

Chemical Engineer	New South Wales (NSW)
ANZSCO Code: 2331-11	April 2009
Labour market rating	No shortage
Comment: <i>Positions for chemical engineers were generally filled with few problems in process engineering, consulting and research and development in various sectors including manufacturing, heavy engineering, biomedical and waste water.</i>	

Occupational demand

Census data indicate that employment of chemical engineers grew by about one per cent per annum over the five years to 2006. More recently, demand for the occupation has been subdued. The AIG-PricewaterhouseCoopers *Performance of Manufacturing Index* for March indicates that activity in chemicals, petroleum and coal manufacturing in Australia fell for the seventh consecutive month, while activity for manufacturing as a whole in NSW fell for the eleventh consecutive month. Raw coal production in NSW grew by 7.0 per cent in 2008 but declined in January and February 2009 to its lowest level in almost three years.

Occupational supply

DEEWR estimates that supply to the occupation from completions in entry-level university courses in NSW was about 70 persons in 2008, which was below the average of 82 for the previous five years. The annual training rate for the occupation (university completions as a percentage of employed chemical engineers) is 9.7 per cent, which is significantly above the average for all engineering professionals. There are no separate data on immigration of chemical engineers. No quantifiable data on wastage of chemical engineers was available for this report.

Employer and industry comments/current labour market

A DEEWR survey of employers who had recently advertised for chemical engineers found that 75 per cent of vacancies were filled within six weeks of advertising, which was an improvement on the figure of 64 per cent in 2007. The consensus of employers and recruitment agencies was that the supply of chemical engineers had increased considerably in recent months as a number of NSW employers had cut back their chemical engineering workforce and frozen recruitment. This view was supported by the results of the survey, which found an average of 2.5 suitable applicants per vacancy. Advertisers reported a significant increase in the number of applications from interstate, particularly from those with experience in the resources sector in Western Australia. Recruitment agencies noted that vacancies for chemical engineers still attracted many applicants from overseas who were seeking sponsorship but that most employers preferred to recruit engineers with recent Australian experience given the increased supply on the market. Positions for experienced chemical engineers were filled with few problems in process engineering, consulting and research and development in various sectors including manufacturing, heavy engineering, biomedical and waste water. Graduate positions proved particularly easy to fill, with anecdotal evidence of significant cutbacks in graduate recruitment. Unfilled vacancies were mainly confined to senior positions requiring highly specialised experience and were scattered across various industry sectors including petrochemicals, food and beverage manufacturing and personal products manufacturing.

Labour market outlook

While demand for the occupation in areas such as water management and environmental protection should continue to be solid over the short term, this will be offset by subdued activity in mining and manufacturing. Coal mining activity will be adversely affected by the much lower contract coal prices being negotiated for 2009-10 while the global recession and weak consumer spending will continue to have a negative impact on manufacturing production in 2009. As a result, no general shortage of chemical engineers is expected over the short term.