Standard Operation Procedure Pressure Cell Safety

Hazard Registration no.: PSI organizational unit: 3501
Person responsible for room (name / phone): Rustem Khasanov / 5438, Matthias Elender / 5423
Building / room: WEHA /Studio D

Safety

Hazards

- Overstressed pressure cells and pressure cell components may explode
- The incorrect use of pressure equipment may lead to the pressure cell and the equipment failure
- The rules summarized below must be strictly followed in order to avoid any injury

Safety Rules

Organisational safety rules

- Handling of pressure cells is only allowed for the trained persons (scientists, engineers)
- Only the trained persons (scientists, engineers) are allowed to be present in Studio D during the pressure application and the pressure determination. The access of any external people, including users, during this time is strictly prohibited
- The personal safety equipment must be used. It is stored in Studio D and comprises of face protection helmets, protection jackets and Kevlar gloves.
- After pressure application, the pressure cell must stay within the “pressure application area” and inside the pressure protection cylinder for at least 15-20 min. This rule is strictly applied after application of pressure above 75% of their maximum value!
- As soon as the waiting-time is over, the cell must be immediately placed in an ammo-box. The cell can be removed from the ammo-box only immediately before mounting it on the sample stick.
- Loaded pressure cells are not allowed to stay outside the ammo-box. The transportation and storage of cell(s) is allowed only by using ammo-boxes.
- For pressures above 75% their maximum value, the dedicated protection cylinder for the ACS measurements must be used.
- No photos are allowed to be taken at the instrument GPD and in Studio D.

Storage and workplace

- All loaded cells must be stored inside the ammo-boxes.
- The pressure cell transport is only allowed by using the ammo-boxes.

Every person must be instructed before handling pressure cells.

Personal protective measures

- Hand protection: When manipulating pressure cells, use the Kevlar gloves.
- Head protection: Use the face protection equipment (helmet).
- Body protection: Wear the protection jacket.

Actions in an Accident, First Aid

Immediate life-saving measures

- Keep calm, alert the emergency center (SIZ) on the phone number 3333
- Give the following information: who is calling, what happened, where it happened.
- Take care of injured persons and provide First Aid. Keep attention to own safety.
- Medical consultation is indicated even after a virtually harmless event, if symptoms are recognized.

Date: Signature (room responsible):
Date: Signature (room responsible):
Date: Signature (group head):