# TELANGANA TRIBAL WELFARE RESIDENTIAL DEGREE COLLEGE FOR WOMEN, SIRICILLA DEPARTMENT OF CHEMISTRY EXTENSION ACTIVITIES

# 2022-2023 OZON DAY CELEBRATIONS

**DATE:** 16/09/2022

# STUDENT PARTICIPATED

- PREETHI
- DEEPTHI
- SANDHYA
- SWATHI

# **OBJECTIVE**

#### **Raise Awareness:**

Increase awareness among participants about the importance of the ozone layer in protecting life on Earth from harmful ultraviolet (UV) radiation. Provide information about the causes and consequences of ozone depletion, including the role of ODS such as chlorofluorocarbons (CFCs), halons, and methyl bromide.

# **About the program**

Department of Chemistry has conducted an Ozone Day celebration on September 16, 2022 Students participated actively students gave seminars and speeches this day marked various events and activities including skit play and seminars through skits. Awareness campaigns about the depletion of the ozone layer and steps that should be taken to preserve the ozone layer



**Deepthi** MBZC and team displayed a performance on the dissociation of ozone molecules by the chlorine monoxide

**Shravani** MBZC presented about protocols and international agreements and **Feedback** 

P. VenellaMBZC 3 year has expressed the success of the program

**P.Chandana** found the play more informative.



#### **ACTIVITY: BEST STUDENT SEMINAR COMPETITION**

**DATE:** 09/11/2022

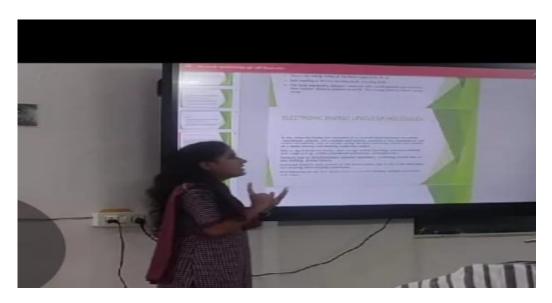
**TOPIC: CHEMICAL BONDING** 

# STUDENTS PARTICIPATED: A.KALYANI III MPC

**OBJECTIVE:** Visual and interactive content presented on the Smart Board has enhanced students' conceptual understanding and retention of key concepts Smart Board technology has significantly increased student engagement and participation in classroom activities, leading to a more dynamic and interactive learning environment.

# **ABOUT THE PROGRAM:**

- As a part of student seminar competition conducted by TTWREIS,
- Kalyani (mpc-3rd year) participated in the best student seminar competition in the college level
- She had given the seminar on the topic of chemical bonding. Content involved classification of bonds Explore the different types of chemical bonds, including covalent, ionic, metallic, and hydrogen bonds, and describe their distinguishing characteristics.



#### Feedback:

- The feedback generally highlighted the need for clearer explanations, especially regarding different types of chemical bonds such as ionic, covalent, and metallic bonds.
- Neeraja MSc expressed the incorporation of more visual aids, such as diagrams or animations, to illustrate the bonding processes effectively.
- K.DEEPTHI Visual representations were deemed helpful in enhancing understanding and retention of the material.

**ACTIVITY: WORLDS AIDS DAY** 

#### **DATE:** 1-12-22

# STUDENTS PARTICIPATED:

- ANUSHA
- SRAVANI
- SANGEETHA
- RADHIKA
- RAMYA
- AKHILA

# **OBJECTIVES:**

- Raise Awareness: Increase public awareness about HIV/AIDS, its transmission, prevention, and treatment options
- Empower Communities: Empower communities affected by HIV/AIDS through education, capacity-building initiatives, and support networks to address their specific needs and challenges.

