

SOPHIA GIRLS' COLLEGE
(AUTONOMOUS), AJMER



DEPARTMENT OF CHEMISTRY

2020-21

1. Flex making Competition

CATALYST THE CHEMISTRY FORUM
Sophia Girls' College (Autonomous), Ajmer



Organises

**Flex Making
Competition**

B.Sc. Part II and III
M.Sc. Chemistry (Final)

RULES-

- A group of five students will make a Flex on the themes given below
- Flex should be designed in Microsoft word on a single A4 size paper in portrait mode.
- It should contain more of a pictorial representations and less words.
- Judgement will be based on Theme, Content and overall presentation.

Mail at – chemistry@sophiacollegeajmer.in by 11th November, 2020

First three winners from each class will get an e certificate.

Themes

- Chemistry as a career Prospective
- Nanotechnology
- Role of Chemistry in Industries
- Supramolecular Chemistry
- Greener Approach to Chemistry
- Laboratory Techniques
- Lab Safety
- Periodic Table
- Spectroscopic Techniques
- Solvent Extraction
- Nuclear Science
- Conductivity meter and its working
- pH meter and its working
- Colorimeter and its working
- Biological Chemistry

Name of the Activity- Flex making Competition

Date of activity – 11th November, 2020

Number of Participants – 120 students

Objective of the Activity

The objective of the competition was to ignite the fire of imagination and creativity in the students. This Competition was the fusion of Imagination, Innovation and Conceptual understanding. This competition was about presenting the conceptual understanding of chemistry through flex designing.

Learning Outcome- Student learned various aspects of designing a flex as well as presenting chemistry knowledge in an innovative manner.

Let us share a bit of the universe with you, one star at a time

waste minimization at source * use of catalyst in place of reagents * using non toxic reagent * use of solvent free or recyclable environmentally benign solvent system

GREEN CHEMISTRY IS ABOUT



pH METER

pH meter

A pH meter is an electronic instrument used to measure the pH (acidity or alkalinity) of a liquid.

The first commercial pH meters -1936 by **Arnold Orville Beckman** in the United States.

The pH scale ranges from 0 to 14. 0 is highly acidic, 7 is neutral, and 14 is highly basic.

Acid	Neutral	Base
0	7	14
1		
2		
3		
4		
5		
6		
8		
9		
10		
11		
12		
13		

Examples of substances and their approximate pH values:

- Hydrochloric Acid: pH ~1
- Lemon Juice: pH ~2-3
- Cabbage: pH ~7
- Water: pH 7
- Auto-flowering cannabis: pH ~8-9
- Milk of Magnesia: pH ~10-11
- Lye: pH ~13-14



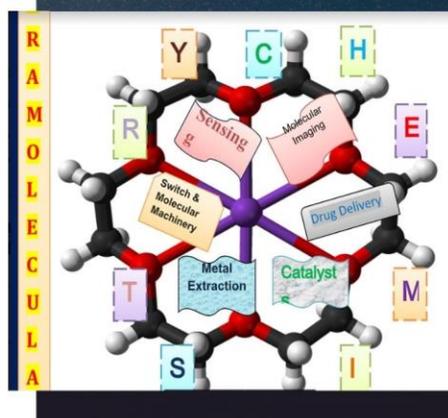
LAB SAFETY RULES



- | | | | | |
|--------------------------|-----------------------|----------------------------|--------------------------------------|---------------------------|
| | | | | |
| Always wear lab coat | Wear Safety gear | Keep the workstation clean | Clean your hands after experimenting | Know Emergency Procedures |
| | | | | |
| Don't pipette by mouth | No Eating Or Drinking | Chemical Safety | Electrical Safety | Laser Safety |
| | | | | |
| Don't Play Mad Scientist | Fire Safety | No Pacemakers | Don't touch hazardous Chemicals | Report Accidents |

Working of pH meter:

- pH meter base on electro-chemical potential in liquid solution and electron mobility in metal.
- In two liquid solution case one known solution place inside the glass electrode(membrane) and unknown solution outside.





Sophia Girls' College (Autonomous), Ajmer

Catalyst – The Chemistry Forum

Certificate of Achievement

This Certificate is proudly presented to Dikankshi Chattree of B.Sc. Bio Part III for winning the First prize in the Flex Making Competition organized by Catalyst – The Chemistry Forum in November, 2020.

