
PROFESSIONAL SCIENTISTS REMUNERATION SURVEY SUMMARY REPORT

2015



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About Professional Scientists Australia

Professional Scientists Australia is a division of Professionals Australia (formerly the Association of Professional Engineers, Scientists and Managers, Australia). We represent several thousand professional scientists from a broad range of specialisations including health science, automotive design, biomedical science, ecology, veterinary science, neuroscience, mental health, genetics and genomics, astronomy, biochemistry, mineral processing, environmental science, defence research, synchrotron science, environmental science, immunology and water science.

Professionals Australia is an organisation registered under the Fair Work Act 2009 representing over 25,000 Professional Engineers, Professional Scientists, Veterinarians, Architects, Pharmacists, Information Technology Professionals, Managers, Transport Industry Professionals and Translating and Interpreting Professionals throughout Australia. Professionals Australia is the only industrial association representing exclusively the industrial and professional interests of these groups.

We have three objectives:

- to provide a strong voice for professional scientists. This includes considering the kind of support, policies and practices at the enterprise and structural levels that will be necessary to create a sustainable science workforce capable of realising optimal levels of innovation, productivity and competitiveness;
- to play a leading role in encouraging dialogue between industry, government and the higher education sector. This means advocating for investment and structural reforms, building the platforms for cooperation and change and initiating and leading projects to foster collaboration; and
- to promote public understanding of science and the key role professional scientists play in ensuring Australia's future. This involves influencing public policy and resource allocation decisions and promoting the value of science to decision-makers and the wider community. We seek to highlight the critical role science plays in enabling productivity and innovation, promoting economic prosperity, protecting the environment, improving human welfare and quality of life and protecting national security. In doing so, we raise the status of the profession and the professionals who work in it.

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About Science & Technology Australia

Science & Technology Australia represents 68,000 scientists and technologists, and promotes their views on a wide range of policy issues to government, industry and the community. The organisation was formed in late 1985 and represents a vast array of professional interests within the field across Australia, with members including organisations such as the Australian Neuroscience Society, Australian Society for Biophysics, the Royal Australian Chemical Institute, the Australian Council of Deans of Science and the Women in Science Enquiry Network, amongst others. The organisation contributes to discussions at the highest levels in policy-making in Australia and communicates with the highest level of government.

Science & Technology Australia has three formal objectives:

- to encourage scientific dialogue between industry, government, and the science and technology community;
- to promote public understanding of science; and
- to foster close relations between member societies.

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FOREWORD



Science-based organisations must have recognition and reward strategies that will ensure a sustainable, agile and adaptable science workforce over the longer-term

With the labour force participation rate and average working hours below their levels of a few years ago and leading indicators of labour demand pointing to only modest employment growth in the near-term, the survey not surprisingly showed that professional scientists - as well as looking at whether or not their salaries are keeping pace with the market - are making job security a priority.

While the ABS reports that STEM skills jobs grew at around 1.5 times the rate of other jobs between 2006 and 2011¹, the Australian Industry Group's 2014 *Survey of Workforce Development Needs* still found that almost 44 per cent of employers continue to experience difficulties recruiting STEM-qualified workers.²

The market is therefore likely to become more challenging for science and technology-based organisations wanting to attract and retain high-calibre science talent, with a limited number of active candidates in the market and some looking to the international job market to provide employment certainty.

Ensuring Australia's ongoing science and technology capability is critical to a successful transition to a knowledge-based economy and supporting science-based innovation. We need to maintain a science workforce with the necessary skills and experience so we can develop what the Australian Council of Learned Academies describes as the "high-skill group capable in research commercialisable innovation and effective response to technological change". To do this, science-based organisations must have recognition and reward strategies that will ensure a sustainable, agile and adaptable science workforce over the longer-term.

We are committed to providing specialist remuneration information services to support these objectives.

CHRIS WALTON

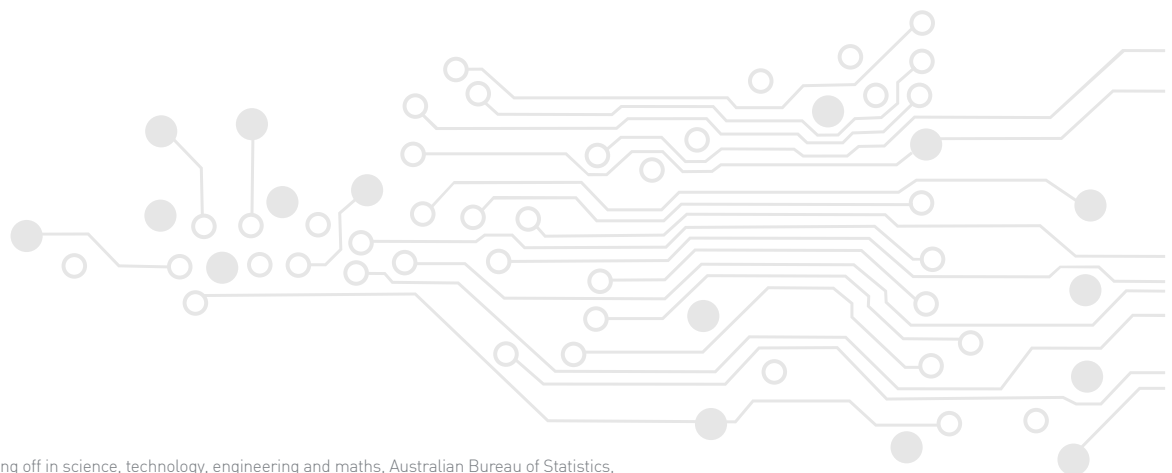
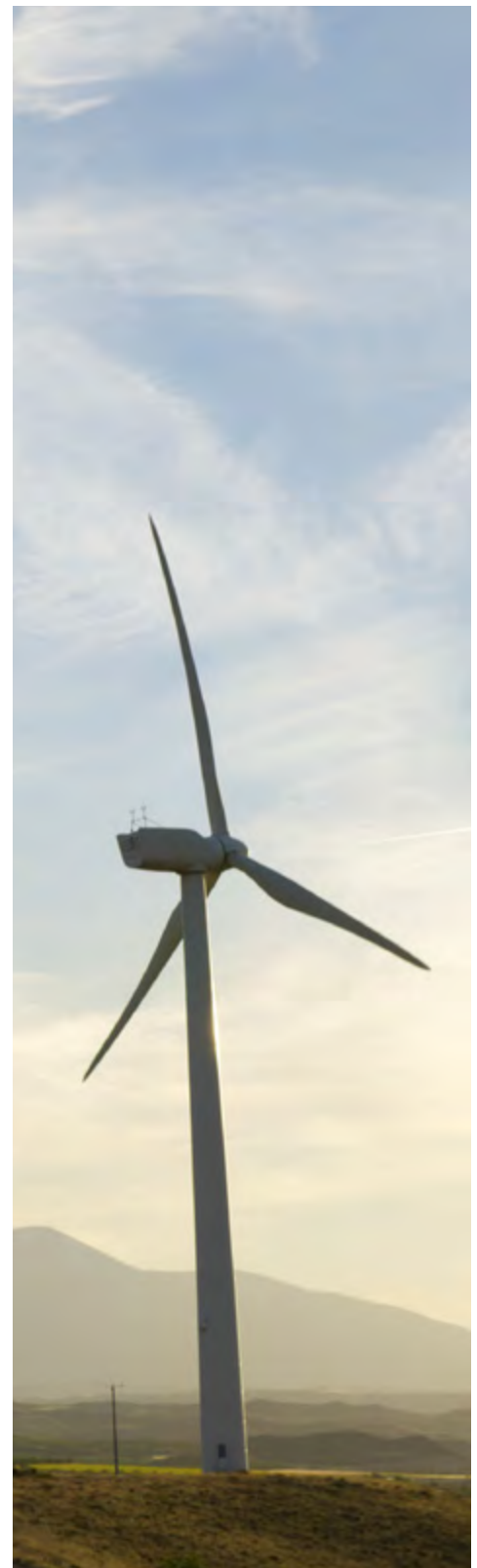
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CEO,
Science & Technology
Australia



1 Media release, Qualifications paying off in science, technology, engineering and maths, Australian Bureau of Statistics, 24 February 2014. Catalogue number 4250.0.55.005 - Perspectives on Education and Training: Australians with qualifications in science, technology, engineering and mathematics (STEM), 2010-11.
2 Australian Industry Group [2015]. Progressing STEM Skills in Australia, Foreword.

INTRODUCTION

A woman in a white lab coat is standing in a field of yellow-flowered plants, possibly a research facility. She is looking at a plant that is covered in a clear plastic protective covering. The sky is overcast with grey and white clouds. The ground is brown and appears to be a dirt path or field.

“In order to realise the long-term benefits of the investment that we and society have made in our skills, experience and education, it is important that highly-qualified and trained professional scientists are given proper financial recognition.”

Survey respondent

Welcome to the 2015 Professional Scientists Remuneration Survey Summary Report.

Many professional scientists don't opt for Science as a career for the money but rather because they feel it's a vocation and are passionate about the work.

Nonetheless it's critical that current data on remuneration is available to ensure scientists are being paid what they're worth, and have an evidence-base for negotiating their salaries at review time, an objective benchmark for reference when considering a job offer and a basis for making an informed judgement about whether or not it's time to move on to another role.