# **ABOUT THE PROGRAM:**

Department of Chemistry conducted an aids day awareness program number of events were organized to make the students aware about that type of virus and their prevention and control

# **AWARENESS CAMPAIGN:**

The rally featured informative booths and interactive displays to educate

- HIV/AIDS prevention, transmission, and treatment options. Volunteers distributed informational
- pamphlets attendees and provided opportunities for attendees to ask questions
- A rally was organized by life science students and awareness program



# **ACTIVITY: SCIENCE DAY**

# **DATE-**28/02/2023

# STUDENTS PARTICIPATED:

- Jyothi,
- Deepthi
- Kalyani

# **OBJECTIVE:**

- Showcase the contributions and achievements of scientists, especially focusing on national and local scientific advancements.
- Promote innovative thinking and problem-solving skills through hands-on activities, experiments, and demonstrations.

# **ABOUT THE PROGRAM:**

- The Department of chemistry along with all the science departments organized a science fairon28- 02-2023
- In the morning session, quiz was conducted subjects Students participated in the quiz competition and excelled
- In the afternoon session poster presentation was conducted students from various groups presented on participating in this program
- From MBZC II year Deepthi and team presented poster on distillation of water.







- Motivate students to pursue careers in science and research by highlighting the scientific explanation
- B. Vijaya MPCIII found this presentation very informative and improved her critical thinking

#### **ACTIVITY: POSTER PRESENTATION**

**DATE:-**18/03/2023

# **OBJECTIVE:**

- Fulfill academic requirements, such as course assignments.
- Knowledge sharing through posters enhances the learning skills
- Effective delivery of theory through pictures.

#### **ABOUT THE PROGRAM:**

- On18-03-2023a poster presentation was conducted within the campus. Poster presentation delivers the concept in pictorial form and caters to the innovation in students' approach to a theory
- Students of final year life sciences participated in the poster presentation students elucidated theoretical conceptual topics on air quality and other environment-related topics.
- The Effect of Aerosol Environment poster on behalf of Chemistry A poster was presented by Deepthi and team from the mbzc-2nd year and the topic is the modern periodic table and its properties.

• Neeraja and the team fromthempc-3rdyearpresented a poster presentation





# **FEEDBACK:**

**Kurra Sravani** from mbzc3year found this activity very informative **viand** of life science first year found this presentation very conceptual.

EDUCATE EMPLOYABILITY PROGRAM ACTIVITY: Scope in chemistry

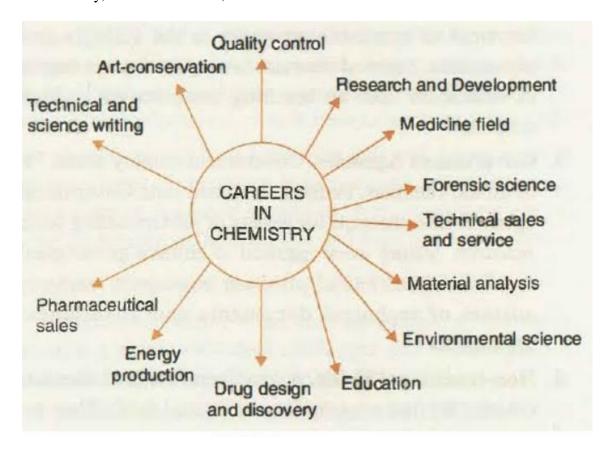
**DATE:** 4/4/23

# **STUDENTS INVOLVED:** all final years

# **OBJECTIVE:**

- Provide a brief overview of what chemistry and its career opportunities
- Explain the importance of chemistry Introduce the main branches of chemistry (e.g., organic, inorganic, physical, analytical, biochemistry).
- Highlight the unique focus and applications of each branch.

**ABOUT THE PROGRAM**: Department of chemistry has organized EEE programmed on scope in chemistry to all the second year and final year students with chemistry background THE SESSION FOCUSED ON the different employment opportunities such as Drug Development, Quality Control, Regulatory Affairs. **Analytical Chemist**: Environmental Testing, Forensic Science, Food and Beverage Industry. Environmental Consultancy, Pollution Control, Water Treatment



WORLD WATER DAY CELEBRATIONS ACTIVITY: WATERDAY

#### STUDENTS INVOLVED:

- MANEESHA
- TRIVENI
- DEEPTHI
- VINIKA
- TRISHA

# **OBJECTIVE:**

- The day highlights the importance of ensuring that all people, regardless of their location or socioeconomic status, have access to safe and clean drinking water and adequate sanitation facilities.
- The day encourages individuals and communities to take action, whether through local conservation projects, educational campaigns, or advocating for better water policies and practices.

