



















Date: 03.02.2021
 Authorized user: Frank
 Brückerhoff-Plückelmann/
 Hendrik Voigt
 Work area: Velion Zone
 Workplace: Room 100.045

Safety Instruction

Raith VELION

WWU
 Münster Nanofabrication
 Facility (MNF)
 Center for Soft Nanoscience
 (SoN)
 Busso-Peus-Str. 10
 48149 Münster

Range of Application		
Focused Ion Beam and Scanning Electron Microscope		
Hazard for People and the environment		
    	<ul style="list-style-type: none"> • There can be flammable gases inside the chamber • There can be poisonous precursor gases in the chamber • There is a high Voltage applied to the machine ~ 35kV • High magnetic fields are applied to the column • A laser interferometer is used for stage positioning • When using the loadlocks there is a crushing hazard • Do not handle precursor gases without protective gear • Parts of the machine can be very hot e.g. the pumps • The Machine uses an Ion beam which might cause ionizing radiation • Do not trip over the machine and cables 	    
Safety Measures and Rules of Behavior		
  	<ul style="list-style-type: none"> • Operating the machine is only allowed after previous instructions and training by the instrument managers • Wear protective gear when installing the samples to avoid contamination of the specimen chamber • Vacuum systems must be purged thoroughly after use of gases in the chamber • Persons wearing a cardiac pacemaker or metallic implants must not approach the tool at any time. • Make use of the occupational health care • Do not remove the cover of the machine without contacting the instrument managers • Handling delicate materials might require wearing full protective gear • In case of any unclear issues contact the responsible person Dr. Banafsheh Abasahl 	  
Action in Failure		
<ul style="list-style-type: none"> • In case of any malfunction or abnormality leave the machine running, press Shift + Ctrl + Alt + F12 and call the instrument managers 		
Action in Accident, First Aid		
	<ul style="list-style-type: none"> • Inform appointed first aider. • Immediately treat small injuries. • Enter data in the accident book. • In case of severe injuries call an emergency doctor (phone 112). • Inform your superior. 	
Maintenance and Disposal		
<ul style="list-style-type: none"> • Maintenance work may only be carried out by qualified and instructed staff. 		