Nr.: 0002s-R01e 2020-03-20

OPERATING INSTRUCTIONS

According to Betriebssicherheitsverordnung

Offen im Denken Faculty of Chemistry

Institute: AAC

Work place: AAC Labs

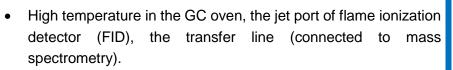
Activity: Laboratory work

EQUIPMENT

Agilent Intuvo 9000, 7890A, 7890B 6890N GC + LECO peripheral equipment

DANGERS FOR HUMANS AND ENVIRNOMENT





- Capillary easily to be broken during being adjusted or cut.
- Sharp and fast moving needle of the syringe of the auto sampler.
- High pressure in the tank containing liquid nitrogen for the modulation.
- High voltage in the exposed cable.
- Gas such as explosive hydrogen, large amount of nitrogen.
- Chemicals or volatile compounds used.

PROTECTIVE MEASURES AND RULES OF CONDUCT



- While the system running, it is not allowed to touch the FID part, the transfer line or open the gate of GC.
- While dealing with the capillary, the protection like wearing glasses, gloves and lab coat is necessary. The cleaving stone for capillary cutting needs to hold carefully because of keenness.
- While the auto sampler taking samples from the vials, it is not allowed to touch the needle of the syringe at all conditions.
- While filling, installing or checking the liquid nitrogen tank, the protection like wearing glasses, anti-freezing gloves and lab coat is necessary
- It is not allowed to touch the electric wire without being disconnected from electricity, especially with wet hands
- Check the safety instructions on the security manual before using gases like hydrogen, nitrogen, helium.
- Check the safety instructions on the chemical registry system such as DaMaRIS, GESTIS-Substance Data Base before using chemicals, especially for volatile or toxic compounds.

RESPONSE TO MALFUNCTIONS	
Shut down device immediately, faults must be Maria Madani, if not present O. Schmitz, M. Su F.Uteschil, S. Meckelmann.	· ·
BEHAVIOUR IN CASE OF ACCIDENT/FIRST AID	
 Keep calm. Call first responders. Emergency call: 0112 Report accident. 	
 Maintenance only by authorized, competent persons. Switch off the device and disconnect it from the mains. Regular inspection of wearing parts. 	Э