S.K.R & S.K.R Government College for Women (A) Kadapa

Department of Chemistry



Certificate Course

On

"CHEMDRAW – Drawing of Chemistry"
2021-2022

TITLE OF THE COURSE: CHEMDRAW- DRAWING OF CHEMISTRY

CONDUCTED BY : DEPARTMENT OF CHEMISTRY

DEPT. INCHARGE : MRS.L.SUDHEERA

CONVENER/RESOURCE: D.WINNIE TEJA, Lect. in Chemistry PERSON

PERIOD : MARCH TO JUNE (A.Y 2021-2022)

INAUGURATION DATE: 19-03-2022

VALEDICTORY DATE: 28-06-2022

NO OF STUDENTS ENROLLED: 49

Objective:

Acquire skills on usage of ChemDraw Software to draw the chemical structures. Also, predict physical and chemical properties like bond angles, bond lengths, stereochemistry, polarity, H-NMR, C-13 NMR and Mass Spectral Data.

Outcome:

This course gives a favor or weightage to the students during the interview in securing jobs or research opportunities.

Curriculum design:

- ♣ The total workload of the course work is 60 hours.
- ♣ It contains four modules. Each module consists of 14 hours, in which seven sessions are theory and seven sessions are practicals.
- ♣ Two hours are allotted to practical examination at the end of the course work.
- **4** Two hours are allotted to rectification and doubts clarification on the examination.

Teaching Pedagogy:

- ♣ Flipped Classroom teaching Black board and ICT tools.
- Classroom teaching through LCD projector.
- Practical work on computer systems.
- Continuous student evaluation through assignments.

Assessment and Evaluation:

- ♣ Student is evaluated through the examination at the end of the course work.
- **♣** Certificates will be issued based on the performance.

SYLLABUS

MODULE-I:

- 1. About ChemDraw
- 2. Installation and applications
- **3.** Usage of tools present in the ChemDraw
- 4. Drawing of Chemical molecules with ChemDraw
- 5. Drawing of chiral centered molecules
- **6.** Checking the correctness of structures drawn
- 7. Convert the structures into IUPAC name

MODULE-II:

- 1. Convert the IUPAC name into structure
- **2.** Find the stereochemistry of molecules
- **3.** Find the molecular weight and chemical formulae
- 4. Predict the ¹H NMR spectra and chemical shift values
- **5.** Predict the ¹³C NMR spectra and chemical shift values Checking the correctness of structures drawn
- 6. Predict the melting point, boiling point and logP values

MODULE-III:

- 1. Convert the 2D structure into 3D structure
- 2. Find the bond lengths and bond angles
- 3. Save the molecules in different formats
- **4.** Insert the molecular structures into MS word and PPTs.
- **5.** About standard ChemDraw settings for different scientific organizations
- **6.** Convert the 3D structure into ball and stick model

7. Convert the 3D structure into wire and cloud model

MODULE-IV:

- 1. Convert the 3D structure into mesh model
- 2. Find the electronic surface of the molecule
- **3.** Application of internet to draw the chemical molecules
- **4.** Standard parameters for drawing molecules.
- **5.** Export and import chemical molecules
- **6.** Summary of ChemDraw

