

Chem Drawing Skills & It's applications

IQAC Resolutions

As per the IQAC resolution, it was decided by the Dept of Chemistry to organize a certificate course program on "Chemdraw software" in the month of January 2019 for the BSc final year BSC BZE, MPC students. The resolutions as follows.

Resolutions:-


- 1) To send a Circular to the final year BSc students.
- 2) It has been resolved to prepare the list of students interested for the course.
- 3) It has been resolved to prepare a time table & syllabus and schedule of the course.

[Signature]
I/c chemistry Dept.

[Signature]
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Vittalwadi, Narayanaguda,
Hyderabad-29, T.S.

Need analysis of the course

This course aimed at imparting skills on use of various open source chemistry tools that are essential for any student @) researcher with chemistry as a major subject. At the end of course, the participants will be able to use these softwares for drawing chemical structures, generation of their names, calculation of molecular formula, molecular weight, density, spectroscopic techniques $^1\text{H NMR}$, $^{13}\text{C NMR}$, chemical reaction pathways prediction.


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Objectives of the course

- 1) To learn the process of downloading & installation of the software
- 2) To improve the drawing skills in chemistry
- 3) Chem draw is a major tool in drawing structures, and useful skill for researchers & students
- 4) To draw the chemical structures
- 5) To write the chemical structure names
- 6) Generation of their names,
- 7) Learning about chemical reaction pathways prediction.
- 8) Identifying the ^1H NMR & ^{13}C NMR spectra
- 9) Molecular formula & mol. wt detection.
- 10) Finally, students improve their drawing skills in chemistry.
- 11) Helpful for generation & processing of simple & complex chemical structures.

Outline of the course

ACD/Chem sketch - software: -

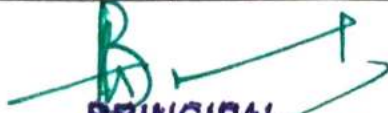
- 1) Introduction, download & installation process
- 2) Drawing various chemical structures
(acyclic, cyclic, polycyclic and heterocyclic)
- 3) Name generation from structures.
- 4) Conversion of name of molecule into its structure.
- 5) Calculation of physical properties such as density, molecular weight, molecular formula.
- 6) Prediction of $^1\text{H NMR}$ & $^{13}\text{C NMR}$.
- 7) practice session.
- 8) practice session.


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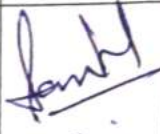
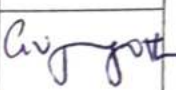



COURSE SCHEDULE (18/01/2019 to 30/01/2019)

Sl. NO	Name of the Lecturer	Designation and Address	Dates	Topic	Signature
1	G.Vijaya Jyothi Dr A.Santhoshi D.Prakash	Lecturer in chemistry, BJRGDC,Narayanaguda Hyd.	18/01/2019	ACD ChemSketch software:- Introduction, download and installation process.	<i>G. Vijaya Jyothi</i> <i>DK</i>
2	Dr A.Santhoshi	Asst.prof in chemistry BJRGDC,Narayanaguda Hyd.	19/01/2019	Drawing various chemical structures (acyclic, cyclic, polycyclic, and heterocyclic).	<i>Santhoshi</i>
3	D.Prakash	Asst.prof in chemistry, BJRGDC,Narayanaguda Hyd.	21/01/2019	Name generation from structures.	<i>DK</i>
4	G.Vijaya Jyothi	Lecturer in chemistry BJRGDC,Narayanaguda Hyd.	22/01/2019	conversion of name of molecule into its structure, lengths, dihedral	<i>G. Vijaya Jyothi</i>
5	G.Vijaya Jyothi	Lecturer in chemistry BJRGDC,Narayanaguda Hyd.	23/01/2019	calculation of physical properties such as density, molecular weight, molecular formula,	<i>G. Vijaya Jyothi</i>
6	Dr A.Santhoshi	Asst.prof in chemistry BJRGDC,Narayanaguda Hyd.	24/01/2019	^1H , ^{13}C NMR prediction from molecular structure	<i>Santhoshi</i>
7	Dr A.Santhoshi	Asst.prof in chemistry BJRGDC,Narayanaguda Hyd.	25/01/2019	Practice session	<i>Santhoshi</i>
8	D.Prakash	Asst.prof in chemistry BJRGDC,Narayanaguda	28/01/2019	Practicals by students	<i>DK</i>