Sr Pearl

Dr. Sr. Pearl

Principal

Sophia Girls' College (Autonomous), Ajmer

2. PPT making Competition





Catalyst The Chemistry Forum
Sophia Girls' College (Autonomous), Ajmer
Organises

PPT making Competition
B.Sc. Part I

RULES-

- More pictorial representation and less use of words
- Number of slides should not exceed 10.
- Judgement will be based on Theme, Content and overall presentation.

Themes

- Laboratory Techniques
- Importance of chemistry in research
- Periodic Table
- Various types of Glasswares used in Chemistry laboratory
- Chemistry Behind Food

Mail at – chemistry@sophiacollegeajmer.in by 17th November, 2020

First three winners will get an e-certificate.

Name of the Activity- PPT making Competition

Date of activity – 17th November, 2020

Number of Participants – 34 students

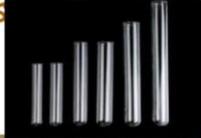
Objective of the Activity

“You can’t always be the most talented in the room but you can be the competitive” Power Point presentations are the most effective mode of communication, using which every type of data can be well organized and presented. This competition created a positive environment among the students wherein they were high on spirit and enthusiasm, that urged them to show their novel ideas to their optimum level. This activity kept the student engaged and it was organized to explore and encourage creativity in students and offer them a platform to showcase their skills.

Learning Outcome- This activity was organized to explore and encourage creativity in students and offer them a platform to showcase their skills. It inspired them to think and work creatively in order to promote artistic excellence.

Test tube

Use to hold, mix, heat small amount of



MAJOR BIO

- Carbohydrates
- Proteins
- Fats



* FOODS RICH IN PROTEINS, VITAMINS, & MINERALS HAVE REGULATORY FUNCTIONS IN THE BODY.

> E.G. MAINTAINING HEART BEAT, BODY TEMPERATURE, CLOTTING OF BLOOD & EXCRETION OF WASTES.

* PROTECTIVE FOODS ARE CLASSIFIED INTO TWO GROUPS :-

MINERALS, & PROTEINS OF HIGH



LS ONLY.
FRUITS.



PPT Making Competition

										0
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Sophia Girls' College (Autonomous), Ajmer

Catalyst – The Chemistry Forum

Certificate of Achievement

This Certificate is proudly presented to Amisha Godara of B.Sc. Bio Part I for winning the Third prize in the **PPT Making Competition** organized by **Catalyst – The Chemistry Forum** in November, 2020.

