

# Andhra Christian College::Guntur

## Department of Chemistry

### Seminar on Polymers

**Name of the Activity:** Seminar on Polymers in the department of Chemistry.

**Date:** 05-04-2022

#### **Objectives:**

1. To develop intellectual breadth and depth in polymer science and engineering and to have specialized training for career in teaching, research and industry.
2. To educate the graduate students with a strong background of polymer science and technology so that they will fulfil the needs and expectations of scientific and industrial communities.
3. To acquire up-to-date knowledge and skills for professional success with ethical standards.

#### **Report:**

Department of Chemistry conducted a Seminar on Polymers for which the Resource Person was Mrs. Y. Chandra Rekha, HOD of Chemistry, B.H.H. Degree College for women, Guntur. She delivered an extensive talk on Polymers and their applications in various fields. 25 students attended the seminar and interacted with the resource person with curiosity and enthusiasm. This programme was very informative and beneficial to the students.

#### **Key Points:**

Polymer is a class of synthetic and natural materials collected of very huge molecules, called macromolecules, that are multiples of simpler chemical units known as monomers. Polymers make up numerous things in living organisms, such as, for instance, nucleic acids, proteins, and cellulose.

Polymer science and engineering is a multifaceted field that plays a crucial role in various industries, such as packaging, automotive, textiles and biomedicine. It involves studying and manipulating polymers, which are long chain molecules made up of repeating units.

The recent developments of polymer technology have revolutionized the field of material science increasing the use of polymer-based substances from building materials to packing materials, electrical engineering, communications, automobiles, aircrafts etc.

Polymers help us to save energy with lighter vehicles and insulated buildings, package consumable goods; reduce land use and fertilizers and save lives by way of countless medical applications.

They are also much lighter than metal parts, making transportation easier and less expensive. Plastic parts also cause less friction and wear on equipment and machinery than metal does, lowering the risk of damage and the need for constant maintenance or replacement.

Product made from polymers are all around us: clothing made from synthetic fibers, polyethylene cups, fiberglass, nylon bearings, plastic bags, polymer-based paints, epoxy glue, polyurethane foam cushion, silicone heart valves, and Teflon-coated cookware. The list is almost endless.

Furthermore, they create the basis of these minerals as feldspar, diamond, and quartz and man-made materials like glass, concrete, plastics, paper, and rubber.

### **Uses of polymers**

Polymers are utilized in nearly every extent of modern living. Soda and water bottles, grocery bags, phones, textile fibres, food packaging, computers, auto parts, and toys all contain polymers.

Even more-urban technology utilizes polymers. For instance, the membranes for water purification, carriers utilized in controlled drug release and biopolymers for tissue manufacturing all utilize polymers.

### **Polymers for automotive applications**

Automotive polymers are utilized in an extensive variety of automotive parts. High-performance thermoplastic elastomers and also liquid rubbers are found in tires, exterior and interior parts, and engine mechanisms. Their dependable functionality, durability, lightweight, and wear resistance lessen releases and supports in making driving safer and more convenient

Hence, the growing demand for the polymer in several end-use industries, including electronics, packaging, and automotive plastics are those polymers that are extensively utilized in several industries, credited to their qualities, like strength, lightweight, flexibility, transparency, and low cost, such major factors are propelling Polymer industry.

### Acknowledgements:

The department is thankful to the Principal, Dr. K. Moses for giving permission and support for conducting the programme. The department is also thankful to the Resource person, Mrs. Y. Chandra Rekha for successful conduction of the seminar. Special appreciation to all the faculty of the department and students participated.



## STUDENTS ATTENDED THE POLYMERS SEMINAR

S.No. Y <sub>19</sub>	Class No.	Name of the student	Signature of the student
1	601	M. Naga Srivaishnavi	M. Naga Srivaishnavi
2	602	D. Mosha Rani	D. Mosha Rani
3	604	Ch. Mounika	Ch. Mounika.
4	605	K. Smiley	K. Smiley
5	610	K. Pawan chand	K. Pawan chand
6	612	J. Emmanuel Raj	J. Emmanuel Raj
7	613	S. Isaiah	S. Isaiah
8	615	M. Ratna Babu	M. Ratna Babu
9	622	T. Bhagya Raj	T. Bhagya Raj
10	626	T. Siva Purva Chandra	T. Siva Purva Chandra
11	903	M. Hema Latha	M. Hema Latha
12	912	S. Vinay Kumar	S. Vinay Kumar
13	913	C. Issac Abraham	C. Isaac Abraham
14	915	P. Srikanth	P. Srikanth.
15	918	P. Yesu Das	P. Yesu Das
16	921	V. Vamsi	V. Vamsi
17	922	V. Dileep Kumar	V. Dileep Kumar
18	924	Ch. Naga Raju	Ch. Naga Raju
19	925	S. Prasheela	S. Prasheela
20	930	D. Ramya	D. Ramya

9/19  
HEAD, CHEMISTRY DEPARTMENT  
A.C. COLLEGE, GUNTUR.

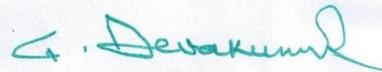
ANDHRA CHRISTIAN COLLEGE, GUNTUR  
(Day, Evening and PG)

NOTICE

Date: 04-12-2018

This is to inform you that there will be a workshop on "SOIL ANALYSIS" conducted by Chemistry Department on 05-12-2018 at 11.00 AM, in room no. 63.

All the students are requested to attend the programme without fail.



PRINCIPAL

PRINCIPAL  
Andhra Christian College  
GUNTUR

Copy to:

1. The coordinator, IQAC, Andhra Christian College.
2. The office manager, Andhra Christian College.