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 Work area:
 Workplace: Raum 110.037

Operating Instruction

TOF-SIMS 5

(Company: IONTOF)

Company: WWU
 Center for Soft Nanoscience
 AG Arlinghaus
 Busso-Peus-Str. 10
 48149 Münster

Range of Application		
	Time-of-Flight Secondary-Ion Mass Spectrometry in High Vacuum. Operation with high voltage, liquid nitrogen, and compressed gases.	
Hazards for People and the Environment		
	<ul style="list-style-type: none"> • Implosion by improper operation or use of improper materials. Caution for flying parts. • High voltage (up to 30 kV) and electrical discharges. • Visible wavelength positioning laser beam (Class 2). • Lifting of heavy instrument components. • Hot surfaces on instrument (>100 °C). • Extreme cold surfaces on instrument (up to -196 °C). • Electrical connections and cables inside the instrument. • Highly compressed gases in portions of the instrument. • Operating noise. • Strong magnets in pressure measuring connectors may interfere with cardiac pacemakers. 	
Safety Measures and Rules of Behavior		
	<ul style="list-style-type: none"> • Operation and repair of instrument only by properly trained personnel. • Follow all warning symbols on instrument! • Read and follow all safety guidelines in ToF-SIMS handbook. • Turn off central power before working on the open instrument. • Never reach through an open gate valve. • Advise visitors of hazards. • Regularly monitor vacuum pressure gauges. • Wear clear nitrile gloves when working inside the vacuum chamber. • Wear ear protection when the noise is loud. • Wear eye protection when adjusting the positioning laser (class 2). 	
Actions in Failures		
	Only authorized personnel are allowed to shut down the instrument. In emergencies only, shut down the power by pushing the Red Emergency Shutdown Button.	
Actions in Accident, First Aid		
	<ul style="list-style-type: none"> • Protect yourself. Rescue injured persons from the danger zone only if it can be done safely. Contact first aid trained personnel. • Follow the alarm plan. • Fight fires only with CO₂ fire extinguisher. 	
Maintenance and Disposal		
	Repairs permitted only by representatives of the IONTOF, GmbH, and persons certified by IONTOF.	
Consequences of Nonobservance		
	Damage to the Instrument, malfunctioning of the instrument, expensive repairs.	