

**RESEARCH OFFICER (GLASS TECHNICIAN)  
POSITION DESCRIPTION**

<b>Position Title:</b>	Research Officer (Glass Technician)	<b>Position Number:</b>	<b>Faculty/Division:</b> Sciences
<b>Classification:</b>	HEO6	<b>No. Direct Reports: 0 &amp; Highest Classified Position:</b>	<b>School/Branch:</b> Physical Sciences
<b>FTE:</b> 1.0	<b>Reports to:</b> Project Leader, Glass & Fibre Fabrication	<b>Fixed</b> <input checked="" type="checkbox"/> <b>Continuing</b> <input type="checkbox"/>	<b>Discipline/Unit:</b> Physics
<b>Position Summary:</b>	<p>The School of Physical Sciences in the Faculty of Sciences brings together the internationally acclaimed and contemporary disciplines of chemistry; earth science; and physics, delivering undergraduate and postgraduate education, training and research with both national relevance and global outreach and networks in the public and private sectors.</p> <p>The Institute of Photonics and Advanced Sensing (IPAS) has been formed to create an internationally leading transdisciplinary research group within The University of Adelaide based in the School of Physical Sciences. The Institute is developing a range of new technologies using fibre optics and lasers in order to allow the sensing of a range of chemical and biological signals. IPAS works across multiple markets including: Defence, Environmental, Medical and Food &amp; Wine.</p> <p>The Australian Research Council Centre of Excellence for Nanoscale BioPhotonics (CNBP) brings together expertise in physics, material science, chemistry, biochemistry, embryology, neuroscience and cardiovascular science to build new tools and drive the development of new devices to measure and sense at a nanoscale level - providing powerful new ways of understanding cellular processes within the human body.</p> <p>The Australian National Fabrication Facility (ANFF) links 8 university-based nodes providing researchers and industry with access to state-of-the-art fabrication facilities. The Optofab node at The University of Adelaide in the School of Physical Sciences offers specialist manufacturing facilities and support staff.</p> <p>The Research Officer will be primarily responsible for the production of glasses, preforms, fibre probes, and maintenance of fabrication-related labs and equipment, and training of staff and students in the production of glasses and preforms to support members of IPAS, CNBP and the Optofab node of the ANFF.</p>		
<b>Position Characteristics:</b>	<b>Scope</b>	Under general direction the Research Officer will contribute to the fabrication of glasses and fibres and develop practical procedures in the safe handling and use of chemicals in glass fabrication	
	<b>Significant internal/external relationships</b>	IPAS Laboratory Manager IPAS Professional Staff UoA Research staff, Research students, Technical and Administrative staff School of Physical Sciences Staff External suppliers	
	<b>Special conditions</b>	Some out of hours work may be required. Reasonable workplace adjustments will be made for people with a disability.	
	<b>Delegations</b>	Nil	

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<b>Key Responsibilities and Outcomes</b>	1	Fabrication of glasses and fibres	<ul style="list-style-type: none"> <li>• Prepare glasses including batching raw materials, mould polishing, glass melting, casting, and annealing.</li> <li>• Undertake extrusion of glasses into preforms.</li> <li>• Complete mechanical polishing and chemical etching of glasses and preforms.</li> <li>• Perform chemical etching and cleaning of crucibles and silica liners.</li> <li>• Participate in the development of new glasses and advancement of glass fabrication processes.</li> <li>• Prepare fibre probes, and support fibre probes surface coating research and development.</li> </ul>
	2	Laboratory and equipment maintenance and support	<ul style="list-style-type: none"> <li>• Maintain laboratories, equipment and scientific instruments including cleaning, chemical waste management and ordering of chemicals.</li> <li>• Develop and establish laboratory, equipment and instrument operational procedures.</li> <li>• Prepare and update risk assessments and safe operation procedures.</li> <li>• Liaise with equipment and instruments service providers</li> </ul>
	3	Assist with laboratory training and supervision	<ul style="list-style-type: none"> <li>• Provide assistance to staff and higher degree students in the experimental work of their research.</li> <li>• Provide technical support and training in the safe operating procedures of selected scientific equipment and in the safe use of chemicals and experimental procedures related to chemistry and materials activities.</li> <li>• Provide supervision and training to part time laboratory assistants as required.</li> </ul>
<b>Criteria</b>	<b>Capabilities and Behaviours</b>	Achievement Drive	<ul style="list-style-type: none"> <li>▪ Plans carefully and sets goals for improving performance.</li> <li>▪ Plans ahead to ensure all tasks completed.</li> <li>▪ Deals with conflicting demands quickly and calmly.</li> <li>▪ Delivers high quality output.</li> </ul>
		Communication	<ul style="list-style-type: none"> <li>▪ Adapts style and content of communication of ideas and information to match the audience.</li> <li>▪ Uses high level communication skills (clarifying questions, summarising, paraphrasing) to ensure their meaning is understood.</li> </ul>
		Continuous learning	<ul style="list-style-type: none"> <li>▪ Undertakes regular review of work practices to identify areas for improvement.</li> <li>▪ Identifies possible solutions to solve an issue when raising it to the next level.</li> <li>▪ Reviews projects and activities to learn from successes and mistakes and implement improvements from the learning.</li> </ul>
		Flexibility and Adaptability	<ul style="list-style-type: none"> <li>▪ Shows flexibility in coping with multiple and changing priorities.</li> <li>▪ Adapts to changes in environment and work demands, working effectively with a variety of situations and people.</li> <li>▪ Adapts responses and tactics to fit changing circumstances.</li> </ul>
		Service Focus	<ul style="list-style-type: none"> <li>▪ Takes personal responsibility to resolve enquiries, requests or complaints.</li> <li>▪ Uses initiative in actively and promptly following up with clients to ensure satisfaction with the service.</li> <li>▪ Agrees expectations with client to ensure client understands service delivery timeframes.</li> </ul>
		Teamwork	<ul style="list-style-type: none"> <li>▪ Actively participates in team meetings through sharing ideas and contributing to discussions.</li> <li>▪ Accomplishes shared goals through accepting joint responsibility.</li> <li>▪ Supports team members to achieve their goals by sharing workloads.</li> </ul>

