

CQT/RA/005/V3

## Activity-Based Risk Assessment Form

Name of Department Center for Quantum Technologies Location of Lab S15-01-18/19  
 Name of Laboratory Quantum Optics Group Name of PI Christian Kurtsiefer  
 Name of Researcher/LC All personnel involved with labwork Name of Activity/Experiment Handling of Compressed Gas Cylinder

1.		2. Access the Risk			3. Risk Control					
No	Description of Activity	Hazards	Possible Accident / Ill Health & Persons-at-Risk	Existing Risk Control (Mitigation)	Severity	Likelihood (Probability)	Risk Level	Additional Risk Control	Person Responsible	By (Date)
1	Handling of Compressed Gas Cylinders	Sudden, out-of-control release of gas from cylinder along with the potential creation of a hazardous atmosphere.	<b>Possible risk:</b> Physical danger from asphyxiation for inert gases. <b>Person at risk:</b> Person handling the compressed gas cylinder, and any other people in the same enclosed area.	<b>Engineering Control:</b> Compressed Gas Cylinders are properly secured when in use. <b>Administrative Control:</b> Acknowledgement and conformance to control measures presented in the Standard Operating Procedures.	3	1	3	No additional risk control required.		
		Sudden, out-of-control release of gas from cylinder along with the potential creation of a hazardous atmosphere.	<b>Possible risk:</b> Chemical burns in the case of corrosive gases. <b>Person at risk:</b> Person handling the compressed gas cylinder, and any other people in the same enclosed area.	<b>Engineering Control:</b> Compressed Gas Cylinders are properly secured when in use. <b>Administrative Control:</b> Acknowledgement and conformance to control measures presented in the Standard Operating Procedures.	2	1	2	No additional risk control required.		
		Sudden, out-of-control release of gas from cylinder along with the potential creation of a hazardous atmosphere.	<b>Possible risk:</b> Explosion in the case of flammable gases. <b>Person at risk:</b> Person handling the compressed gas cylinder, and any other people in the same enclosed area.	<b>Engineering Control:</b> Compressed Gas Cylinders are properly secured when in use. <b>Administrative Control:</b> Acknowledgement and conformance to control measures presented in the Standard Operating Procedures.	3	1	3	No additional risk control required.		
2	Changing Compressed Gas Cylinders	Pressurised gas cylinders are very heavy - up to 80 kilos- and unstable objects and as such can present considerable danger to those handling them.	<b>Possible risk:</b> Physical Injury. <b>Person at risk:</b> Person handling the compressed gas cylinder.	<b>Personal Protective Equipment:</b> Suitable closed-toe shoes to prevent crushing when moving cylinders. If a cylinder falls over, no one should EVER attempt to catch it. It is much too heavy and will cause serious injury. It is also very robust and is unlikely to be damaged although it may make a loud noise. Competent help should be called to assist in setting it upright.	2	1	2	No additional risk control required.		

Conducted By Brenda Chng

Approved By \_\_\_\_\_

Center for Quantum TechnologiesName Christian Kurtsiefer

Signature \_\_\_\_\_

Approval date 23-Jun-14Next Revision date 22-Jun-17  
(Maximum 3 years)