# **ABOUT THE PROGRAM:**

- World Water Day is an international observance day designated by the United Nations (UN) to highlight the importance of freshwater and advocate for the sustainable management of freshwater resources. It is celebrated on March 22 each year
- Department of chemistry has organized speeches skits on water day to educate students and about water issues, such as scarcity, pollution, and the importance of clean
- Hosting poster-making competitions focused on water-related themes to engage students creatively.
- Setting up exhibitions showcasing models, charts, and other educational
  materials related to water conservation, water cycle, and innovative water-saving
  techniques.
- Vinika delivered power point presentation on statistics of water available sources in different forms



- Focused on Specific areas of water quality of include Good content quality.
   K. SRAVANI expressed her satisfaction in presentation of ppt
   P. MEENA found particular topics more informative

- > TRISHA found the statical approach of the session very productive

# **ACTIVITY: FIELD TRIP**

# PLACE OF VISIT DAIRY

**DATE: 23/5/23** 

# **STUDENT PARTICIPATED:**

Mamatha Shravani Sravanthi Deepthi Akhila

**OBJECTIVE:** provide an awareness program on Pasteurization Homogenization Separation Fermentation Chemical Analysis and Quality Control pH Measurement Chemical Additives and Preservatives students get awareness about the Ph of milk and different preservatives added in the milk

# **ABOUT THE PROGRAM:**

Department of chemistry in collaboration with the microbiology department carried out a visit to KARIMNBAGAR DAIRY. The purpose of this visit is to provide an overview and analysis of a recent visit to a dairy facility from a chemistry perspective. The visit aimed to explore the various chemical processes involved in dairy production, including milk processing, quality control measures, and the role of chemistry in ensuring the safety and nutritional value of dairy products. To know the critical steps in milk processing is pasteurization, where the milk is heated to a specific temperature to eliminate harmful bacteria while preserving its nutritional properties. Separation techniques are employed to isolate cream from milk, which is used to produce various dairy products such as butter and cream.



The dairy visit provided valuable insights into the intricate chemistry involved in milk processing and dairy product manufacturing. By understanding the chemical principles underlying each stage of production and quality control measures, it becomes evident how chemistry plays a pivotal role in ensuring the safety, quality.

Good awareness on PH OF MILK and separation techniques by B. VEENELA Informative on the safety and nutritional value of dairy products by A SWATHI

#### **ACTIVITY: SEMINAR**

**DATE:** 15/6/23

**TOPIC:** HYBRIDISATION

**STUDENT PARTICPATED**: PRIYANKA LFSII YEAR

**OBJECTIVE:** Seminar on ICT and PPT enabled methodology in modern LEARNING presentation tools, Techniques for creating visually appealing slides, including the use of images, charts, and diagrams. Incorporation of multimedia elements like audio and video clips to enrich the presentation experience.

# **ABOUT THE PROGRAM**

This report presents an overview of a seminar focused on utilizing Information and Communication Technology (ICT) in presentations, particularly emphasizing the use of PowerPoint (PPT) as a tool for effective communication. The seminar aimed to explore various techniques, best practices, and innovative approaches to enhance presentation skills using ICT platforms. Priyanka of MZC II YEAR delivered a lectured-on concept of hybridization □ Explanation of the concept using the valence bond theory and molecular orbital theory Types of hybridization: SP, sp2, sp3, sp3d, sp3d2, and their respective geometries. Application of hybridization in understanding the structure and properties of organic compounds.