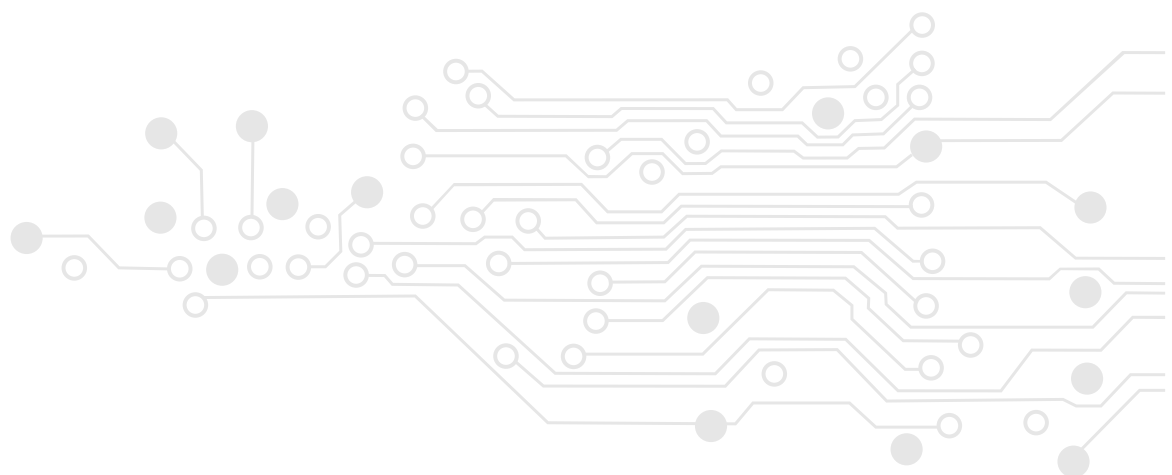
It's important that science and technology-based employing organisations understand the importance of attracting and retaining scientists by appropriately recognising their skills and the investment they have made obtaining graduate and post-graduate qualifications. It's critical that they respect the value of the work scientists do and reward them in line with relevant market salaries. In what is generally regarded as a strengthening economy with cautious but improving business sentiment and strong hiring expectations in science and technology-based organisations, it's critical that salaries and benefits are competitive and attractive to both potential candidates and existing staff.

Professionals Australia, Professional Scientists Australia and Science & Technology Australia have a thorough and broad-ranging survey process in place which allows us to provide the most accurate and up-to-date salary information possible. The survey is an annual snapshot of remuneration including base salary and other benefits across sectors, responsibility levels, years of experience, industries and branches of science.

The report provides detailed analysis of:

- current base salaries and total remuneration packages;
- annual salary movements;
- average bonuses as a proportion of total package; and
- working hours and how additional hours are compensated.

This is comprehensive, detailed and independent research you won't find elsewhere.



KEY RESULTS

A close-up photograph of a scientist in a laboratory. The scientist is wearing safety glasses and a lab coat. They are holding a petri dish with a red agar medium, showing several brown bacterial colonies. A pipette tip is visible in the foreground, and other petri dishes are blurred in the background.

Across all sectors employing scientists, a full-time professional scientist takes home an average annual base salary of \$111,854 and total package of \$130,176, with the highest packages found in the Private sector and Education (University or tertiary institution) sector with average total packages of \$135,551 and \$136,385 respectively.

Remuneration stood out as a priority for participants ranking in importance second only to job security

The average base salary across all sectors increased by 2.5 per cent since last year's salary survey with the greatest increases in the Education (University or tertiary institution) and State Public Service sectors. This is in comparison with the cost of living increasing 1.5 per cent over the previous 12 months to June 2015 and the Wage Price Index rising by 2.3 per cent over the same period. 36.5 per cent of respondents reported that they had not received any increase over the previous 12 months.

Overall, 47 per cent of scientists surveyed reported being satisfied or very satisfied with their current level of remuneration. 33.2 per cent were dissatisfied or very dissatisfied. Of those who said they were considering leaving their current job, 55.3 per cent said a pay increase would alter their intention. Remuneration stood out as a priority for participants ranking in importance second only to job security which was the highest priority amongst scientists surveyed.

11.7 per cent of those surveyed across all sectors were paid bonuses or incentives in the last year. The highest average bonuses were in the Private sector and Education (University or tertiary institution) sector. Additional benefits ranged from 6 to 16 per cent of respondents' median total packages across responsibility levels.

Of those who had changed job in the previous 12 months, the main reasons included broadening career development opportunities and obtaining improved job security. Of those who were considering leaving their current job, 39.4 per cent cited better work/life balance as a reason and 18.6 per cent said increased flexibility was a factor. Access to continuing professional development and flexible work arrangements ranked slightly higher on average as reasons for considering leaving their current job for women than for men.

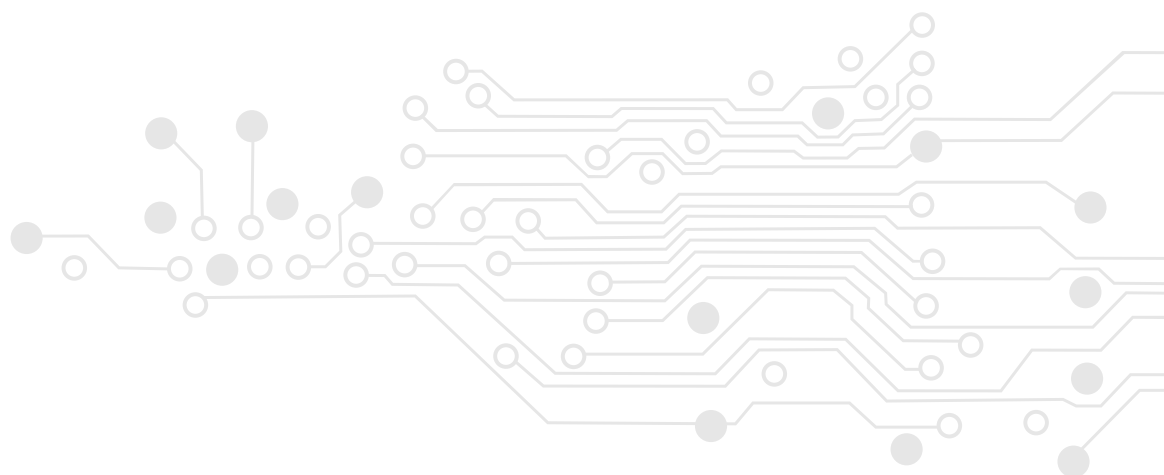
32.5 per cent reported a decline in the number of professionals with science capabilities in management and decision-maker roles in their organisation. 16.4 and 24.2 per cent of respondents said adherence to professional standards and the level of service quality had declined. 77.3 per cent agreed or strongly agreed that cost-cutting was affecting their organisation's science capability. Deprofessionalisation – the diminution of professional science capability across responsibility levels, industries and job functions – was ranked as a major concern by 48.3 per cent of respondents. 59.9 per cent of respondents said staff morale at their workplace had declined in the previous 12 months and 64.9 per cent said worker fatigue had increased.

The survey found a significant interaction between a professional scientist's gender and responsibility level for both base salary and total package, where males appear to receive significantly larger remuneration packages during the middle stages of their career than their female counterparts, suggesting that women were disadvantaged at Levels 3, 4 and 5. The differences were not significant at Levels 1 and 2 or beyond Level 5. The average proportion of total packages received as benefits on top of base salary was also lower for females compared with males. Overall, 13.6 per cent of the average male total package was composed of benefits in addition to base salary, while the figure for females was 11.9 per cent.

Respondents worked on average 44 hours per week including 6 hours of overtime. Only 13 per cent received monetary payment in recognition of their overtime, a significant issue in view of the 18.7 per cent of respondents reporting that they were expected to work longer hours in the past year compared to the previous one. The average number of hours worked per week was greatest for those working in Research and development, Teaching or training and Management.

“I value contributing to my organisation and the community in providing scientific advice and services but science is not always recognised as having a role in helping people in the way that professions such as nursing or policing are. While this is a big part of professional satisfaction, there needs to be broader recognition of this.”

Survey respondent



FINDINGS



01 SALARIES BY EMPLOYMENT SECTOR

SUMMARY OF FINDINGS

Across all sectors employing scientists, a full-time professional scientist takes home an average annual base salary of \$111,854, and total package of \$130,176, with the highest packages found in the Private sector and Education (University or tertiary institution) sector with average total packages of \$135,551 and \$136,385 respectively.

The average base salary across all sectors increased by 2.5 per cent since last year's salary survey with the greatest increases in the Education (University or tertiary institution) and State Public Service sectors. This is in comparison with the cost of living increasing 1.5 per cent over the previous 12 months to June 2015 and the Wage Price Index rising by 2.3 per cent over the same period. 36.5 per cent of respondents reported that they had not received any increase over the previous 12 months.

“I am already working harder and doing more senior work than I was 12 months ago but with no promotional opportunities available and only a very modest increase in remuneration.”

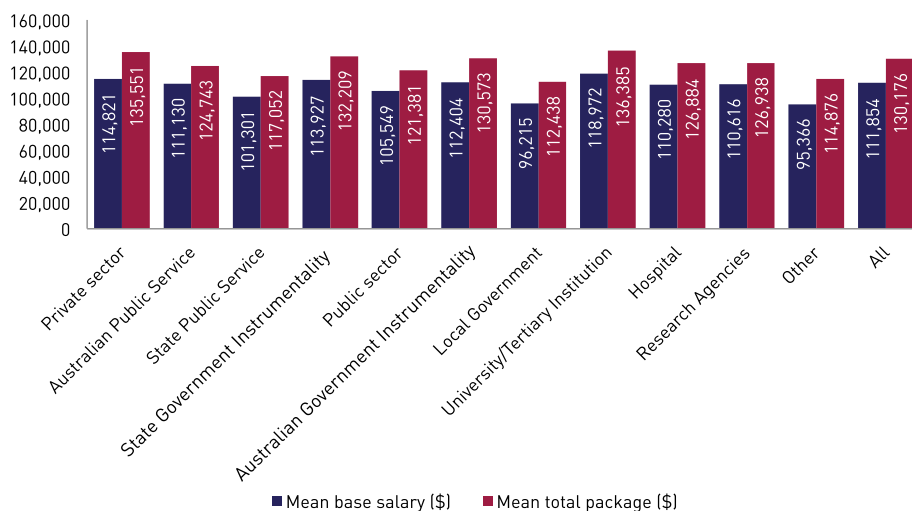
Survey respondent

DATA SUMMARY

1.1 Average base salaries and total package by employment sector

Across all sectors employing scientists, a full-time professional scientist takes home an average annual base salary of \$111,854 and receives a total package worth \$130,176.

