



Scientific Officers and Technical Officers Ad Hominem Promotions Performance Standards Document

(see [UCT Jobs Catalogue](#) for supplementary detail)

	Scientific Officer	Technical officer
Purpose of Position	The SO post is intended to provide specialist scientific service, typically but not necessarily in a laboratory setting. The primary purpose is to support the teaching and research enterprise by, for example, teaching in undergraduate laboratories or, for example, by management or operation of a research service facility. Specialist skills develop from training as a scientist (Bachelor's degree in STEM disciplines)	The TO post is intended to provide specialist technical service, typically but not necessarily in a workshop setting. The primary purpose is to support the teaching and research enterprise by, for example, the design, operations, maintenance or repair, of equipment and apparatus. Technological, Mechanical, or electronic skills are typically required and normally develop from specialist training (NTC trade test or NDip)
Promotion	Promotion would result from demonstrating increased levels of performance and specialisation in the position; increased complexity of scientific skills, and increased levels of initiative and responsibility. At the level of PC10 and above, leadership and management contributions to the wider department or faculty are expected. Promotion also requires consistent and sustained high performance within the current position.	Promotion would result from demonstrating increased levels of performance and specialisation in the position; increased complexity of technical ability and skills, and increased levels of initiative and responsibility. At the levels of PC10 and above, leadership and management contributions to the wider department or faculty are expected. Promotion also requires consistent and sustained high performance within the current position.

Quick guide to trends across levels/ranks

Skills and Competencies	SO/TO PC 8	Senior SO/TO PC 9	Chief SO/TO PC 10	Principal SO/TO PC11	Principal SO/TO PC12
Research Support (<i>Design, Problem Solving, Interpretive skills</i>)	<i>basic</i>	<i>basic</i>	<i>intermediate</i>	<i>advanced</i>	<i>advanced</i>
Teaching and learning support (<i>application of educational principles, subject knowledge, mentoring and social skills, explanatory and presentation skills</i>)	<i>basic</i>	<i>basic</i>	<i>intermediate</i>	<i>advanced</i>	<i>advanced</i>
Management (<i>Management of Projects, Resources, Staff</i>) Leadership (<i>Decision Making Skills, Initiative, Responsibility</i>) Service & Engagement (<i>within UCT context; external context</i>)	<i>n/a</i>	<i>Basic</i>	<i>intermediate</i>	<i>advanced</i>	<i>advanced</i>

Scientific Officers

The primary role of a Scientific Officer is to provide scientific support for the teaching and research enterprise. These guidelines should be read in conjunction with the candidate's submission and position description which would define the specific nature of support.

Guidelines: Typical Performance Standards/ outputs

Core Function category	Scientific Officer PC 8	Snr Scientific Officer PC 9	Chief Scientific Officer PC 10	Principal Scientific Officer PC11	Principal Scientific Officer PC12
Research Support	- Provides a routine scientific service to support the research enterprise (e.g by maintaining stocks and consumables in research labs) - Performs under supervision.	- Provides a scientific service to support the research enterprise (e.g. maintenance of stocks and consumables; may include routine preparations for experiments) - Performs under some supervision.	- Provides a specialist scientific service to support the research enterprise. (e.g. preparations and set-up of experiments; accesses appropriate resources to support research needs) - Performs independently as part of a research team.	- Provides specialised scientific service to support the research enterprise (e.g. by contributing to conceptualisation of research questions / projects; conducting experiments, analysis and interpretation of data, problem-solving; expertise to find and assess non-standard resources) - Provides scientific input on research projects, within departmental contexts.	- Provides highly specialised scientific service to support the research enterprise. (e.g. is recognised as an authority in a field and demonstrates excellence in conceptualisation of research questions, conducts experiments, interpretation of data, problem-solving, report writing and communication of findings) - Provides scientific input on research projects across departmental/faculty contexts.
Teaching Support	- Provides a routine service to support teaching of undergraduate students (e.g. set up of lab and maintenance of provisions in teaching laboratories). - Performs according to set standards.	- Provides a scientific service to support teaching of undergraduate students (e.g. preparation of teaching materials and modalities in teaching laboratories). - Performs sometimes under supervision in consultation with lecturer.	- Provides a specialist scientific service to support teaching of undergraduate students (e.g. facilitates student learning by explanation of basic scientific concepts and theories; and by testing/ preparation of teaching materials and modalities in teaching laboratories). - Management of student marks	- Provides a specialised scientific service to support teaching of undergraduate students (e.g. facilitates student learning by knowledgeable interpretation and explanation of complex scientific concepts; by consultative engagement with students and guidance in their report-writing; ensuring that teaching materials and modalities are prepared, tested and problems are resolved; Ability to design and implement new teaching protocols/procedures). - Comprehensive Management of student records and marks processing,	- Provides a specialised scientific service to support teaching of undergraduate students (e.g. facilitates student learning by knowledgeable interpretation and explanation of complex scientific concepts; by consultative engagement with students and guidance in their report-writing; ensuring that teaching materials and modalities are prepared, tested and problems are resolved; Ability to design and implement new teaching protocols). - Comprehensive Management of student records and marks processing,

