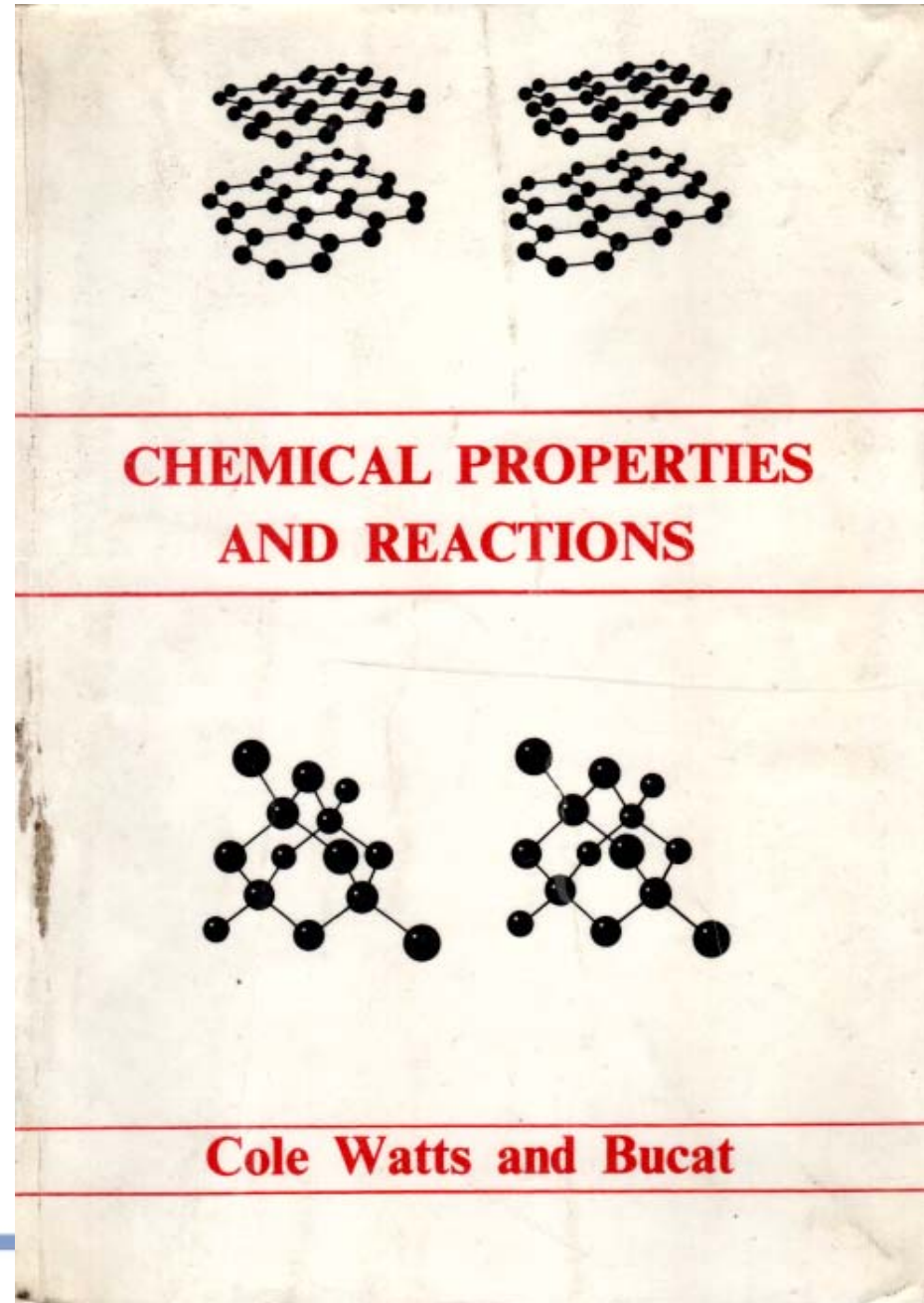


“iVEC is increasing Western Australia’s innovative capacity and economic development by encouraging and supporting the exploration, evolution and exploitation of advanced computing, large-scale storage, high-speed communications and scientific visualisation via grid technologies and eResearch services”

End of High School

- Enjoyed chemistry
 - Spent half of year in Scotland where we did experiments every week
 - Managed to maintain my interest despite lack of lab work in Perth
- Had an interest in computing
- Wanted to be a chemical engineer
 - But thought Curtin was too far away - I was very sheltered being brought up in Nedlands!
 - Started a science course at UWA



University career

- Majored in Chemistry
 - Did quite a few computing units too
 - Not too much focus on industry applications
- Went to Oxford to do a PhD in inorganic chemistry
 - Area of research was pretty esoteric
 - Did use stereo visualisation extensively
- Completely changed focus when did a postdoc at the Royal Institution in London
 - Was in conjunction with ICI, a large chemical company
 - High Performance Computing underpinned project

Hydrometallurgy

- Returned to WA to join Curtin School of Applied Chemistry
 - Experience of simulation of systems of industrial relevance key in securing position
 - Undertook a significant body of work using supercomputers to understand fundamentals of the Bayer process
 - A single page in Cole, Watts and Bucat!
- Became CEO of iVEC five years ago
 - Oversaw a 100-fold increase in computer power
 - Can now store over 1 petabyte of data
 - Federal budget announced \$80 million for iVEC to build a new HPC resource in WA 1000 times more powerful than what we have today!
 - Big focus on the Square Kilometre Array radio telescope

Lessons Learnt

- There are still many unsolved problems in the minerals and energy sector that require leading edge science to solve
- You never know when you will use things you learned in the past
 - Learned about the Bayer process in year 12 which suddenly became the focus of my professional life over 10 years later
- You must be ready to learn new things
 - Only three years ago, I knew nothing of radio astronomy and had no reason to think I would ever have to!
- You must be flexible and adaptable
 - WA will have a world class supercomputer which until budget night was completely inconceivable