

**SKILLS FRAMEWORK FOR ENERGY AND CHEMICALS  
SKILLS MAP - RESEARCH TECHNOLOGIST**

<b>Sector</b>	Energy and Chemicals				
<b>Track</b>	Research and Development (R&D)				
<b>Occupation</b>	Chemist				
<b>Job Role</b>	<b>Research Technologist</b>				
<b>Job Role Description</b>	The Research Technologist supports Research and Development (R&D) by researching and compiling data from various sources to support the development of research proposals. He/She assists in performing technical laboratory-based studies, experiments, analyses and evaluations for R&D projects. In addition, he documents and summarises experimental data for further review and interpretation by chemists.				
	The Research Technologist contributes to new product development by supporting the process development and scale-up for new and improved products. He performs routine laboratory operations by performing basic troubleshooting and maintenance of R&D laboratory equipment, and supports chemists with laboratory activities as required. He complies with Workplace Safety and Health (WSH) and Environmental Management System (EMS) requirements when conducting laboratory activities. In addition, he contributes to continuous improvement initiatives and activities for the laboratory.				
	The Research Technologist works in a team in the laboratory. He is analytical, a good team player, able to work independently, and possesses good communication and technical writing skills.				
<b>Critical Work Functions and Key Tasks</b>	<b>Critical Work Functions</b>		<b>Key Tasks</b>		
	Administer Workplace Safety and Health (WSH) and Environmental Management Systems (EMS)			Comply with WSH and EMS systems	
				Conduct activity-based risk assessments	
				Handle, store and transport hazardous substances and dangerous goods in accordance with WSH and EMS standards and practices	
				Maintain good housekeeping in the workplace	
	Perform laboratory operations			Assist in the documentation of Research and Development (R&D) work records for both internal and external customers	
				Document and summarise experimental data for review and interpretation by chemists	
				Perform basic troubleshooting and maintenance of R&D laboratory equipment in accordance with laboratory standards	
				Support chemists with laboratory activities	
	Manage Research and Development (R&D)			Assist in performing technical laboratory-based studies, experiments, analyses and evaluations for R&D projects	
				Compile research data to support development of research proposals	
				Support the design of experiments and tests according to market and business needs	
Manage new product development			Assist in the co-creation of new products in collaboration with the technical service and application teams		
			Support process development and scale-up for new and improved products		
Administer staff and organisational development			Contribute to continuous improvement initiatives and activities		
			Identify opportunities for continuous improvement		
<b>Skills &amp; Competencies</b>	<b>Technical Skills and Competencies</b>			<b>Generic Skills and Competencies (Top 5)</b>	
	Continuous Improvement Management	Level 3		Communication	Intermediate
	Environmental Management System Framework Development and Implementation	Level 3		Computational Thinking	Intermediate
	Laboratory Data Reporting and Analysis Management	Level 3		Problem Solving	Intermediate
	Laboratory Equipment Maintenance and Calibration Management	Level 3		Digital Literacy	Intermediate
	Laboratory Operations Management	Level 3		Sense Making	Intermediate
	Procurement Management	Level 2			
	Product Testing Management	Level 3			
	Project Management	Level 3			
	Quality Control Management	Level 2			
	Sample Management	Level 3			
	Technical Report Writing	Level 3			
	Workplace Safety and Health Framework Development and Implementation	Level 3			
	Workplace Safety and Health Hazard Identification and Risk Control Management	Level 2			
<b>Programme Listing</b>	For a list of Training Programmes available for the Energy and Chemicals sector, please visit: <a href="http://www.skillsfuture.sg/skills-framework/energyandchemicals">www.skillsfuture.sg/skills-framework/energyandchemicals</a>				

The information contained in this document serves as a guide.