# INTRODUCTION OF CHEMLAB-MANAGEMENT

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#### **Chemistry Laboratory Management**

- 1. Layout
  - 2. Good tools and calibrated
  - 3. Laboratory Infrastructure
  - 4. Laboratory Administration
  - 5. Laboratory organization
  - 6. Lab funding facility
  - 7. Inventory and Security laboratory



#### **Chemistry Laboratory Management**

- 8. Security Laboratory
  - 9. Discipline
  - 10. Skills resources men (HR)
  - 11. Regulation of basic lab
  - 12. Handling common problems
  - 13. The types of jobs (job discription)

## Terms Spatial Laboratory (Lab lay out)

Inlet (in.)
The door to the outside (out)
Emergency exit (emergency exit)
Space preparation (preparation room)
Space equipment (equipment room)
Hall bath (fume hood)
Storeroom / warehouse (storage room)
Staff room (staff room)
Room technician / laboratory assistant
Seminar rooms (seminar room)

## Terms Spatial Laboratory (Lab lay out)

Work space (activity room)

Break room / worship

Room cleanliness infrastructure

Space safety equipment

Praktikan cabinets (lockers)

Glass cupboard

optical instruments cupboard

The door window was given a wire gauze, so that insects and birds can not enter

Fan (for a dehumidifier)

Conditioned space to certain tools that require a specific requirement



#### List of Laboratory Use

For the learning process For practicum

For research



#### Good tools and calibrated

Ready to wear (ready for use)
 Calibrated
 Net
 Not broken
 Operate well
 all existing equipment must be accompanied by manual operation (manual operation)



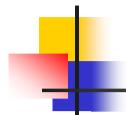
#### Laboratory technicians

should always be in place, because every time

the equipment is operated possibility of the

appliance is not operating properly can occur.

#### Laboratory Infrastructure



- lab.
  - **Asessment:**
- lab construction
- Other facilities

#### public facilities

- lab construction
- Other facilities



#### Laboratory Administration

- inventory list of equipment
- list of equipment needs
- out incoming correspondence
- laboratory usage list
- inventory list of materials
- inventory list of tools for Furniture & evaluation reporting system



### Organizations & Facilities lab funding

- Organization
- organizational structure
- job description personnel structure of the lab manager

- Facilities funding
- SPP
- Regular budget/ DIP
- Sponsor
- etc.

### Inventory and Security Laboratory

The goal of the Inventory and Security lab activity is to prevent loss and misuse, reduce operational costs, improve quality of work, reduce the risk of loss, and increase cooperation.



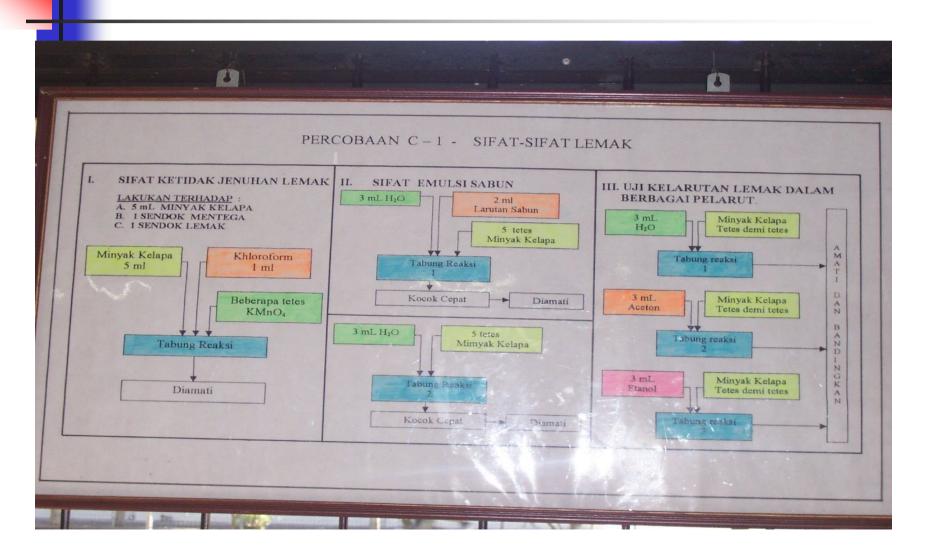
#### **Security Laboratory**

- Responsibility
- Neatness
- Cleanliness
- Attention to their respective duties
- First aid (first aid)
- Clothing
- The doors
- Tools.