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G. Vijaya Jyothi

		Hyd.			
9	Dr A.Santhoshi	Lecturer in chemistry, BJRGDC,Narayanaguda Hyd.	29/01/2019	Practicals by students	
10	G. Vijaya Jyothi Dr A. Santhoshi D. Prakash	Asst.prof in chemistry, BJRGDC,Narayanaguda Hyd.	30/01/2019	Practicals by students ,Review test, feedback, Certificates issue	 

To
The Principal
BJRGDC,
Narayanaguda,
Hyderabad.

Dt. 10/01/2019

Respected sir,

Sub : Chemistry department-10 days Certificate Programme
on Chem-Drawing skills and its applications " to BSc
students from 18/01/2019 to 30/01/2019 –permission-Reg.


It is to bring to your Kind notice that, chemistry department
is going to offer 10 days Certificate program on " Chem-Drawing
skills and its applications " to BSc students from 18/01/2019 to
30/01/2019 .

I therefore request for Permission to conduct certificate course by
Chemistry Department.

Thanking you sir,

Yours faithfully


I/C Chemistry Department

Permitted

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Notice

Dt: 10/01/2019

All the students of BSc BZC, MPC are informed that chemistry department is going to offer 10 days Certificate program on "Chem-drawing skills and its applications" to BSc students from 18/01/2019 to 30/01/2019. Therefore Interested students are requested to give their names to chemistry faculty immediately.

Sivapathri
I/C Chemistry Dept.

B. J. R. 17.1.2019
Principal
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L. G. a III MPC/MPG
Q. S. BZC III Y
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MPC - IV Y f.

Certificate course in hands on training of basic chemistry softwares- Chemdraw

Objectives

The Department of chemistry of BJR Government Degree College, Narayanaguda, Hyderabad offers 10 days **Certificate course in hands on training of basic chemistry softwares-ChemDraw**. This course aimed at imparting skills on use of various open source chemistry tools that are essential for any student or researcher with chemistry as a major subject. At the end of course, the participants will be able to use these softwares for drawing chemical structures, generation of their names, retrieve information about physical properties calculations, three-dimensional molecular structure calculations, spectroscopic signatures, chemical reaction pathways prediction, molecular functional groups, docking sites predictions, and other parameters efficiently.

Course Duration– 30 Hours

Eligibility– All B.Sc. final year students having chemistry as major subject and all M.Sc. Chemistry students are eligible

Number of seats-50

Evaluation Process– Assessment of candidates will be done through theoretical assignments, projects & practical examinations after completion of each module. All successful candidates will be awarded with certificates.

Contents for certificate course in hands on training of basic chemistry softwares

Module 1 (4 hours)

ACD ChemSketch software:– Introduction, download and installation process, Drawing various chemical structures (acyclic, cyclic, polycyclic, heterocyclic), name generation from structures, conversion of name of molecule into its structure, calculation of physical properties such as density, molecular weight, molecular formula, refractive index from structural formula, bond angles, bond lengths, dihedral angles.

Learning outcomes:- After successful completion of this module candidate will be able to use ACD ChemSketch for generation and processing of simple and complex chemical structures.

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DEPARTMENT OF CHEMISTRY

REPORT

10 days certificate course on:

"CHEM-DRAWING SKILLS AND ITS APPLICATIONS"

The department of chemistry has conducted a 10-days certificate course on "Chem-Drawing Skills and its applications". The period of course was from 18-01-2019 to 30-01-2019

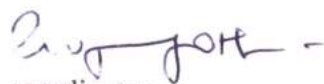
This course is mainly designed to improve the drawing skills in chemistry. This course is not only for knowledge enhancement for students they can utilize the skills for improvement of chemistry subject knowledge as well as they can also apply this skills in research activity in their higher education .

