

## Mark Sceats

I grew up on the North Shore of Sydney but moved to Queensland with my parents when my father headed the Brisbane branch of the Reserve Bank. After secondary school I attended the University of Queensland, graduating with the University Medal, followed by a PhD in Physical Chemistry.

I undertook a post doctoral fellowship at the James Frank Institute of the University of Chicago, before moving to the University of Rochester, where I won the Alfred P Sloan Fellowship for my work in laser technology. American universities encourage academics to work closely with industry, enabling the commercialisation of Intellectual Property. I returned to Australia as Reader in the University of Sydney's Department of Chemistry, imbued with this philosophy and was given an opportunity to put it into practice when approached by the Overseas Telecommunication Commission, now Telstra, to establish the Optical Fibre Technology Centre, collaborating with engineers and physicists, as well as OTC engineers. At the time, OTC was the most advanced long-haul optical fibre network in the world, and they funded the installation of a facility which made special purpose optical fibres, developing novel devices used for switching and amplifying signals in the networks.

The Hawke Labor Government's commitment to "the Clever Country" saw the establishment of Cooperative Research Centres (CRCs). A consortium of university researchers, Telstra, and other multi-national companies won funding to establish the Australian Photonics CRC. Over my 10 years as CEO, the APCRC spun out thirteen start-up companies and launched the careers of many staff and students in industry and academe. I was awarded the MA Sargent Medal of the Institution of Engineers in Australia and the Centenary Medal. With the dot com crash of 2000, government support for the Centre ceased and it was wound up.

I had a brief "retirement" before being presented with an idea for a new process for manufacturing materials, such as cement, from which CO<sub>2</sub> could be separated for re-use or sequestration, so I was launched on to a second career with the establishment in 2005 of Calix Ltd. This is now an ASX-listed global company with its pilot and commercial scale demonstration plants at Bacchus Marsh in Victoria processing magnesium oxide and other materials for export products. Based on success in Australia, we won an EU grant which has funded a project applying the process technology for emissions reduction from cement manufacturing, with a consortium including Heidelberg Cement. The project was successful, and a second EU-funded project is underway to scale up the technology to a commercial scale. Calix is a technology development company, and I am its Chief Scientist and Executive Director. The company is also working on industry applications, including for water treatment, agriculture, aquaculture, biotechnology and battery materials.

My partner Elizabeth Elenius and I have lived in Pymont since 2000. We have enjoyed travelling to many parts of the world. We can also base ourselves in my daughter's home in London, enjoying family time with her partner, Joe, and my granddaughter, Rosa. My son, Tony, his wife, Christina and their two sons Oliver and Jasper live in Petersham. Fortunately, Elizabeth is active in the community and I share in the social life of this amazing community, making many good friends. We live a rich and rewarding life and look forward to making a contribution to both global and local environments.