- Participants gained practical skills to enhance their presentation abilities and effectively communicate their ideas
- The seminar provided valuable insights into leveraging ICT tools, particularly PowerPoint, to create compelling and impactful presentations.
- Overall, the seminar served as a platform for fostering digital literacy and communication skills essential for success in the digital age.
- The presentation was good K. SRAVANI
- The presentation was informative K. DEEPTHI

# 2021-2022

# **ACTIVITY: BEST STUDENT SEMINAR COMPETITION**

**DATE:** 09/06/2021

# STUDENTSPARTICIPATED:

A.Kalyani MZC II year

**TOPIC:** chemical bonding

#### **OBJECTIVE:**

- > To enhance students' knowledge and understanding of chemical bonding theories.
- ➤ To provide a platform for students to present their research and findings related to chemical bonding.
- ➤ To encourage critical thinking and analysis of chemical bonding phenomena.

# **ABOUT THE PROGRAM:**

As in the part of best student seminar competition conducted by head office TTWRDC, A.Kalyani (mbzc-3rd year) participated in best student seminar competition in the college level she had given the seminar on the topic chemical bonding. Seminar began with an introductory session on chemical bonding theories, covering topics such as:

- > Ionic bonding
- > Covalent bonding
- > Metallic bonding
- > Hydrogen bonding

The presenter explained the fundamental principles underlying each type of bond and their significance in chemical reactions and molecular structure session focused on the properties and characteristics of different types of chemical bonds. The presenter discussed:

- Bond length and bond energy
- Polar and nonpolar bonds
- Intermolecular forces

Students actively participated in the discussions, demonstrating their understanding of the topics and exchanging ideas with their peers.



# **FEEDBACK:**

Examples and illustrations were provided to elucidate the concepts and principles discussed.

The presenter highlighted the relevance of chemical bonding concepts in understanding Students actively participated in the discussions, demonstrating their understanding of the topics and exchanging ideas with their peers. Students actively participated in the discussions, demonstrating their understanding of the topics and exchanging ideas with their peers.

Neeraja MZC III YEAR found the session very informative V. Bindu MBZC 3<sup>rd</sup> year formal this seminar satisfactory.

**ACTIVITY: WORLD AIDS DAY** 

**DATE:** 1/12/2021

**INTRODUCTION:** Degree students initiated a significant step towards raising awareness about HIV/AIDS in rural communities by organizing a rally in TTWRDC[W] Rajanna SIRICILA this event aimed to educate villagers about the prevention, transmission, and treatment of HIV/AIDS, emphasizing the importance of awareness and eradicating stigma associated with the disease.

#### **OBJECTIVE:**

- ➤ **Awareness:** Increase public awareness about HIV/AIDS, its transmission, prevention, and treatment options
- Empower Communities: Empower communities affected by HIV/AIDS through education, capacity-building initiatives, and support networks to address their specific needs and challenge

# **ABOUT THE PROGRAM:**

Department of chemistry in collaboration with the botany zoology commenced the rally with explaining the purpose and significance of the event.

Students, adorned in red ribbons symbolizing solidarity with people living with HIV/AIDS, led the procession through the village streets, attracting the attention of local residents.

Banners and placards bearing educational messages about HIV/AIDS prevention, testing, and treatment were prominently displayed throughout the rally. Community Engagement:

The rally garnered significant participation and support from the local community. Residents of all ages actively joined the procession, demonstrating their commitment to combating the spread of HIV/AIDS and fostering a more inclusive and understanding community



#### **FEEDBACK**

The competition encouraged creativity and participation from students, with many expressing their thoughts on HIV/AIDS through art and slogans. The display of posters around the campus was praised for its visual impact and educational value.

# **ACTIVITY: SCIENCE DAY**

**DATE:** 28-2-22

**TOPIC: SANITIZERPREPARATION** 

# STUDENTS PARTICIPATED:

Kalyani MPCIII, monika, Vijaya MPC III, MamathaMPC III.

# **OBJECTIVE OF THE PROGRAM:**

The objective of hand sanitizer preparation at TTWRDC SIRICILA was to provide students with practical skills in producing an essential hygiene product amid the COVID-19 pandemic. Hand sanitizer plays a crucial role in preventing the spread of infectious diseases, and by learning to prepare it, students could contribute to promoting public health awareness in their communities. Preparation of hand sanitizer as per WHO guidelines using commonly available reagents in the laboratory. This move helped the people during the pandemic. The purpose is to inculcate scientific knowledge to the Chemistry as well as Life Science students.

