

<b>Chemical Engineer</b>		<b>Western Australia</b>
ANZSCO Code: 2331-11		March 2009
Labour market rating:	No Shortage	
<b>Comment</b>		

### Occupational demand

Australian Bureau of Statistics (ABS) census data of 2006 shows that over 40 per cent of chemical engineers in Western Australia (WA) work in the manufacturing sector. Chemical engineers are employed in engineering design and engineering consultancy services, alumina and aluminium production and water supply. There is commitment in place for expenditure of \$2.5 billion for an alumina refinery in the south of WA, with an investment of a further \$1.5 billion under consideration at a separate location. ABS reports indicate that in the December quarter 2008 there was a rise in petroleum exploration expenditure of 48 per cent to \$540 million. Industry sources also indicate that gold mining continues to be strong in WA. All these industries are employers of chemical engineers. ABS data show the number of chemical engineers in WA has increased by 29 per cent between 2001 and 2006, to 331. The ABS Labour Force Survey shows that between November 2007 and November 2008, employment in this occupation has increased at a similar rate.

### Occupational supply

A four-year Bachelor of Engineering degree majoring in Chemical Engineering is available at Curtin University and the University of Western Australia (UWA). Chemical and Process Engineering has been offered at UWA since 2006. The first cohort of the UWA graduates will complete their degree at the end of 2009 for single degree and 2010 for double degree. Chemical engineering graduates often obtain employment in alternative fields after acquiring a double degree. Domestic graduate numbers from Curtin were 85 in 2007 and 72 in 2006. No immigration data is available on Chemical Engineers.

### Employer and industry comments/current labour market

A DEEWR survey of employers who had recently advertised for chemical engineers showed 86 per cent of vacancies were filled within six weeks of advertising. There were five applicants per vacancy of whom two per vacancy were considered by employers to be suitable. Several employers reported that chemical engineer positions could usually be filled by a person with a BSc. in chemistry or metallurgy as well as a chemical engineer. Large employers reported that the slow down in new projects and exploration activity is starting to flow through to employment which requires the skills of a chemical engineer. Many of the large employers of chemical engineers report they are now starting to shed or rationalise their staffing. Employers in specialist mining sector supply, and companies who provide contract services to the resource industry report scaling back of demand as the major employers cut into future expenditure. Several employers said that internal recruitment was becoming very important as they try to maintain their specialist staff. They were then able to fill the gaps in their workplace plans with highly qualified people who were now coming on to the labour market as a result of the slow down. Employers report a general expectation that the workload will contract rapidly but the contraction will be deeper in certain sections of industry. The slow down in new projects and exploration activity is also starting to flow through to the smaller and specialist suppliers of chemical engineering services and consulting companies and many are also starting to shed or rationalise staff. Employers said that oil and gas projects in WA are continuing to develop and they are factoring this into their workforce development planning for the employment of chemical engineers.

### Labour market outlook

In the medium term employment outlook is expected to remain stable with no shortages expected in this area of specialisation.