			• Performs independently in consultation with lecturer.	• Performs independently as part of the team teaching structure	• Performs independently as part of the team teaching structure
Management Leadership, and Service	• Maintains and administers Laboratory environment according to set policy and standards.	• Laboratory environment is proactively maintained and administered responsibly. • Low cost resources are managed within a well-defined budget.	• Laboratory environment/ scientific service facility/ Scientific Project is proactively managed and is independently administered. • A range of low / medium cost resources are managed using discretionary decision making. • Participation in departmental responsibilities / administration	• Complex Laboratory environments or Specialist Scientific services/projects are managed and administered. • A range of resources (e.g. Staff / Equipment / Budget/ Time) are proactively managed using a high degree of discretionary decision making. • Management and development of personnel • Participation in departmental middle-management structures / administration • Engagement in the workplace and Service to/for the university across contexts.	• Specialist Laboratory or Scientific service/ Project is managed and administered for the broad University community • A range of resources (Staff / Equipment / Budget/ Time) are proactively managed using a high degree of discretionary decision making. • Management and development of personnel across payclasses; participates in conflict resolution and recruitment. • Participation in departmental middle-to-top management structures and administration • Engagement with educational & research communities across several contexts within UCT and externally.

Technical Officers

The primary role of a Technical Officer is to provide technical support for the teaching and research enterprise. These guidelines should be read in conjunction with the candidate's submission and position description which would define the specific nature of support.

Guidelines: Typical Performance Standards / outputs

Core Function category	Technical Officer PC 8	Snr Technical Officer PC 9	Chief Technical Officer PC 10	Principal Technical Officer PC11	Principal Technical Officer PC12
Research Support	- Provides a routine technical service to support the research enterprise (e.g. by maintenance of routinely-used equipment in research labs) - Performs under supervision.	- Provides a technical service to staff to support research enterprise. (e.g. maintenance, repair, operations of routinely-used equipment in research labs; Demonstrates proficiency as a competent end user of equipment). - Performs sometimes under supervision and engages proficiently with staff researchers.	- Provides specialist technical service to support research enterprise (e.g. operations, maintenance, repair of equipment, fault finding; accesses appropriate resources to support research needs; design of apparatus) - Able to train new users on equipment use. - Performs independently as part of research team.	- Provides a specialist technical service to support research enterprise (e.g. Demonstrates comprehensive understanding of the research enterprise by contributing to technical conceptualisation of research projects; operations and maintenance of complex equipment; design of complex apparatus; expertise to find and assess non-standard resources) - Provides technical service for research projects within or across departmental contexts.	- Provides a highly specialised technical service to support research enterprise (e.g. Is recognised as an authority in a field; Demonstrates comprehensive understanding of the research enterprise by contributing to technical conceptualisation of research projects; operations and maintenance of complex equipment; design of complex apparatus; expertise to find and assess non-standard resources) - Provides technical service for research projects across departmental and faculty contexts/ engages with researchers within UCT and externally
Teaching Support	Provides a routine technical service in undergraduate teaching laboratories (e.g. operations and maintenance of routine laboratory equipment)	Provides a technical service in undergraduate teaching laboratories (e.g. operations, maintenance, repair of routine lab equipment)	Provides a specialist technical service in undergraduate teaching laboratories (e.g. operations, maintenance, fault-finding and repair of laboratory equipment; design of laboratory apparatus)	- Provides a specialist technical service for teaching laboratories (e.g. operations, maintenance, repair of laboratory equipment and design of laboratory apparatus) - Management of a technical teaching service for students and staff / Postgraduate students are taught and supervised to use workshop	- Provides a highly specialised technical service for teaching laboratories (operations, maintenance, repair of laboratory equipment and design of complex laboratory apparatus) - Management of a technical teaching service for students and staff / Postgraduate

	• Performs according to set standards.	• Performs sometimes under supervision in consultation with lecturer.	• Performs independently in consultation with lecturer.	equipment and machinery as required by their studies	students are taught and supervised to use workshop equipment and machinery as required by their studies
Management Leadership, Service	• Workshop / service environment is maintained and administered according to set policy and standards.	• Workshop environment is proactively maintained, and technical service is administered responsibly. • Low cost resources are managed within a well defined budget.	• Workshop environment is proactively managed and technical service is independently administered. • A range of low / medium cost resources are managed using discretionary decision making • Participation in departmental responsibilities / administration	• Complex workshop environments and Specialist technical services are managed and administered. • A range of resources (Staff / Equipment / Budget/ Time) are proactively managed using a high degree of discretionary decision making. • Management and development of personnel • Participation in departmental middle-management structures / administration • Engagement in workplace and Service to/for the university across context.	• Complex workshop environments and Specialist technical services are managed and administered for the broad University community. • A range of resources (Staff / Equipment / Budget/ Time) are proactively managed using a high degree of discretionary decision making. • Management and development of personnel across contexts; participates in conflict resolution, and recruitment. • Participation in departmental middle- to-top management structures and administration • Engagement with educational & research communities across several contexts within UCT and externally.