framework that is consistent with community mores. And you will be able to deal with uncertainty, and with probability, because you will know that there is always more to know.

Because of your fine education, you won't be daunted by complexity but rather you will be excited by it. You will use your own scientific discipline as your foundation, but you will know how to work with others as they put their disciplines, and their culture, alongside yours as you search together - to solve problems, or to lessen adverse impact.

There are indeed some big issues in this oyster of yours. Ones like climate change; reduced arable land and soil fertility; food supply; fresh water; pandemics and health more generally; ageing populations - alongside population growth.

The real question is obvious: how **do** we face challenges? How do we face them down, really?

Even now, in 2011, we can't feed or house the world's population, nor provide all of it with clean drinking water, security or good health. Our planet can't sustain us now – there are already some 1 billion malnourished people yet by 2050 there will be an additional 2 billion people on Earth.

Many of you graduating today won't believe that we can face the challenges just by doing more of the same – adding small incremental movements to everything. Nor should you. The rest of us don't want you to be content with that approach either.

We all want you to apply your talents and your skills, your knowledge, to find new ways of doing things – better ways. Ways that take us off an escalator and put us into an elevator – ways that move us from incremental changes and take us to necessary step changes.

Remember that it will be people like you, with an education like yours, who will discover what we need to know and who will have the ability to use that new knowledge to provide many of the answers that our future will depend on. It will be quality thinking and quality work in the disciplines represented here today, and in the countries represented here today, that will help human-kind to meet the challenges head on - and win.

I have come away from my 150 or so graduation ceremonies over the years convinced that the world has a chance. Not just because they are happy days and we leave on a high, but because you can see that the world, or parts of it anyway, is in good hands. You see graduates with the hopes and the aims and the freshness to do good things. Graduates equipped to take us to new levels, as we search out what we are, why we are what we are, and how we got to be where we are. Indeed, that basic understanding is another of the great challenges of humanity – learning, as I said earlier, the very nature of things. And so, too, is taking what we have learnt and applying it for the benefit of all living systems.

So let me leave you with a few simple thoughts: be proud of what you have done and face the future with confidence; never forget the less fortunate or the less privileged because they need you to use your knowledge and skills so that their lot in life can be improved; and never resile from your personal values, stand up for what you believe in and be confident of what you can achieve when you try.

Through all that you have done – and all that you will do – I hope that there is time for enjoyment. I hope that you enjoyed your studies. I hope that you will enjoy your work. And for now, I am sure that you will enjoy your celebrations.

I thank you sincerely for letting me share this day with you.