1. Green Laboratory Practices

Goal:

- **To maintain the safety and health of lab workers while contribution to sustainability goals of entire campus.**
- **To reduce the use of hazardous chemicals, generate less hazardous waste.**
- **To minimize by product in chemical transformation by redesign of reactions and reaction sequences.**

The Context :

- **Laboratories have a huge impact on environment in terms of resource requirement, energy use & waste production. With the public eye increasingly turning to word sustainability, this feature looks at ongoing efforts to make laboratories more green while weld all like to think were doing out bit to wards a more sustainable and healthy plant whether that be recycling properly, putting on an extra sweater instead of turning the heat up or carpooling, have you ever considered your contributions to sustainability while at work?**
- **Single use plastic is very high on the agenda nowadays with global efforts a foot to rid the oceans of plastic waste A 2015 report from university of Exeter (UOE UIC) determined that 5.5 million tons of plastic waste is being generated globally in case of scientific research with 1.8 % of total global plastic production attributed to bio-scientific research.**
- **A wide range of chemicals which are potentially dangerous are employed in laboratories. Many of stains & dyes used fav staining in laboratories are extremely harmful to human & other animals Toxicity, Carcinogenicity, Gene toxicity, Immuno toxicity are only same of harmful effects of standard stains & dyes available to us.**

The Practice :

- **Our lab consumes hundreds to thousands of pert dishes per month and therefore a switch to reusable glass pert dishes has saved tones of energy & land fill space one pound of poly styrene petri dishes costs 11.28 kwh of energy, 20.54 gals of water creates 0.113 solid waste and emits 2.51 lbs of co2 In contrast, glass petri dishes are only be manufacturing and shipped once, and would only enter land fills when broken.**
- **Histo chemical methods are used in lab to fix embed & stain tissue sections. Toxicity is a commonly accepted hazard in histological proassing xylene and toluene solvents have neurotoxic effects our lab replace hazardians chemicals with bio friendly alternatives to reduce occupational hazard of histology lab work most popular staining method world wide is " H & E" (Hematoxylin and eosin stains) hematoxylin contain haematein dye & metal ions that province blue staining of all nuclei Eosin is synthetic dye derived from fluorescein can also be effectively used as an alternative for eosin. Curcumin (primary, compound of turmeric) is non toxic & eco friendly so disposal is easy curcumin also fluoresces most synthetic fluorescent dyes are carciengenic and expensive.**

Evidence of success:-

- Money is saved in long term by purchasing glass petrisidhes

- Money is saved by turmeric instead of purchasing expensive fluorescent dyes for staining.
- Health is protected in labs.
- Ecological impacts were prevented by not pansing toxi c histochemicals down drains.

Problem Encountered & Resource Required:-

- The main obstacle is that time required for autoclauins & washing for glass pertiplants.
- More workers required for handling glass plants washing
- Sterilization of glass petriplates is always a problem

2. WALL MAGAZINE "UDAN & ABHIVAYAKTI"

Goal:

- **To develop the creativity of the students, pupil teachers & other members.**
- **To provide opportunity to experts thoughts, ideas & awareness messages in artistic manner.**
- **To write original poems, articles etc.**
- **To provide information about current affairs.**
- **To develop tam spirit in students.**
- **To develop soft & psychomotor skills.**

The Context :

- A wall magazine is a periodical run on a bit notice board, especially is an educational institute where the students and other members of the institution can post their articles, poems, drawings, & other such composition to share with each other these can be in due form of collage giving a message.
- It's a beautiful medium of students expression because they can display their artistic works & any peace of interesting & informative news. Which they want to share with their follow students.

The Practice:-

- Two wall magazines are published biannually by the institution named "Udan & Abhivayakti" first edition is published in july & second edition in December two editorial boards are constructed to publish the wall magazines. Each editorial board has chief editor, co-editor & student editors. The main responsibility of the board is to collect material from the students of different departments. After collection of material the board edit the content and display on the wall magazine" all students & other members feel motivated after reading and watching the magazine. It also motivates team to write, to draw, to share their feeling and thoughts in creative & artistic way. It enhances their soft & psychomotor skills.

Evidences of success :-

- Students & faculty members are being motivated & participated in creating and editing the material.
- Students are made to develop group work with team spirit.
- Students are being motivated to aware & learn current affairs, information & cultural values.

They are getting new ideas do create something new, which is displayed in next issued.

Problems Encountered & Resources Required

- The main problem is to collect material from students in July, first edition because of admission procedure.
- In the beginning of the academic session students do not take interest. They create problem to give material in time. That's why first issue is displayed with delay.
- Every year new editorial board is created new students take time to give their names for being a part of editorial board.