

Nr.: CAM_{01.401}_{device number}

Equipment: Rigaku Smartlab X-Ray Diffractometer

Location: Centre for Advanced Materials, INF 225, 01.401

Device responsible persons: Lisa Veith

What do we want to achieve?				
Safe operation of the equipment				
What can happen?				
<ol style="list-style-type: none"> 1. Device is operated with X-rays → Damage from ionizing radiation 2. High voltage is applied in instrument → Electric shock 3. Beryllium in x-ray tube and detector → poisoning 4. When converting components in the measuring chamber → pinching of fingers 5. Hot surfaces on rotary pump → Burning 				
How can we prevent that?				
<ul style="list-style-type: none"> • To protect device and user, the instrument must not be used without instruction by the person responsible for the instrument, or a person authorized by her/him. • Persons who are not instructed must not touch the instrument nor any of its components. • Possible dangers to users will be explained during the initial instruction by the responsible person. • Modifications to the device are not permitted. Do not remove covers or cables, do not remove or disassemble the X-ray tube and detector (possible contact with beryllium). • In case of correctly attached security covers and a functional interlock function, potential X-ray radiation is no danger for people working close to the instrument. When the x-ray tube is switched on, the doors to the sample and measuring chamber can only be opened when the shutter to the chamber is closed, so that radiation cannot escape. • When you encounter problems, first contact the person responsible for the instrument (Lisa Veith, 54 19 886) or the radiation protection officer (Olaf Skibbe, 54 19 890). • In case of a situation that is considered dangerous by non-instructed persons, use the red "emergency-off" button. The person responsible for the instrument must be informed immediately. 				
Created by				
Lisa Veith				
<p>The risk assessment must be checked regularly. The period of verification is fixed at creation of the risk assessment.</p> <p>In the case of fundamental changes, it must be checked and adjusted immediately.</p>				
Checking period: Annually.				

1. Check	2. Check	3. Check	4. Check	5. Check
Date / Name	Date / Name	Date / Name	Date / Name	Date / Name

Risk assessment