#### **ABOUT THE PROGRAM:**

The Department of chemistry celebrated National Science Day on 28/2/2022inremembranceofsirC.V Raman Students participated actively and displayed their exhibits. Studentsexhibiteddripirrigationmodelandsynthesisofhandsanitizer.

**HANDS-ON LEARNING EXPERIENCE:** To provide students with practical experience in preparing hand sanitizer, including understanding the ingredients, formulations, and production process. To demonstrate the effective utilization of readily available resources in producing essential hygiene products,

The Drip Irrigation Project at aimed to promote sustainable and efficient water management practices in agriculture while enhancing agricultural productivity and income for farmers in the surrounding areas. Drip irrigation is an innovative technique that delivers water directly to the roots of plants, minimizing water wastage

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ANUSHA MZC III expressed exhibits made more learning more effective Munni BZC the science fair more informative.

**ACTIVITY: FIELD TRIP** 

DATE : 10-04-2022

# STUDENTS PARTICIPATED:

- Mamatha
- Sarvani
- Sravanti
- Deepthi
- Akhila

**OBJECTIVE:** The department of chemistry has organized a field trip to the nearby dying industry the objective of this visit east to make the students aware about different kinds of solvents dyes solutions that are used to die a fabric The main purpose of this visit is to make the students know about ecofriendly chemicals and improving process efficiency the distillation the purification

# **ABOUT THE PROGRAM:**

The visit organized by the faculty of department of chemistry TTWRDC Siricilla Visit highlighted the importance of personal protective equipment and detailed safety measures and safety protocols that has to be taken while dying a fabric and also provides an insight to the companies waste management practices emission control measures and to minimize environmental impact



The visit concluded with a feedback session where the participants share their observations and the learning experiences

K Deepti MZC3<sup>rd</sup> year expressed her that that the tour was informative and could bring awareness about the advanced effluent treatment and their commitment to work and the safety protocols that were to be followed

# 2019-2020

# **ACTIVITY: QUIZ**

**DATE:** 25/09/2020

**TOPIC:** Basic general chemistry

# **OBJECTIVE OF THE PROGRAM**

• Quiz enhances the student's learning capability through questionnaires.

- Allows the students to think out of the box and have a 360 degree view of the topic.
- To enhance critical thinking and problem-solving skills by challenging students with thought-provoking questions that require analytical reasoning.
- To foster teamwork and collaboration among students, as the quiz was conducted in teams, requiring participants to work together and pool their knowledge.
- To instil a sense of healthy competition, motivating students to strive for excellence their academic performance.



# **ABOUT THE PROGRAM**

The Department of Chemistry has organized an E-quiz on the topic basic of general chemistry. It's an initiative of learning through a questionnaire and the student's involvement with enthusiasm was found satisfactory.

- Includes basic components and formulas units of dimension etc.
- Quiz consists of three rounds preliminary, semi-final, final
- The preliminary round is of multiple-choice, questions
- The Semifinal round is of oral question

# **FEEDBACK:**

- M. Divya Bindhu BZC2 year found this quiz very informative.
- MD. Nowshin expressed the quiz more useful.
- Mounika the quiz useful as its overs the basic concepts in chemistry.

# ACTIVITY 2020-2021 ACTIVITY: NATIONALWEBINAR

**DATE:** 06/01/2021

**TOPIC:** CHROMATOGRAPHY

Each technique, their applications, and advantages in analytical chemistry.

# **OBJECTIVES**

This webinar made a better learning experience for the students and improved the student interaction with the professor. Student actively participated in the webinar and E-certificate was issued as a token of their presence purpose to provide students with information and knowledge about the separation techniques serves as a common platform in sharing real-time knowledge

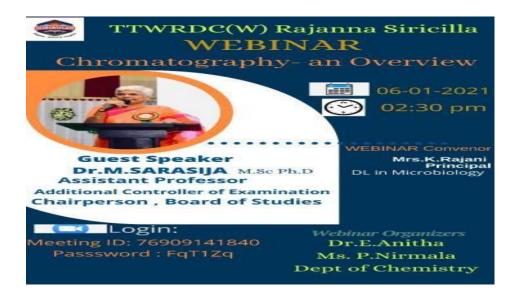
Allows the students to participate actively

- > To discuss various types of chromatography techniques and their applications.
- > To explore the latest advancements and research in chromatography.
- > To facilitate interactive sessions and discussions between students and experts.