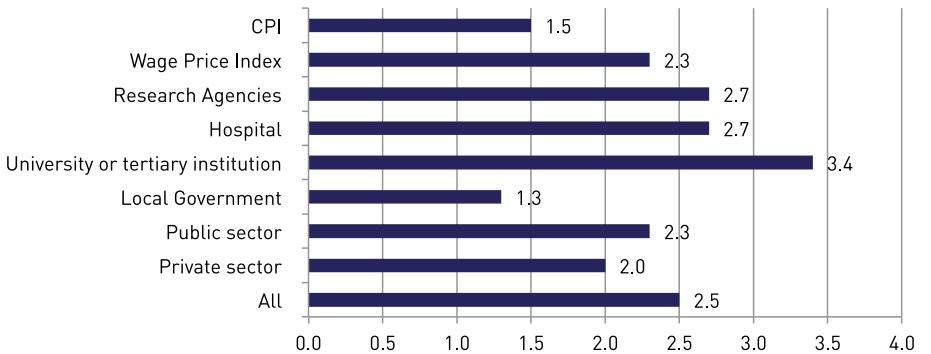
The average annual base salary was greatest in the Education (University or tertiary institution) sector at \$118,972, compared with \$105,549 in the Public sector and \$114,821 in the Private sector. The average annual total package was \$130,176. Similarly, the average total package of \$136,385 was greatest in the Education (University or tertiary institution) sector, compared with \$121,381 in the Public sector and \$135,551 in the Private sector.





1.2 Average annual percentage base salary movements by employment sector

Base salaries paid to professional scientists grew by an average 2.5 per cent over the last 12 months. Average annual rises of 2 per cent were reported in the private sector, while respondents in the public sector reported increases averaging 2.3 per cent. Increases paid to professional scientists were generally higher than inflation at 1.5 per cent (to June 2015) as measured by the ABS Consumer Price Index (6401.0) and roughly in line with increases in earnings across the Australian economy, with the ABS Wage Price Index (6345.0) increasing by 2.3 per cent annualised to June 2015. 36.5 per cent of respondents reported that they had not received any increase over the previous 12 months.



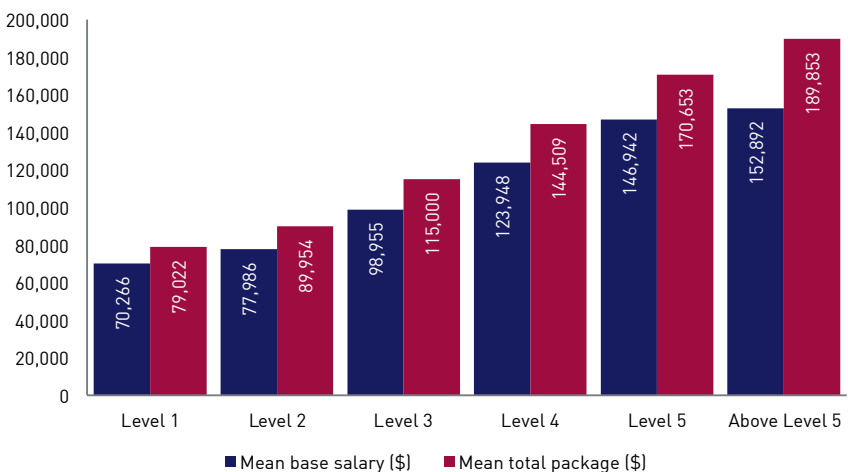
02 SALARIES BY RESPONSIBILITY LEVEL³

SUMMARY OF FINDINGS

The average annual base salary for a Level 1 was \$70,266 with an average total package of \$79,022. Salaries not surprisingly were greatest above Level 5 where the base salary was \$152,892 and total package of \$189,853. Average annual movements in base salary ranged from 2 to 2.7 per cent for professional scientists between Levels 1 and 5 and were greatest for those above Level 5 with an average increase of 3.8 per cent.

DATA SUMMARY

2.1 Average annual base salaries and total package by responsibility level



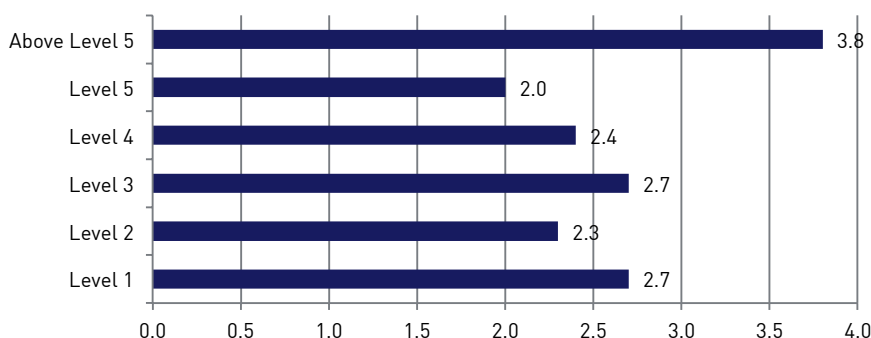
2.2 Base salaries and total package by responsibility level

	BASE SALARY			TOTAL PACKAGE		
	Lower Quartile	Median	Upper Quartile	Lower Quartile	Median	Upper Quartile
Level 1	\$57,745	\$70,111	\$82,000	\$64,291	\$74,797	\$94,075
Level 2	\$66,000	\$77,000	\$90,000	\$73,996	\$89,200	\$104,025
Level 3	\$80,939	\$93,709	\$109,964	\$90,278	\$107,310	\$129,038
Level 4	\$96,000	\$110,000	\$141,500	\$108,592	\$130,846	\$165,345
Level 5	\$112,000	\$140,000	\$177,887	\$129,000	\$154,537	\$202,692
Beyond Level 5	\$128,000	\$150,000	\$187,000	\$140,160	\$179,405	\$239,725

“Skilled scientists are being replaced with unskilled (not even technically trained) staff. There is a lack of appreciation for the important role of scientists and training in our workplace.”

Survey respondent

2.3 Average annual percentage base salary movements by responsibility level



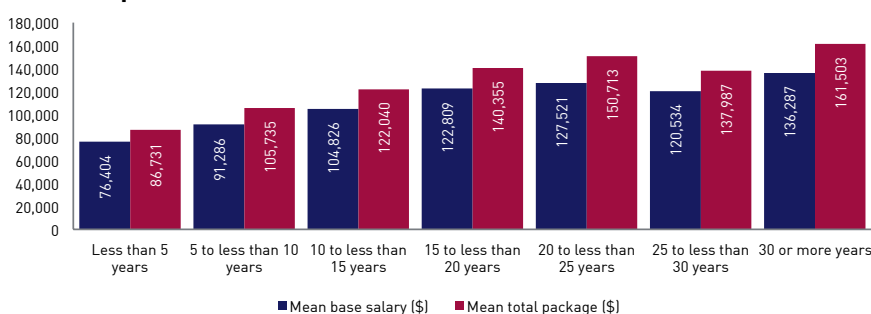
03 SALARIES BY YEARS OF EXPERIENCE

SUMMARY OF FINDINGS

Not surprisingly, the science profession is characterised by high levels of experience. The fields of Microbiology, Mathematics and Agricultural science were characterised by the greatest number of years of experience with an average 26.4, 24.3 and 23.9 years respectively. By comparison, salary movements were greatest for Scientists with less than 5 years' experience and 5 to less than 10 years' experience with average annual percentage increases of 3.8 and 3.3 respectively.

DATA SUMMARY

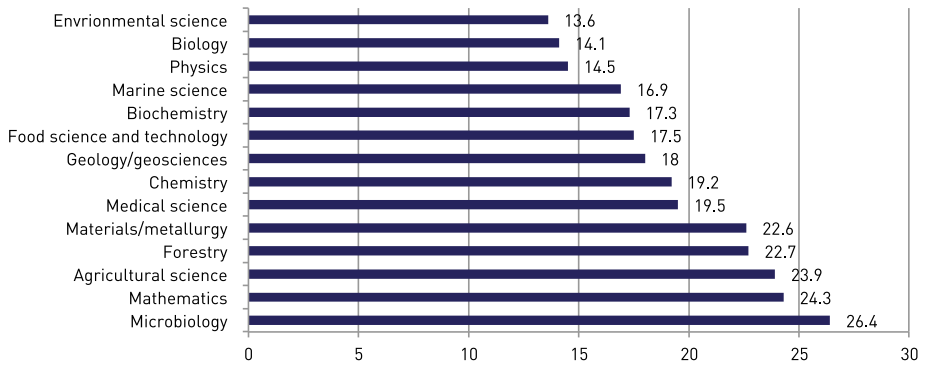
3.1 Average base salaries and total packages by years of experience



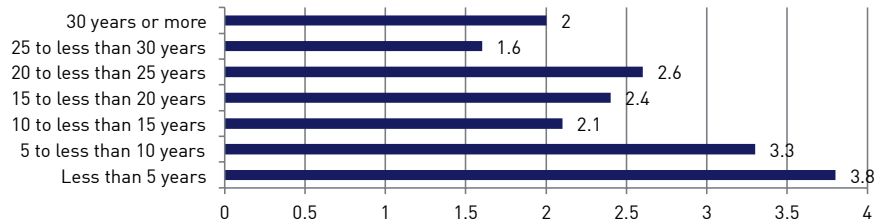
3. The responsibility level definitions used in this survey reflect those in the Professional Employees Award 2010 (available at <http://awardviewer.fwo.gov.au/award/show/MA000065>). For a summary of Responsibility Level Definitions, refer to the About the Survey section.



3.2 Average years of professional experience by branch of science



3.3 Average annual percentage salary movements by years of professional experience



04 SALARIES BY BRANCH OF SCIENCE

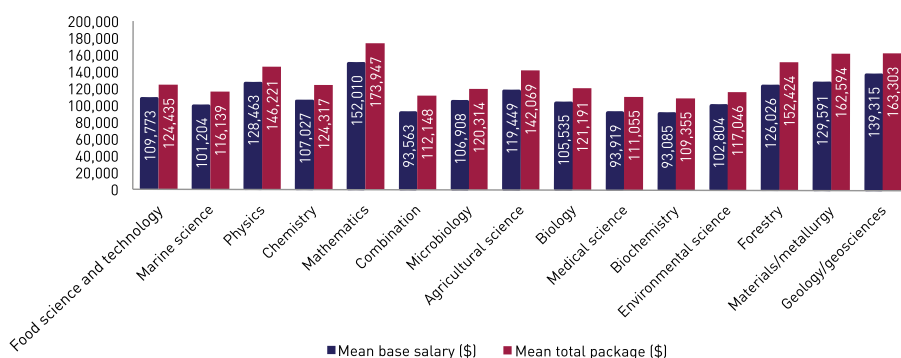
SUMMARY OF FINDINGS

Average annual salary movements were greatest in the Food science and technology and Marine science fields with respective increases of 4.3 and 3.7 per cent. Movements were smallest in the Geology/geosciences and Materials/metallurgy with increases of 0.9 and 1.3 per cent respectively. These figures reflect what has occurred in the Australian economy - following a prolonged period of boom in the resources sector driving up wages for professionals in mining-related fields like Geology/geosciences and Metallurgy/materials, we're now seeing more restricted wage growth as those industries attempt to rein in costs and adjust to suppressed commodity prices.