PHOTO GALLERY

DEPARTMENT OF CHEMISTRY S.K.R & S.K.R GOVT COLLEGE FOR WOMEN (A), KADAPA



Dated: 19-03-2022

CHIEF GUEST

DR. P.SUBBA LAKSHUMMA M.COM., M.PHILL PH.D PRINCIPAL

Resource Person

Dr. B.Ramachandra M.Sc. Ph.D Lecturer in Chemistry, GCMA, Kadapa

Organizing Committee

Smt.L.Sudheera Mrs. Winnie Teja D
Convenor Co-Convenor

Dept. of Chemistry staff Organizers







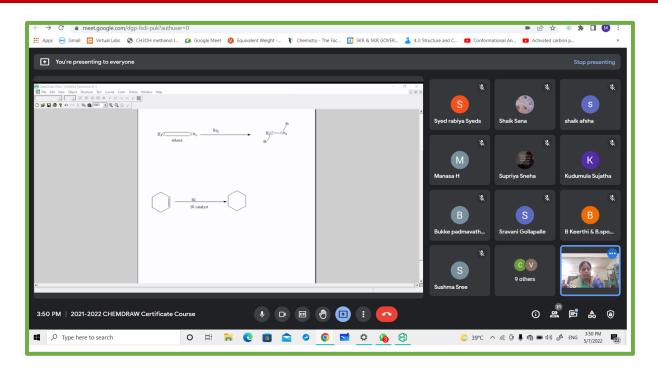


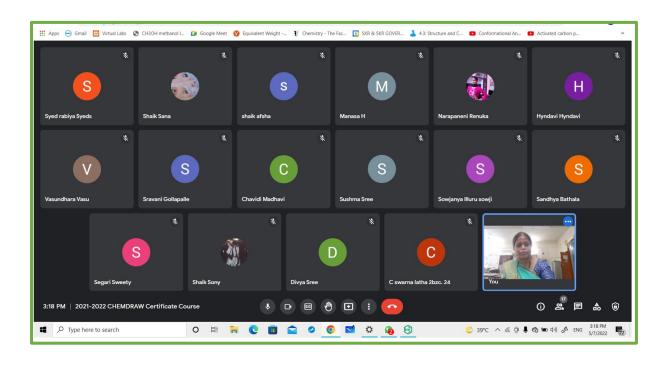


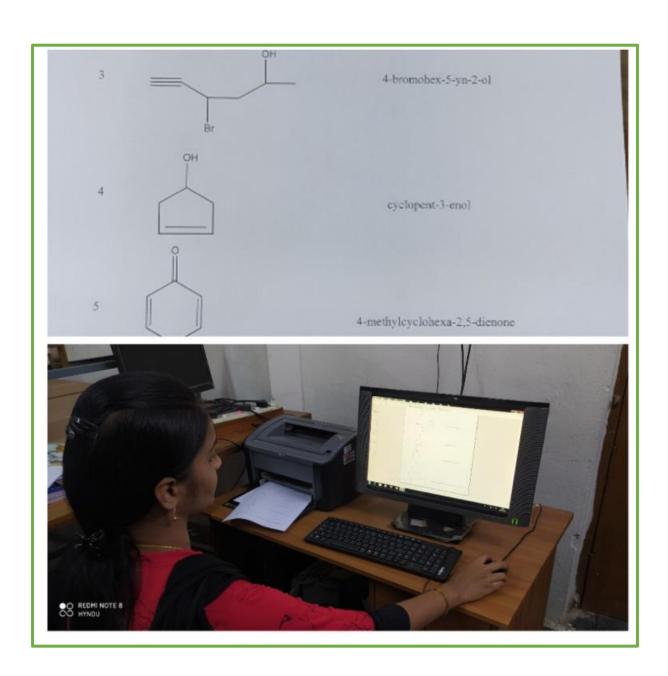
• Classes & Assignments



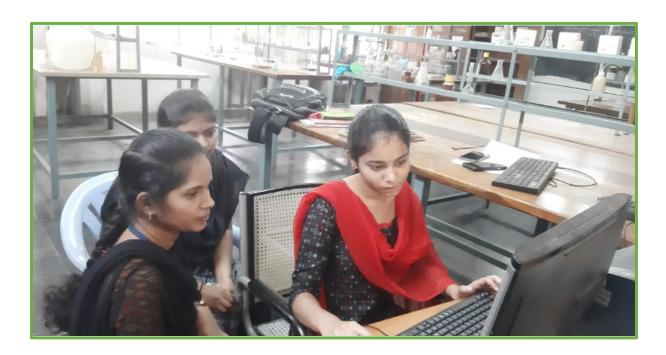












List of students enrolled for ChemDraw Certificate course:2021-2022

III BZC EM

S.No	Name of the	HT No
	student	
1.	O.Divya sree	20190310046
2.	S.Rehana	20190310002
3.	M.Hyndavi	20190310041
4.	V.Venkata surekha	20190310061
5.	S.Sweety	20190310057
6.	P.Supriya	20190310049
7.	B.Sri Sandhya	20190310016
8.	M.Lakshmi	20190310040
	Prasanna	
9.	B.Abigail	20190310020
10	S.Sayeeda	20190310009
11.	S.Uzma Parveen	20190310001
12	S.Sheeba tarranum	20190310010
13.	S.Shafiya Firdose	20190310006
14.	J.Roja	20190310032
15.	G.Sneha sree	20190310029
16.	S.Afsha	20190310003
17.	C.Madhavi	20190310023
18.	V.Siva kumari	20190310064