# **ABOUT THE PROGRAM:**

The Department of Chemistry organized a national webinar on Jan 6<sup>th</sup> 2021and the speaker of the day was Dr M Sarasija Assistant professor in chemistry ,Shatavahana University, and the topic was ''CHROMATOGRAPHY AN OVERVIEW''

The webinar aimed to provide students and faculty members with an in-depth understanding of chromatography, its principles, techniques, and applications in various fields. Provided a comprehensive introduction to chromatography, explaining its basic principles and historical development. He covered key concepts such as the stationary phase, mobile phase, and the separation process, providing a solid foundation for understanding various chromatographic techniques. Discussed different types of chromatography, including paper chromatography, thin-layer chromatography (TLC), gas chromatography (GC), and high-performance liquid chromatography (HPLC). He explained the mechanisms of each technique, their applications, and advantages in analytical chemistry.



The webinar left a good impression on the attendees with excellent structured with good content quality

The expert speakers provided valuable insights, and the interactive format facilitated meaningful discussions, enhancing the overall learning experience.

Expert speaker who shared their knowledge and experience, making the session highly informative and engaging.

Mamatha of MZC II year found this session more insightful.

**Pavitra** of MZC II year expressed the session more informative.

# **ACTIVITY: NATIONAL SCIENCE DAY**

**DATE: 28/2/2021** 

**TOPIC: SCIENCE EXHIBITION** 

# STUDENTS PARTICIPATED:

Munni BZCII

• Kalyani MZCII

Kalyani MPCII

## **ABOUT THE PROGRAM:**

Department of Chemistry celebrated National Science Dayon 28/2/2021 in remembrance of Sir C.V Raman Students participated actively and displayed their exhibits aimed to educate students and faculty members about the importance of water purification, various techniques used, and the latest advancements in the field shared practical insights into the applications of charcoal water purification in real-world scenarios. He presented case studies highlighting successful implementation in rural communities and underserved areas, emphasizing the cost-effectiveness and sustainability of this approach.

Department of Chemistry conducted a science quiz for the students about scientists and their inventions and a prize was distributed to the winner (L.Soujanya-BZC 3rd Year)



# **FEEDBACK:**

The National Science Day seminar on charcoal water purification at TTWRDC, SIRICILA, successfully achieved its objectives of raising awareness, providing education, and fostering interactive discussions on this innovative water treatment method. Triveni MBZC 2<sup>nd</sup>year found the water treatment technique satisfactory.

# ACTIVITY 2019-2020 ACTIVITY: NATIONAL SCIENCE DAY

# **DATE-28/02/2019**

**TOPIC: DISPLAY OF SCIENCE EXHIBITS** 

# STUDENTS PARTICIPATED:

- 1. Aswath
- 2. Anusha
- 3. Kalyani
- 4. Vijaya

#### **OBJECTIVE OF THE PROGRAM**

- To spread awareness about the importance of science in daily life.
- Science day gives an opportunity to students of scientific thought to share their capabilities.
- To encourage students to engage in scientific research and innovation.
- To provide a platform for students to showcase their scientific projects and ideas.

# **ABOUT THE PROGRAM**

- To honor the discovery of the RAMANEFFECT National Science Day is celebrated on 28<sup>th</sup>Feb. Every year for which Indian physicist sir C.V.Raman was awarded a Nobel Prize.
- The Department of Chemistry has successfully celebrated Science Day students presented the experiment working model of water distillation
- Students also displayed exhibits which included the effect of density on alkalinity.
- Students from different departments displayed their innovative projects and models.



# **FEEDBACK**

A.Swathi Mbzc2year found this program informative and served as a platform for better learning