DATA SUMMARY

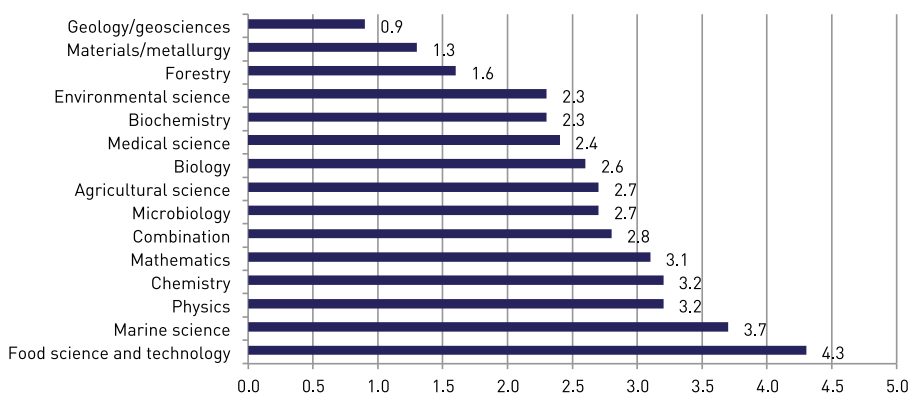
Branches of science (also referred to as fields in this report) are based on the Australian Bureau of Statistics ASCED codes set out in 1272.0 Australian Standard Classification of Education (ASCED), 2001. Readers should note that survey results specific to branch or field of science are based on smaller sample sizes and should be treated with caution.

4.1 Average annual base salaries and total package by branch of science



4.2 Average annual percentage base salary movements by branch of science

Annual base salary movements for professional scientists were determined by comparing the reported current salary of the individual with that reported as having been received 12 months earlier by the same incumbent performing the same job.



“Jobs are fewer and harder to get. People are staying put. I think we are heading towards a crunch when new graduates cannot find jobs to get experience and the older scientists start to retire. That gap of experience will become problematic.”

Survey respondent

05 SALARIES BY JOB FUNCTION

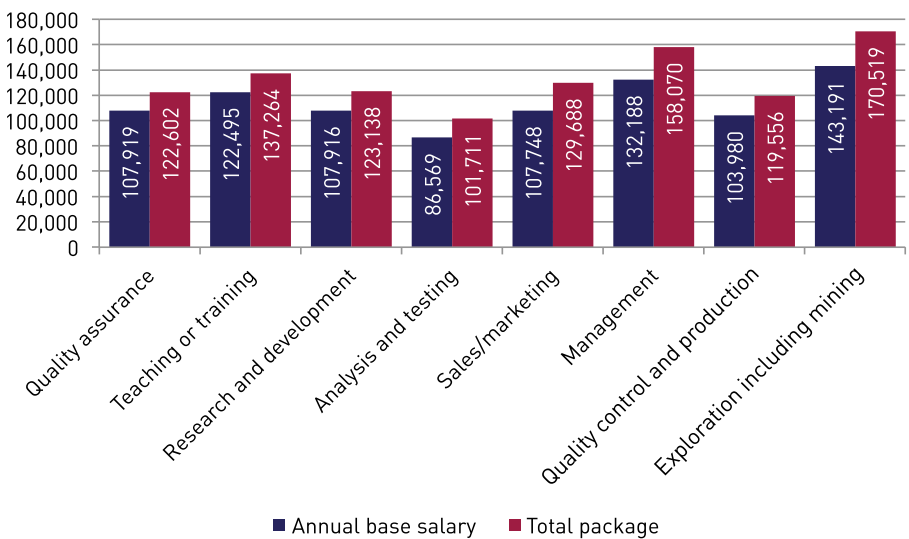
SUMMARY OF FINDINGS

Average base salaries across job functions were generally up on last year. The highest base salaries by job function were in the Exploration (including mining) and Management fields with salaries of \$143,191 and \$132,188 respectively. The highest total packages were in the same areas with total package figures of \$170,519 and \$158,070 respectively.

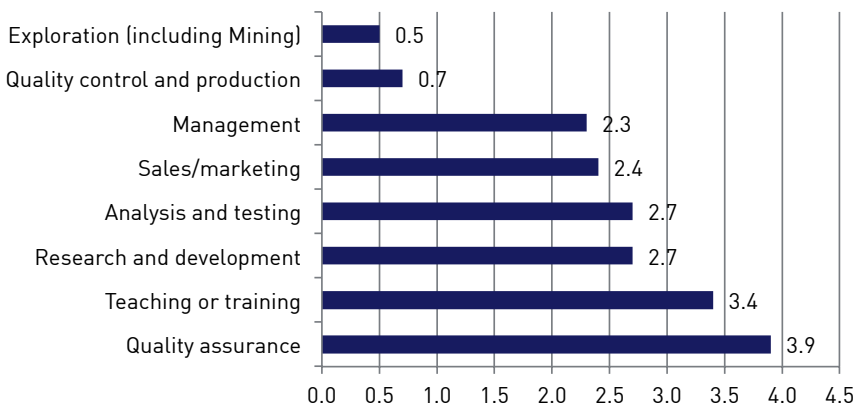
The greatest movement in base salaries were in Quality assurance, Teaching or training, Research and development and Analysis and testing with increases of 3.9, 3.4, 2.7 and 2.7 per cent respectively. The smallest annual percentage movements were in Quality control and production and Exploration (including mining).

DATA SUMMARY

5.1 Average annual base salaries and total packages by job function



5.2 Average annual percentage base salary movements by job function



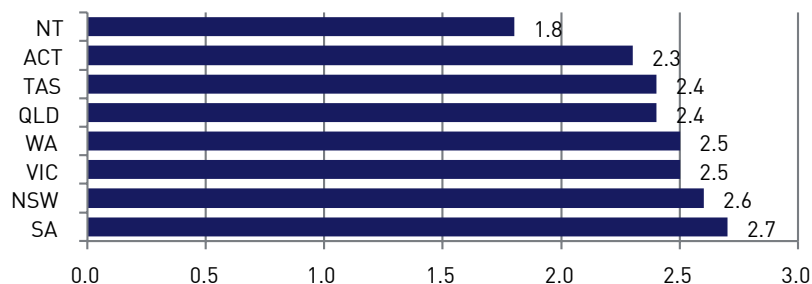
06 SALARIES BY STATE/TERRITORY

SUMMARY OF FINDINGS

While there are encouraging signs for the national science and technology labour market with average base salaries increasing modestly, there were varying outcomes between the states/territories, reflecting each state and territory's particular economic and labour market conditions. SA and NSW led with the highest average salary movements of 2.7 and 2.6 per cent respectively.

DATA SUMMARY

6.1 Average annual percentage base salary movements by state/territory



“It is risky to be a professional scientist in a specialised field. There can be limited options in each state. It can be good because when jobs appear, there are not many that are sufficiently skilled so you have a good chance, but it also means that jobs do not come up often.”

Survey respondent

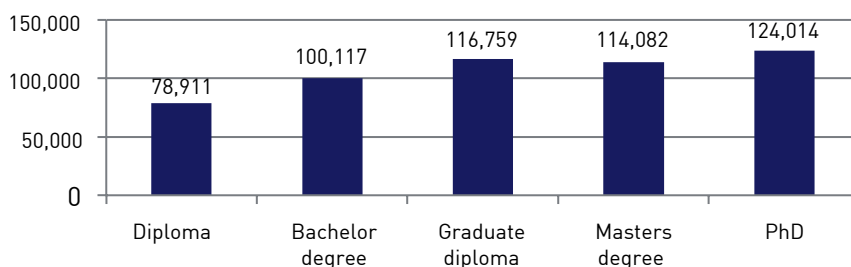
07 SALARIES BY HIGHEST SCIENCE QUALIFICATION

SUMMARY OF FINDINGS

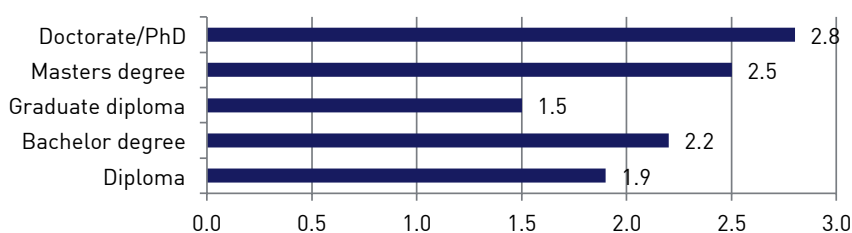
The average base salaries by highest qualification ranged from \$124,014 for those with a PhD, through to \$114,082 for those with a Masters, \$116,759 for a Graduate diploma, \$100,117 for a Bachelor degree and \$78,911 for a Diploma. The greatest annual percentage increase was for those with a Doctorate/PhD with an average base salary increase of 2.8 per cent.

DATA SUMMARY

7.1 Average annual base salaries by highest science qualification (\$)



7.2 Average annual base salary percentage movement by highest qualification



08 SALARIES, SATISFACTION LEVELS AND SCIENCE CAPABILITY

SUMMARY OF FINDINGS

Overall, 47 per cent of scientists surveyed reported being satisfied or very satisfied with their current level of remuneration. 33.2 per cent were dissatisfied or very dissatisfied. Of those who said they were considering leaving their current job, 55.3 per cent said a pay increase would alter their intention. Remuneration stood out as a priority for participants ranking in importance second only to job security which was the highest priority amongst scientists surveyed.