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	<p><b>Knowledge and Experience</b></p>	<ul style="list-style-type: none"> <li>▪ Experience in glass fabrication and processing (highly desirable).</li> <li>▪ Demonstrated hands-on laboratory skills or other equivalent manual experience in any of the following fields; chemistry, chemical engineering, materials science or material engineering.</li> <li>▪ Experience in a research or science environment (chemistry and materials science preferred).</li> <li>▪ Proven ability to work with a degree of autonomy and capable of managing deadlines within tight time constraints.</li> <li>▪ Well-developed written and verbal communication skills with the ability to effectively interact with students, staff and external stakeholders.</li> <li>▪ Proficient user of MS Office suite.</li> </ul>	
	<p><b>Qualifications</b></p>	<p>Degree qualification in either Chemistry, Chemical Engineering, Materials Science or Material Engineering with subsequent relevant experience, or an equivalent combination of relevant experience and/or education/training.</p>	
<p><b>Occupational Health, Safety and Welfare Requirements</b></p>	<ul style="list-style-type: none"> <li>• All Supervising staff are required to implement and maintain the University's OH&amp;S Management System in areas under their control ensuring compliance with legislative requirements and the established Performance Standards. All other staff will assist the Head of School/Branch to create and maintain a safe and healthy work environment by working safely, adhering to instructions and using the equipment provided in accordance with safe operating procedures. Where appropriate, staff will initiate and participate in worksite inspections, accident reporting and investigations, develop safe work procedures and provide appropriate information, instruction, training and supervision. Staff will also inform the Head of School/Branch of any unsafe working practices or hazardous working conditions.</li> </ul>		
<p><b>University Expectations</b></p>	<p>All staff are expected to:</p> <ul style="list-style-type: none"> <li>• Contribute to the efficient and effective functioning of their team or work unit in order to meet University objectives. This includes demonstrating appropriate and professional workplace behaviours in accordance with the Code of Conduct, providing assistance to team members if required and undertaking other key responsibilities or activities as directed by one's supervisors;</li> <li>• Participate in the Planning, Development and Review which includes a regular review of their performance against the responsibilities and performance objectives associated with the role and demonstration of appropriate behaviours which reflect a commitment to the University's values and strategic directions;</li> <li>• Perform their responsibilities in a manner which reflects and responds to continuous improvement; and</li> <li>• Read, understand and comply with all University policies and procedures.</li> </ul>		
<p><b>Approvals:</b> Head of School / Branch Manager</p>	<p><b>Head of School / Branch Manager</b> Name: Professor Sandy Steacy Signature: Date:</p>	<p><b>Director Human Resources</b> Name: Mrs Elysia Ryan Signature: Date:</p>	
<p><b>Acknowledgement of Incumbent</b></p>	<p>I have read and understood the requirements of the position Name: <i>(please print)</i> Signature: Date:</p>		