19.	C.Swarnalatha	20190310024
20.	T.Ishwarya	20190310059
21.	N.Haripriya	20190310045
22.	B.Keerthi	20190310014

III BMC

S.No	Name of the student	HT No
1.	N.Renuka	20190315034
2.	C.Vasundhara	20190315019
3.	S.Shirisha	20190315040
4.	B.Padmavathi	20190315040
5.	C.Eshwari	20190315018
6.	A.Glory	20190315014
7.	A.Lakshmi tulasi	20190315015
8.	T.Anjali	20190315041
9.	M.Sunitha	20190315031
10	K.Japanya	20190315029
11.	G.Gayathri	20190315021
12	G.Pavani	20190315023
13.	I.Sowjanya	20190315024
14.	M.Sowmya	20190315032
15.	S.Sony	20190315009
16.	A.rajeswari	20190315013
17.	S.Hafeezunnisa	20190315048

18.	V.Venkateswari	20190315043
19.	D.Baby	20190315020
20.	K.Joy Samantha	20190315025
21.	K.Prasanna	20190315027

III BIOTECH

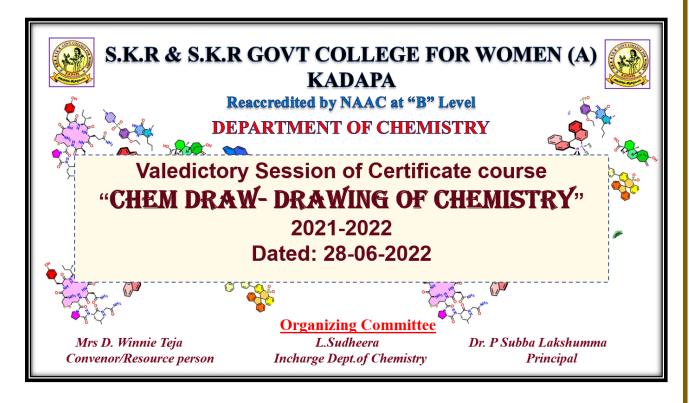
S.No	Name of the student	HT No
1.	S.Nandini	20190314062
2.	S.Sony	20190314013
3.	K.Sujatha	20190314044
4.	D.Sushma sree	20190314034

III MPC

S.No	Name of the student	HT No
1.	G.Sravani	20190308005
2.	M.Aswini	20190308015

Class	No of students
III BZC EM	22
III BMC EM	21
III BT	4
III MPC	2
TO	ΓAL 49

• VALEDICTORY SESSION

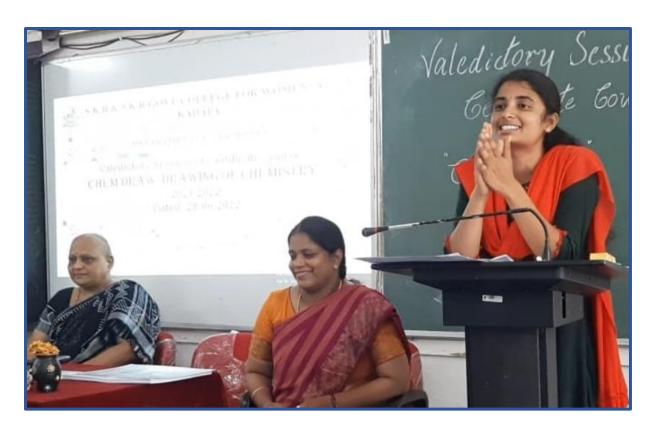














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March 2022 to June 2022		1. Sunne fail
Convenor Mrs. Winnie Teja D	Incharge Dept. Of Chemistry Mrs.L.Sudheera	Principal Dr.P.Subbalakshumr