Of those who had changed job in the previous 12 months, the main reasons included broadening career development opportunities and obtaining improved job security. Of those who were considering leaving their current job, 39.4 per cent cited better work/life balance as a reason and 18.6 per cent said increased flexibility was a factor. Access to continuing professional development and flexible work arrangements ranked slightly higher on average as reasons for considering leaving their current job for women than for men.

32.5 per cent reported a decline in the number of professionals with science capabilities in management and decision-maker roles in their organisation. 16.4 and 24.2 per cent of respondents respectively said adherence to professional standards and the level of service quality had declined. 77.3 per cent agreed or strongly agreed that cost-cutting was affecting their organisation's science capability. Deprofessionalisation – the diminution of professional science capability across responsibility levels, industries and job functions – was ranked as a major concern by 48.3 per cent of respondents. 59.9 per cent of respondents said staff morale at their workplace had declined in the previous 12 months and 64.9 per cent said worker fatigue had increased.

DATA SUMMARY

8.1 Satisfaction levels with current level of remuneration

47 per cent of scientists surveyed were satisfied or very satisfied with their current level of remuneration and 33.2 per cent were dissatisfied or very dissatisfied.

8.2 Reasons for considering leaving current job

31.7 per cent of respondents reported that they were considering leaving their current job. The three main reasons respondents gave for considering leaving their current job were to broaden their career development opportunities (38 per cent), a personal change of location (26.8 per cent) and to obtain improved job security (22.5 per cent). Access to continuing professional development and flexible work arrangements ranked slightly higher on average as reasons for considering leaving their current job for women than for men.

8.3 Factors which would alter intentions to leave job

Of those who said they were considering leaving their current job, 55.3 per cent said a pay increase would alter their intention. Other factors reported as impacting respondents' intention to leave their current job were greater support for continuing professional development (41.7 per cent), a promotion (40.9 per cent), greater organisational commitment to improving workplace culture (39.8 per cent), better work/life balance (39.4 per cent) and greater job security (36.7 per cent).

8.4 Satisfaction levels by branch of science

The highest levels of satisfaction with remuneration levels were found in the Forestry, Mathematics, Chemistry, Geology/geosciences and Environmental science fields.

8.5 Main reason for changing jobs

Of those that had changed jobs, broadening career development opportunities (38 per cent), a personal change of location (26.8 per cent) and improved job security (22.5 per cent) were reported as the main reasons for the change.

“There are rarely remuneration incentives for staff who have studied at Masters level, yet many workplaces require you to use the skill set you acquired by doing this further study.”

Survey respondent



8.6 Current work priorities

Job security ranked highest in respondents' work priorities, followed by remuneration and work/life balance. Respondents ranked their concerns as follows:

1. job security;
2. remuneration;
3. work/life balance;
4. positive workplace culture;
5. career progression;
6. flexible work arrangements;
7. continuing professional development; and
8. being close to home.

8.7 Impact of diminished science capability

32.5 per cent reported a decline in the number of professionals with science capabilities in management and decision-maker roles in their organisation. 16.4 and 24.2 per cent of respondents respectively said adherence to professional standards and the level of service quality had declined. 77.3 per cent agreed or strongly agreed that cost-cutting was affecting their organisation's science capability.

8.8 Deprofessionalisation

Deprofessionalisation – the diminution of professional science capability across responsibility levels, industries and job functions – was ranked as a major concern by 48.3 per cent of respondents.

8.9 Staff morale

59.9 per cent of respondents said staff morale at their workplace had declined in the previous 12 months and 64.9 per cent said worker fatigue had increased.

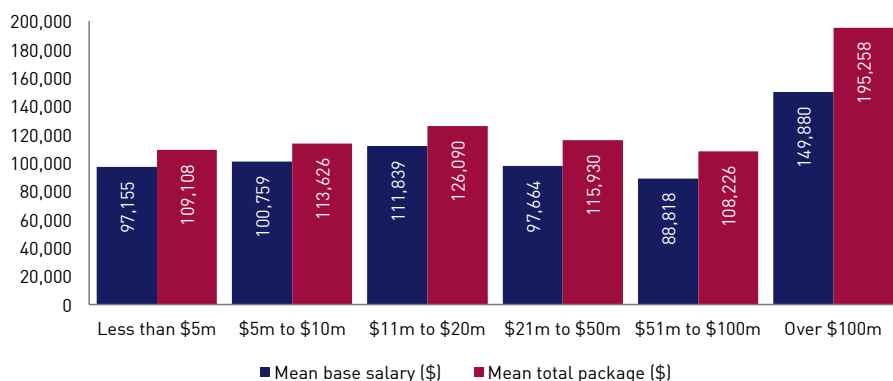
09 PRIVATE SECTOR SALARIES BY TURNOVER

SUMMARY OF FINDINGS

Average base salaries ranged from \$97,155 for scientist employees of private sector employers with a turnover of less than \$5 million, through to \$149,880 for scientist employees of organisations with turnover above \$100 million. Average total packages ranged from \$108,226 for scientist employees of employers with a turnover of between \$51 and \$100 million through to \$195,258 for scientist employees of employers with a turnover of over \$100 million. Indeed, those in the highest earning organisations appear to be the best remunerated with professional scientists at all levels paid significantly more than their peers employed by organisations with turnover of \$100 million or less. The survey found an average annual decline of 0.5 per cent in salaries in firms with turnovers of Less than \$5 million, while the greatest increase of 5.2 per cent was at the \$21 to \$50 million dollar turnover level.

DATA SUMMARY

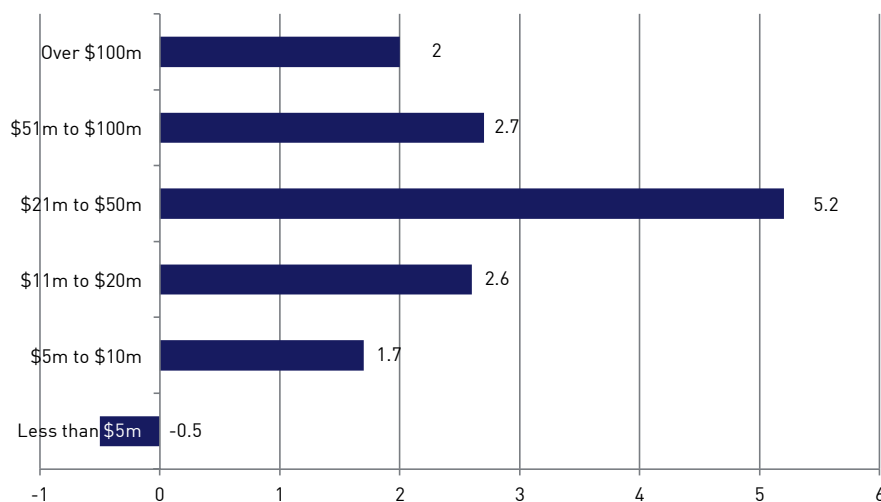
9.1 Average base salaries and total packages by private sector turnover



“I don’t wish to leave for better job security but I am so tired of continual contracts and no stability. It feels very disrespectful.”

Survey respondent

9.2 Average annual percentage base salary movements by private sector turnover



10 SALARIES BY GENDER

SUMMARY OF FINDINGS

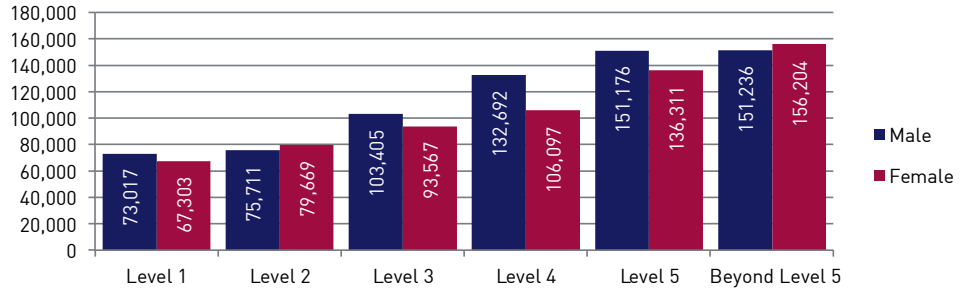
While sample sizes in the survey are small and the conclusions which can be drawn about remuneration levels by gender limited, there are some findings worth noting and keeping a watch on. The survey found a significant interaction between a professional scientist’s gender and responsibility level for both base salary and total package, where males appear to receive significantly larger remuneration packages during the middle stages of their career than their female counterparts, suggesting that women were disadvantaged at Levels 3, 4 and 5. The differences were not significant at Levels 1 and 2 or beyond Level 5. The average proportion of total packages received as benefits on top of base salary was also lower for females compared with males. Overall, 13.6 per cent of the average male total package was composed of benefits in addition to base salary, while the figure for females was 11.9 per cent.