Sr Pearl

Dr. Sr. Pearl

Principal

Sophia Girls' College (Autonomous), Ajmer

3. Creative Animation Video Making Competition



CATALYST THE CHEMISTRY FORUM

**SOPHIA GIRLS' COLLEGE
(AUTONOMOUS), AJMER**

ORGANISES

**CREATIVE ANIMATION VIDEO
MAKING COMPETITION**

SHAKE YOUR HEAD
AND SHOW YOUR
CREATIVITY

Submit your entries till 31 *MAY* 2021
to chemistry@sophiacollegeajmer.in

Name of the Activity- Creative Animation Video Making Competition

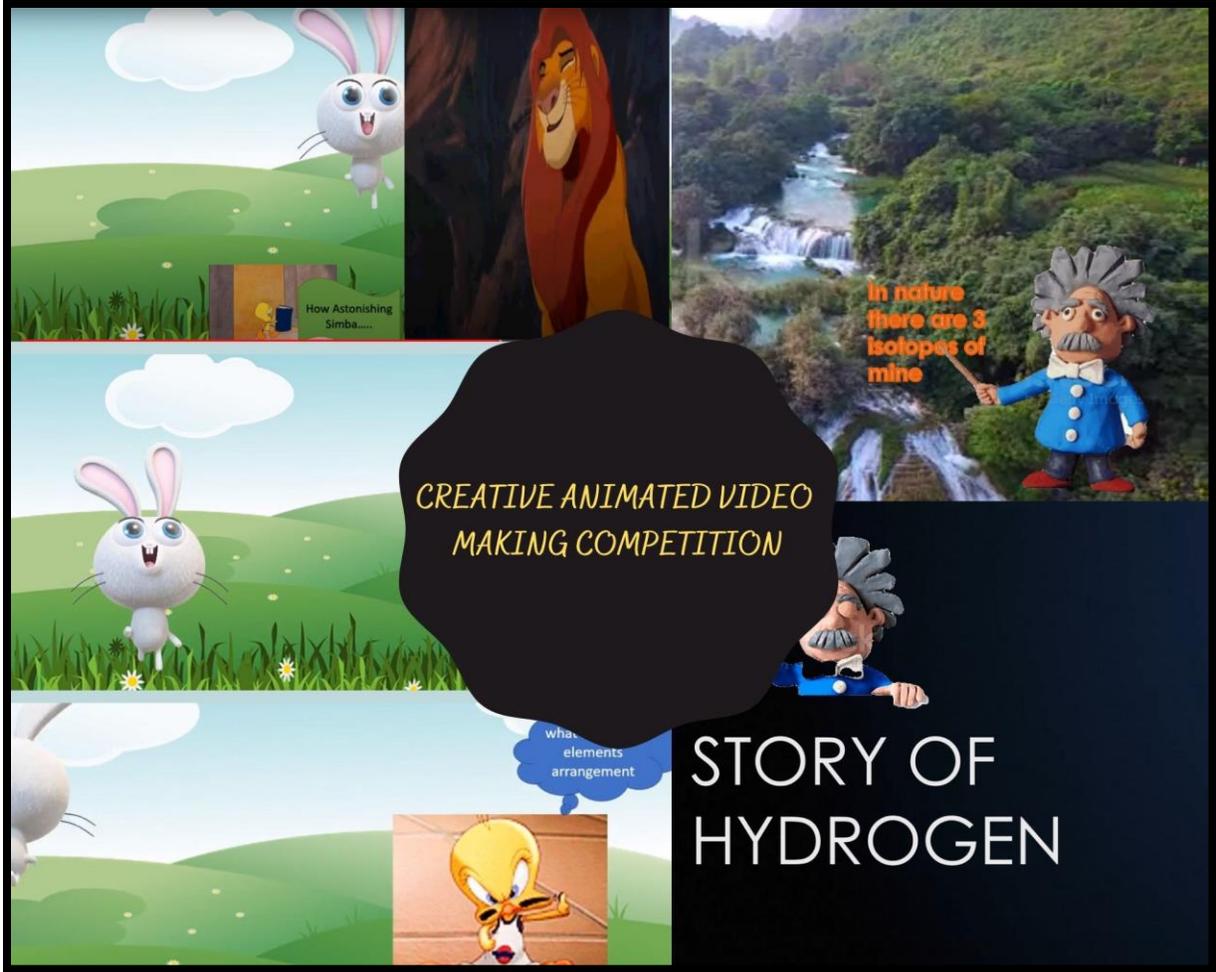
Date of activity- 31st May, 2021

Number of Participants-12 students

Objective of the Activity

“Creativity is intelligence having fun”. Imagination and creativity can change the world, with this aim Catalyst - The Chemistry Forum organised a Creative Animation Video Making Competition. Students were supposed to make Creative Animated Videos on Chemistry. The main motto behind this competition is to prepare the students to know more about the basic working of the software used for making videos and to provide them a platform to share their conceptual understanding of chemistry through videos in an Audio-Visual Manner. Students with their conceptual understandings and creativity prepared videos with full fun.

Learning Outcome- Through this competition the students learned more about the basic working of the software used for making videos and to provide them a platform to share their conceptual understanding of chemistry through videos in an Audio-Visual Manner.



CREATIVE ANIMATED VIDEO
MAKING COMPETITION

In nature
there are 3
isotopes of
mine

what
elements
arrangement

STORY OF
HYDROGEN



Sophia Girls' College (Autonomous), Ajmer

Catalyst – The Chemistry Forum

Certificate of Achievement

*This Certificate is proudly presented to Mansi Chaturvedi of M.Sc. Chemistry (Final) for winning the First prize in the **Creative Animation Video Making Competition** organized by Catalyst – The Chemistry Forum in May, 2021.*

Sr Pearl

Dr. Sr. Pearl

Principal

Sophia Girls' College (Autonomous), Ajmer