#### Discipline

- High discipline of the laboratory / technician and skilled workers available, will support the realization of high working efficiency
- Discipline is strongly influenced by the habits and patterns of human behavior itself.
- Neighbor laboratory / technician should have a good cooperation so that every difficulty can be solved together

#### Posters Work Trial Scheme



### Materials Inventory

List of ingredients for each experiment affixed at cupboard ingredients





#### Materials Inventory

- Chemicals Specification Sheet
- Material Inventory Card
- List of Receipts / Expenditures
   Substance

### Safety Equipment

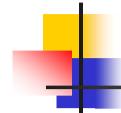
- a. Hydrant
- b. Eye washer
- c. Water Shower
- d. Lab Jackets (laboratory, lecturer) should wear long sleeve
- e. Gloves
- f. Gogle
- g. Mask
- h. First Aid Supplies

#### Labeling



Inclusion of the danger symbol on a solid material and solution preparation (preparation results)

Inclusion of the date of manufacture











#### HAZARD SYMBOLS







#### Poster Discipline of Laboratory



## Incoming Mail and Outgoing Mail

for each Laboratory or overall

ADMINISTRATION OFFICIALS NEED SPECIAL CHEMISTRY LABORATORY



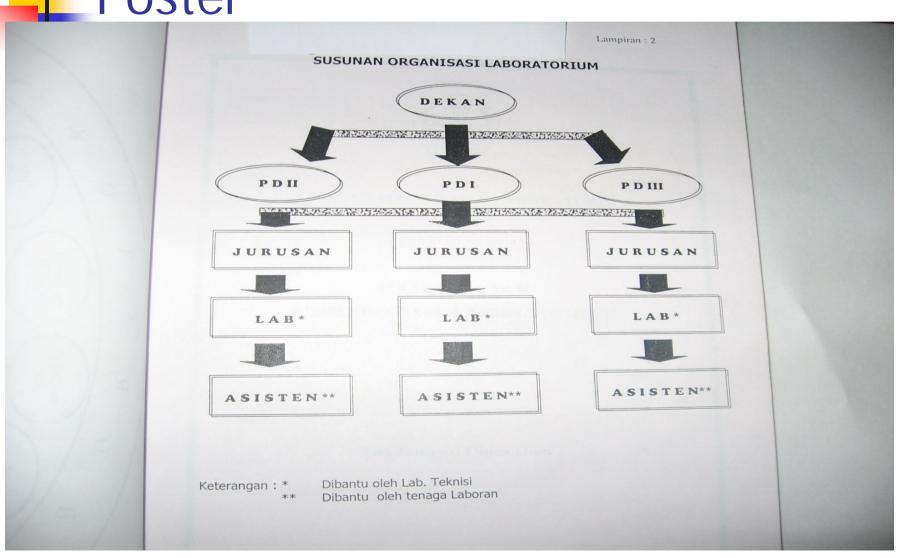
- A. Use of Materials
- B. Revenue and Expenditure Finance
- C. Damaged equipment
- D. Performance Laboratory, lecturer, student and teacher researchers, administrative



#### List Special Equipment Use

- Analytical Balance
- Spectronic
- FTIR spectrophotometer
- AAS
- pH-meter
- Conductometer
- Refractometer
- Etc

### Laboratory Organization Chart Poster





### Waste Disposal Procedures (posters, equipment)

- A. Liquid waste in container vessel (Waste acid, waste alkali, organic waste, etc.)
  - B. Solid waste (certain places)
  - C. Organic solid waste Waste not disposed of in the sink or trashcan.



#### **Practical Guide**

#### Equipped with:

- Discipline of the practicum
- Work salvation Laboratory
- MSDS of chemicals used
- Introduction Equipment used

To achieve and realize the procurement of cocuments and equipment of the above required administrative staff at the Laboratory of Chemistry, in addition to laboratory / technician qualified.

# THANK YOU