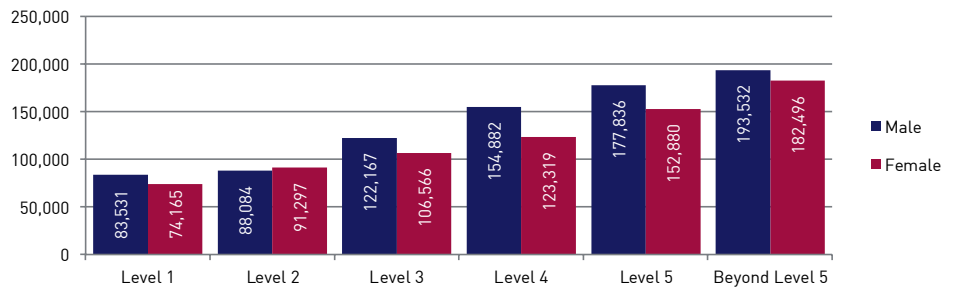
DATA SUMMARY

10.1 Salaries by responsibility level and gender

Average annual base salary by responsibility level and gender

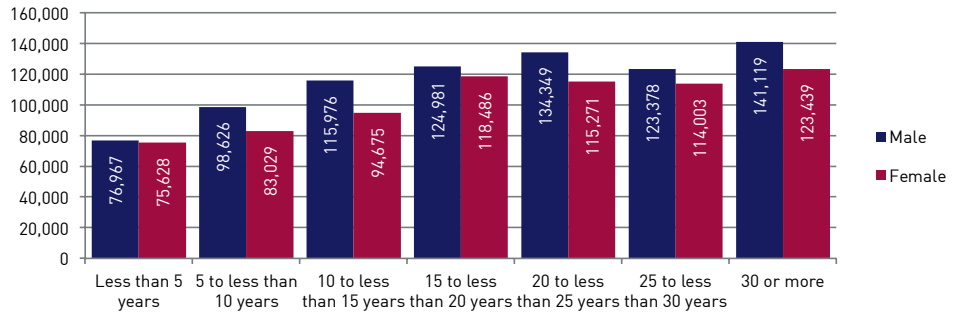


Average annual total package by responsibility level and gender

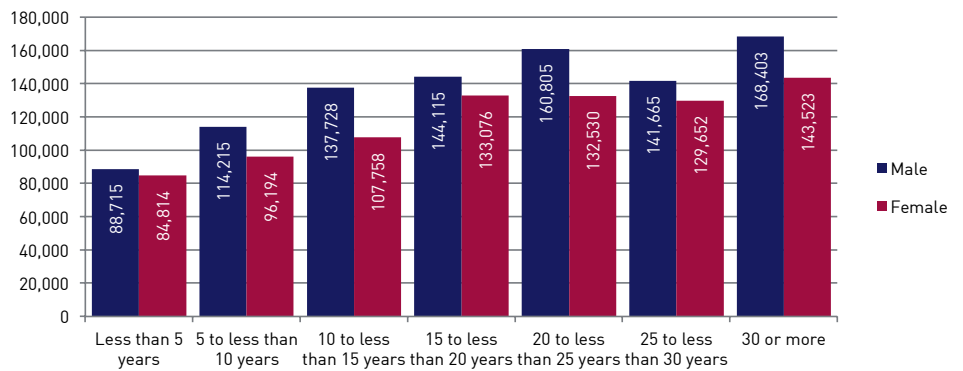


10.2 Salaries by years of experience and gender

Average annual base salary by years of experience and gender

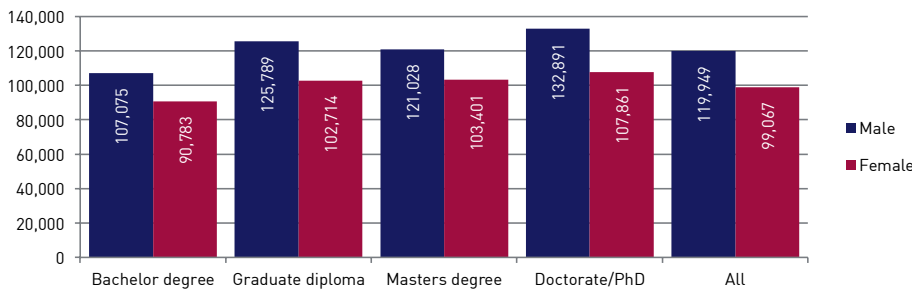


Average total package salaries across years of experience



10.3 Salaries by highest qualification and gender

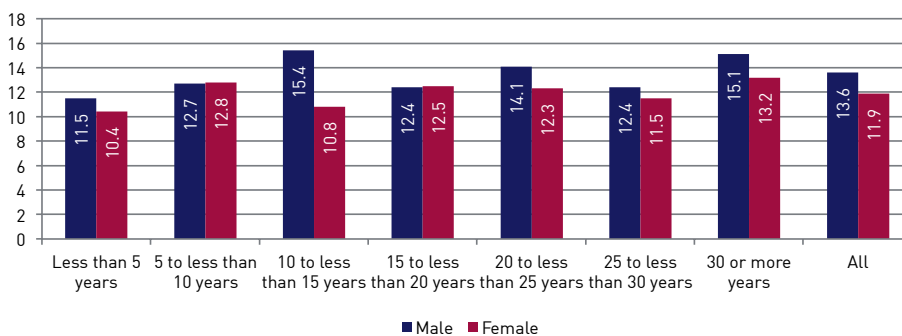
Average annual base salary by highest qualification and gender



“Replacing staff with less scientific knowledge and experience isn’t a smart way to save money.”

Survey respondent

10.4 Benefits as a percentage of total package by gender across years of experience



“Funding pressures have led to cost-cutting which in the long-term will be unsustainable for retaining a skilled workforce.”

Survey respondent

11 SALARIES BY INDUSTRY

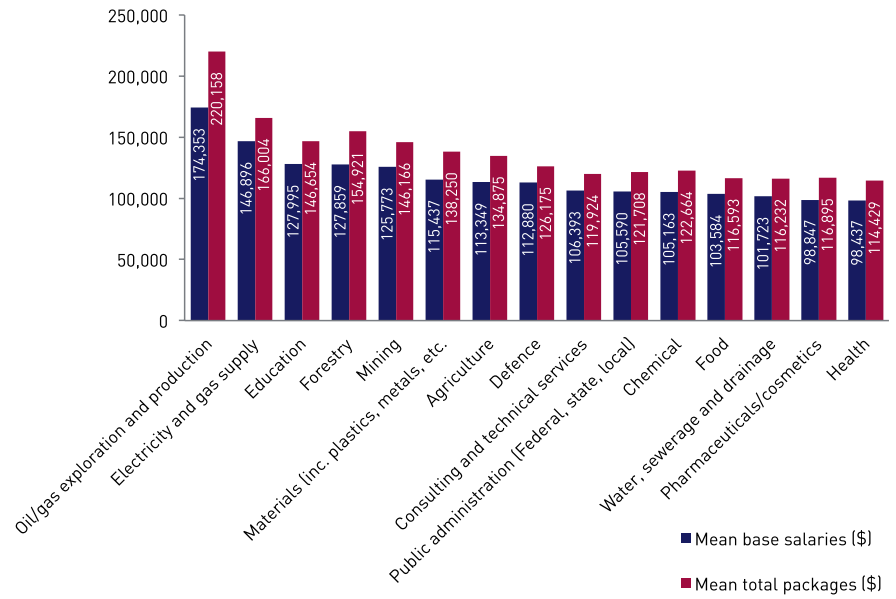
SUMMARY OF FINDINGS

The highest average base salaries were in the Oil/gas exploration and production and Electricity and gas supply industries with salaries of \$174,353 and \$146,896 respectively. The highest total packages were in the same industries with packages of \$220,158 and \$166,004 respectively. The highest average annual salary movements were in the Food, Electricity and gas supply and Education industries with increases of 4.1, 3.6 and 3.5 per cent respectively.

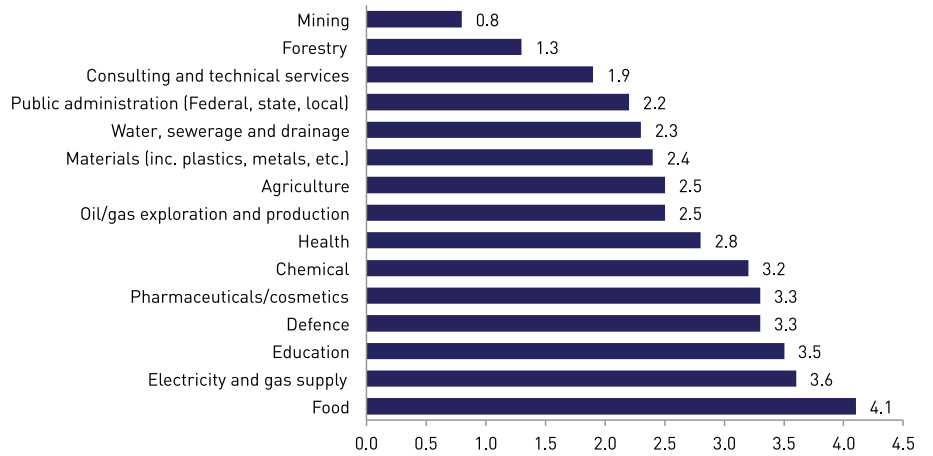


DATA SUMMARY

11.1 Average annual base salaries and total packages by industry



11.2 Average annual percentage base salary movements by industry



12 VARIABLE PAY

SUMMARY OF FINDINGS

11.7 per cent of those surveyed across all sectors were paid bonuses or incentives in the last year. The highest average bonuses were in the Private sector and Education (University or tertiary institution) sector. Additional benefits ranged from 6 to 16 per cent of respondents' median total packages across responsibility levels. Not surprisingly, additional benefits tended to form a greater proportion of total package for respondents at higher responsibility levels. The value of benefits tended to be similar across the different branches of science, with Forestry and Agricultural science having the highest median benefits as a proportion of total package. Across classifications and sectors, the largest component of remuneration apart from base salary was the employer superannuation contribution, with 43.6 per cent of respondents making personal superannuation contributions over and above the employer contribution. 70 per cent had access to remuneration packaging using a salary sacrifice arrangement. 11.1 per cent of respondents received a motor vehicle as part of their package, with vehicles most commonly provided to scientists working in outdoors-based fields such as Forestry, Environmental science and Agricultural science.

“There is still a significant gender pay gap in science in Australia. I have no doubt a man doing my job (same qualification, number of years' experience, etc.) would be paid at least \$10K more.”

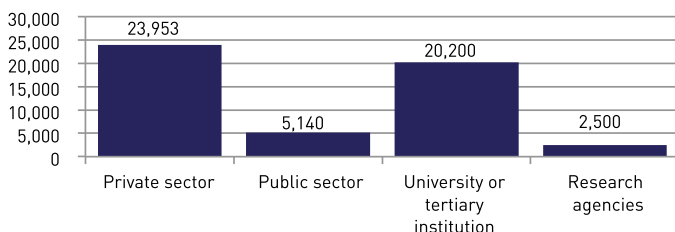
Survey respondent

DATA SUMMARY

12.1 Performance bonuses

Performance bonuses are generally available to employees through an enterprise agreement or common law contract. 11.7 per cent of survey respondents received a performance bonus in the previous 12 months.

12.2 Average bonus by employment sector

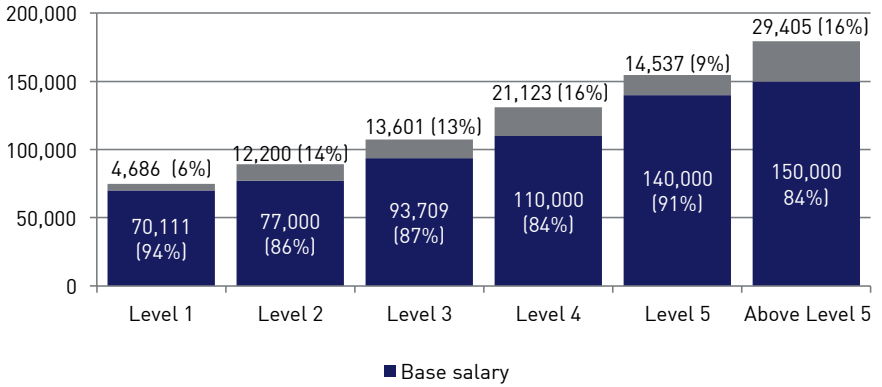


■ Average bonus by employment sector (\$)

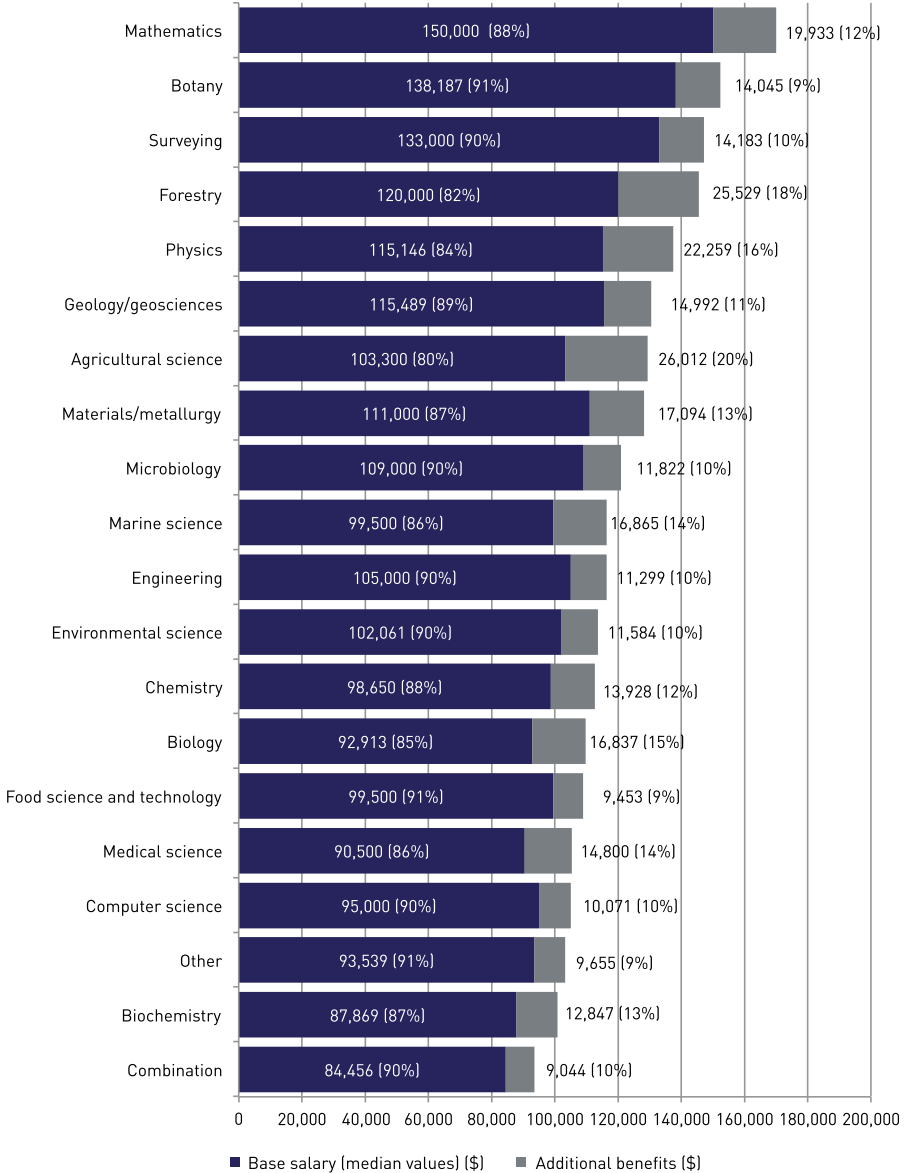


12.3 Base salary and additional benefits as a proportion of total package by responsibility level

Additional benefits are calculated by subtracting base salary from total package to find the pre-tax value of all additional components of remuneration an individual is entitled to above and beyond their base salary.



12.4 Base salary and additional benefits as a proportion of total package by branch of science (median values)



12.5 Motor vehicles

11.1 per cent of respondents received an employer-provided motor vehicle as part of their package with vehicles most commonly provided to scientists working in outdoors-based fields such as Forestry, Environmental science and Agricultural science.

12.6 Access to remuneration packaging using a salary sacrifice arrangement

70 per cent of respondents said they had access to remuneration packaging using a salary sacrifice arrangement.

13 WORKING HOURS AND COMPENSATION FOR ADDITIONAL HOURS WORKED

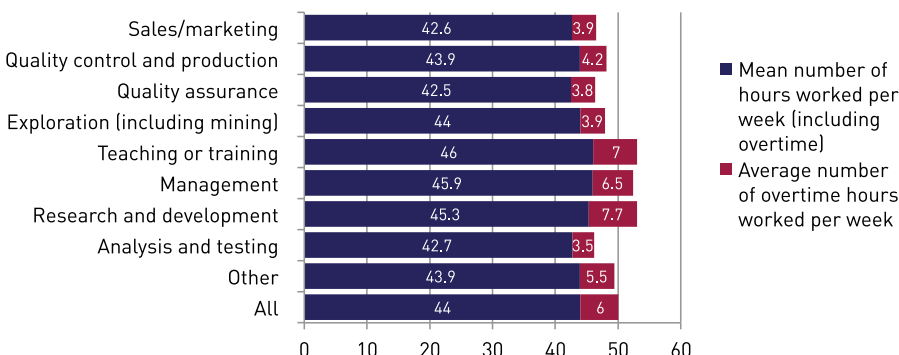
SUMMARY OF FINDINGS

Respondents worked on average 44 hours per week including 6 hours of overtime. Only 13 per cent received monetary payment in recognition of their overtime, a significant issue in view of the 18.7 per cent of respondents reporting that they were expected to work longer hours in the past year compared to the previous one. The average number of hours worked per week was greatest for those working in Research and development, Teaching or training and Management.

DATA SUMMARY

13.1 Average number of hours worked per week plus additional hours by job function

Overall, respondents worked an average 44 hours per week and 18.7 per cent said they were expected to work longer hours in the past year than the previous one. Those who worked in Research and development, Teaching or training and Management worked the greatest number of hours per week.



“Staff morale has declined due to longer hours worked and the difficulties of meeting organisational expectations about maintaining or exceeding the quality of work produced with reduced staff numbers and expertise. Extra hours put in go unnoticed by managers at the higher level. We’re always told just to do more with less.”

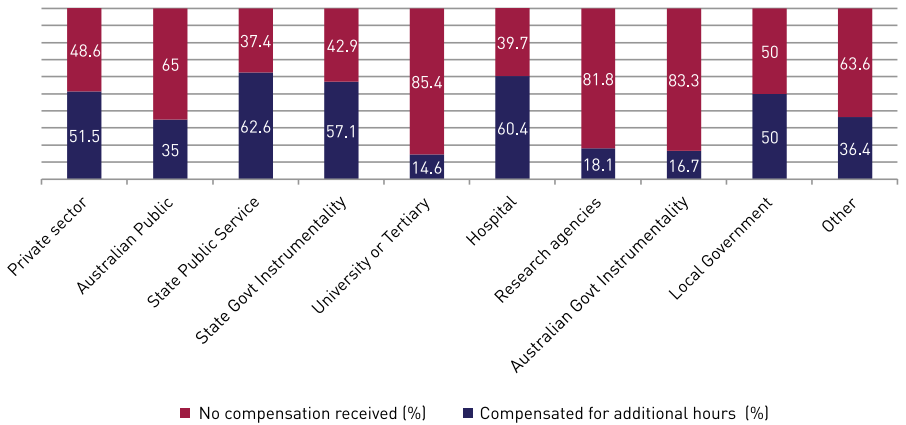
Survey respondent



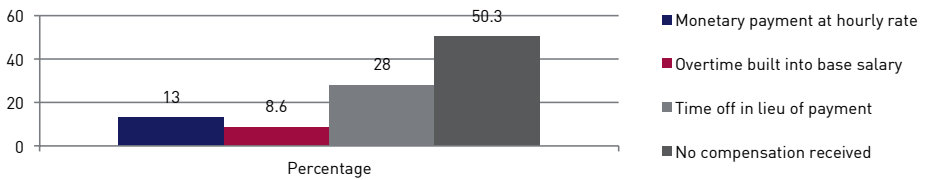
13.2 Compensation for additional hours by employment sector

Overall 50.3 per cent of respondents reported receiving no compensation for additional hours worked. Of those that received compensation, an average 13 per cent received monetary payment, 8.6 per cent reported having compensation for additional hours worked built into their base salary and 28 per cent received time off in lieu of payment. Compensation for additional hours worked was greatest in the State Public Service and Hospital sectors. Over 85 per cent of those engaged in the Education (University or tertiary institution) sector reported receiving no additional compensation for additional hours worked.

Compensation received/not received by employment sector



Forms of compensation for additional hours worked



ABOUT THE SURVEY



TERMS USED

Base salary

Base salary refers to the annual salary component of the contract of employment exclusive of any additional allowances, payments or non-cash benefits.

Total cash

Total cash is the total of some or all of the following components: Base salary, annual leave loading, overtime and other cash allowances.

Total remuneration

Total remuneration is the total of some or all of the following components: Total cash, employer superannuation contributions, benefit value motor vehicles, low interest loans, parking and any other FBT items (health insurance premiums, telephone payments, education expenses, etc.), other non-FBT items (home office expenses, professional subscriptions, etc.)

Total employment cost

Total employment cost is the total of total remuneration plus the cost associated with the Fringe Benefits Tax.

Total package

Total package is the total of total employment cost plus performance pay.

Annual salary movement

The calculation of percentage increases in annual salary is based on a comparison of current base salary to that of twelve months earlier as supplied by the respondent at the time of the survey. The average taken is the mean of the sum of each individual movement for the given category of analysis.



Minimum sample reported

Where the number of respondents in any given category is less than three, the results have not been reported for that single category in order to ensure the anonymity of the respondents are preserved, however the amounts are included in any calculation of the total for the broader category. Similarly, medians are only reported for categories with a minimum of four respondents, and quartiles for categories that have a minimum of five.

Valuation of motor vehicle

The value of capital and running costs given to a motor vehicle provided as part of a salary package has been determined based on the formula - $0.30 \times \text{Cost of Vehicle} + 30 \text{ cents per km}$. Cost of vehicle is the original cost of the car inclusive of government taxes and charges and dealer delivery fees. Where the cost of the vehicle exceeds the Tax Commissioner's Depreciation Limit of \$57,466, an adjustment has been made to the above formula. Capital costs within the formula are based on 22.5% straight-line depreciation over 4 years. Vehicle running costs are based on an average derived from the Royal Automobile Club of Victoria annual survey of car running costs. These costs include registration, insurance, fuel and servicing. The Fringe Benefits Tax liability has been calculated using the following formula: $\text{FBT} = \text{Purchase price} \times \text{statutory fraction} \times 2.0647 \times 0.465$ using the statutory fraction of 20%.

Statistical terms

For the purposes of salary analysis, the following statistical terms were used:

- Lower quartile – the value below which 25% of observations were recorded.
- Median – the value below which 50% of observations were recorded.
- Upper quartile – the value below which 75% of observations were recorded.
- Mean – the sum of individual salary values divided by the number of observations.
- Interquartile range – the values between which 50% of observations fall. The lower boundary is the lower quartile, the upper boundary the upper quartile.
- Response % - the proportion of the survey sample represented by number of observations in the given category.
- Average refers to arithmetic mean unless otherwise stated.

The calculations for base salary, total cash, total remuneration, total employment cost, total package and other remuneration components are made separately for each of the sample respondents, and then ranked. The median is not therefore a reflection of the middle ranked respondent across all categories, but rather the middle value of the particular component when all values of that component are ranked. As a consequence, the component statistics will not add up to the value given by the overall statistic.

A significant difference between the value of the mean and the median will indicate the following:

- where the mean is higher than the median, a number of high values were recorded, sufficient to skew the mean upwards away from the median;
- conversely, if the mean is lower than the median, a number of low values were recorded, sufficient to skew the mean downwards, away from the median;
- if the mean and median are relatively close, the distribution was symmetric.

METHODOLOGY

The Professional Scientists Remuneration Survey tracks annual changes in compensation for full-time employees in Australia. In addition to presenting national trends, it includes analysis by separate indices including branches of science, levels of responsibility, years of experience, job function and science qualification.

The survey was conducted online during May 2015. Invitations to participate were forwarded to member societies of Science & Technology Australia and scientist members of Professionals Australia (formerly APESMA). The member societies represent in excess of 20,000 scientific and technical professionals. In addition, a number of larger Australian-based scientific associations independent of the STA were invited to participate.

To avoid duplication of data arising from a participant starting multiple survey sessions due to technical difficulties, incomplete questionnaires were discarded where multiple responses had been submitted from a single IP address, at least one questionnaire was completed in full, and responses to the incomplete questionnaires mirrored responses in the completed survey.

Incomplete surveys were included in the analysis for any item where respondents provided enough information for that item.

Completed valid questionnaires were returned by 1,456 respondents and have been used as the basis for the analysis contained in this report.

Whilst the survey represents the responses of scientists from a large array of scientific disciplines, industries, sectors and job functions, the report can only represent the responses volunteered by members of organisations under the peak body of Science & Technology Australia, or who were contacted directly to participate in the survey, and should always be viewed as representative of their membership and the disciplines in which the respondents qualified.

The task of describing the remuneration of scientists is made more complex by the diverse roles performed by those who have qualified in a scientific discipline. Traditionally, some may consider the role of a scientist to be strictly defined – to be involved in technical roles. It is clear however that large numbers of respondents are involved in supervisory and management roles and indeed some are engaged in positions that might not seem related to traditional concepts of science at all.

For the purpose of this survey, the decision was made to leave the respondent to decide this issue. All respondents were asked to supply details relevant to their position if they considered the position they held was one best described as being filled by a science professional.



SAMPLE CHARACTERISTICS

The majority of respondents to the survey were male (56.9%) and employed full-time (72%). However, women represented a greater proportion of professional scientists employed in Analysis and testing - the second most commonly identified job function after Research and development. The remaining 28% of respondents not employed full-time included part-time employees (10.2%) and self-employed (5.3%). Students (3.4%) were not included in any remuneration analyses.

New South Wales was the most represented state across respondents accounting for 27.9% of participants, with each state receiving similar levels of representation to their population as a proportion of the Australian population. 76% of respondents were based in city or suburban locales.

The health industry was the most represented industry in the survey at 37.4% of respondents. Similarly, Medical science was the most common branch of science for respondents to be qualified in (18.3%). This field was dominated by females, alongside Biology, Food science and technology and Microbiology. By comparison, the branches of Agricultural science, Forestry and Physics were overwhelmingly composed of males.

On average respondents were 43 years old, had 18 years of experience in their branch of science and had been in the same position for 7.5 years.

Just over half of respondents (50.8%) were employed in large organisations with over 500 employees.

Of those respondents who indicated membership to one or more professional associations or societies, 17.4% indicated they were members of Professionals Australia.



RESPONSIBILITY LEVEL DEFINITIONS

The responsibility level definitions used in this survey reflect those set out in the Professional Employees Award 2010 (available at <http://awardviewer.fwo.gov.au/award/show/MA000065>). The following is a summary of the definitions.

Level 1 - The professional primarily completes tasks of limited scope & flexibility which form part of larger projects under supervision from higher level professionals. Draws on knowledge gained during undergraduate studies and uses various standard procedures to perform responsibilities. Decisions are largely restricted to tasks at hand and work is regularly reviewed by higher levels. May be required to check the work of technical staff.

Level 2 - Following from Level 1, the experienced professional plans and conducts professional work without detailed supervision but with guidance on unusual features and is usually engaged on more responsible assignments requiring substantial professional experience.

Level 3 - The professional is involved in co-ordination of difficult assignments and resolving problems by modifying established guidelines and devising new approaches. May make novel contributions to the design of equipment, products, and procedures. Decisions made at this level are subject to limited review, primarily checked for conformity with broader objectives and priorities. The professional may supervise other technical and professional staff and cooperate with other divisions.

Level 4 - Largely independent with duties assigned in terms of broad objectives, the professional has detailed technical responsibility for products, systems, facilities, or functions. A professional at this level will apply ingenuity, originality, and knowledge from more than one field to influence long range planning; providing technical advice to management and acting as an organisations authority in a given field. Often supervises a group including other professionals and exercises authority over a large sum.

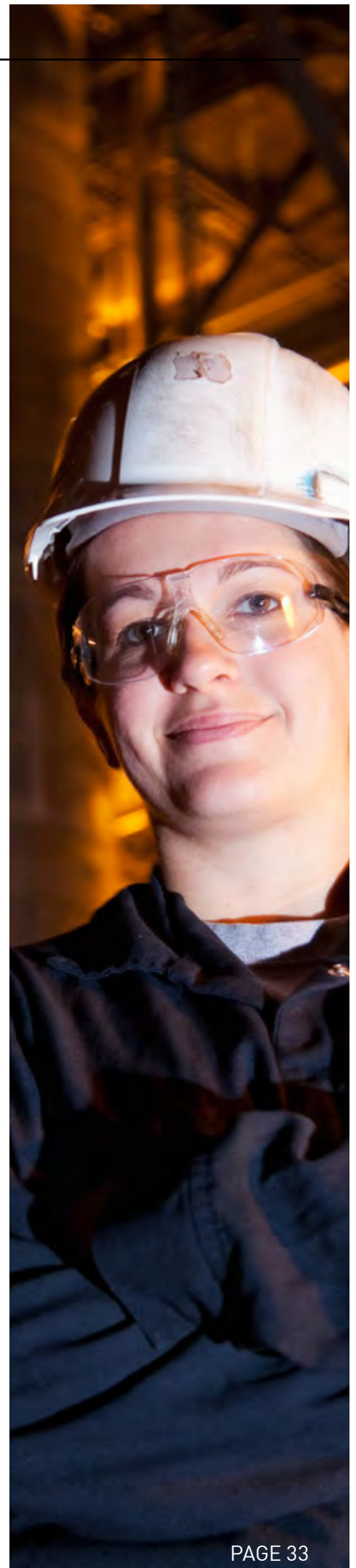
Level 5 - The professional independently conceives programs, responsible for reaching objectives in the most economical manner. Frequently responsible for scientific administrative functions, a scientist at this level directs several professional groups or acts as a scientific consultant. Makes responsible decisions on all matters, including selection, training, rating, and remuneration of staff, subject only to overall policy & financial controls.

Detailed responsibility level definitions are also available at <http://www.professionalsaustralia.org.au/financial-edge/salary-survey-reports/scientists/>.

ACKNOWLEDGEMENTS

This report was compiled by Dominic Angerame, Alex Crowther and Kim Rickard.

Professional Scientists Australia would like to thank the professional scientists who took part in the research and to acknowledge the assistance of Science & Technology Australia and their member organisations in conducting this survey.



FULL REPORT AND ONLINE SALARY CALCULATOR

The findings of this summary report were based on selected data from the 2015 Professional Scientists Remuneration Survey.

Need further detail?

The full report provides access to a more comprehensive dataset and our online salary calculator allows you to search the data via a detailed range of search criteria. If you're a Professionals Australia member, you can access the full report and online salary calculator as part of your membership.

If you're not a Professionals Australia member and would like to subscribe to the full report and online salary calculator for an annual fee of \$330 (GST inclusive) visit:

<http://www.professionalsaustralia.org.au/financial-edge/salary-calculators/scientists-calculator/>.

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