Total syllabus was decided into (05) modules and time table for 30 classes. Out of 30 classes 18 were classes and 12 were practice session. Distribution of the syllabus was done among 03 (three) resource persons, which includes Smt.G.Vijaya Jyothi, Dr.A.Santhoshi, Sri.D.Prakash. The syllabus was completed as per the division and time table,

The course was designated by the committee and member with the Principal, Dr.Bala Bhaskar, as chair person, Dr.Geetha Lakshmi Patnaik, Vice principal , Smt.G.Vijaya Jyothi, Dr.A.Santhoshi, Sri.D.Prakash as members. It was decided HOD to act as coordinator.

A test was conducted at the end of the session for all the participating students to assess the fulfillment of the objectives. All the students were qualified. A feedback of the programme was also collected from the participants. Most of the students appreciated the programme . The suggestions given by the students were recorded and decided to incorporate in the feature course.

certificates are distributed to the 20 students by the principal, Head of the chemistry Department ,other members of the department were present on the occasion.


coordinator


Principal
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DEPARTMENT OF CHEMISTRY-Attendance of Participants For The Certificate Course for the year 2018-19

S.N	NAME OF STUDENT	GROUP	Roll Number	18/11/19	19/11/19	21/11/19	22/11/19	23/11/19	24/11/19	25/11/19	28/11/19	29/11/19	30/11/19
1	Atula Sunitha	MP-III-EM	1070-16 444-001	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha
2	Alluri Mohan	MP-III-EM	441-003	Mohan	Mohan	Mohan	Mohan	Mohan	Mohan	Mohan	Mohan	Mohan	Mohan
3	Bilam Naveen	MP-III-EM	441-008	Naveen	Naveen	Naveen	Naveen	Naveen	Naveen	Naveen	Naveen	Naveen	Naveen
4	Gunda Preethi	MP-III-EM	441-013	Preethi	Preethi	Preethi	Preethi	Preethi	Preethi	Preethi	Preethi	Preethi	Preethi
5	Kodari Katesh	MP-III-EM	441-016										
6	N. Swapna	MP-III-EM	444-027	Swapna	Swapna	Swapna	Swapna	Swapna	Swapna	Swapna	Swapna	Swapna	Swapna
7	B. Arun Kumar	BZC-III-EM	445-502	Arun Kumar	Arun Kumar	Arun Kumar	Arun Kumar	Arun Kumar	Arun Kumar	Arun Kumar	Arun Kumar	Arun Kumar	Arun Kumar
8	B. Pooja Kumari	BZC-III-EM	445-503	Kumar	Kumar	Kumar	Kumar	Kumar	Kumar	Kumar	Kumar	Kumar	Kumar
9	D. Sunitha	BZC-III-EM	445-508	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha
10	G. Sai Tejaswini	BZC-III-EM	445-509	Tejesvi	Tejesvi	Tejesvi	Tejesvi	Tejesvi	Tejesvi	Tejesvi	Tejesvi	Tejesvi	Tejesvi
11	B. Nikitha	BZC-III-EM	445-514	Nikitha	Nikitha	Nikitha	Nikitha	Nikitha	Nikitha	Nikitha	Nikitha	Nikitha	Nikitha
12	Banoth Sunitha	BZC-III-EM	445-502	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha	Sunitha
13	G. Samba Raju	BZC-III-EM	445-506	Raju	Raju	Raju	Raju	Raju	Raju	Raju	Raju	Raju	Raju
14	G. Sneha	BZC-III-EM	445-510	Sneha	Sneha	Sneha	Sneha	Sneha	Sneha	Sneha	Sneha	Sneha	Sneha
15	Somnath	BZC-III-EM	445-522	Somnath	Somnath	Somnath	Somnath	Somnath	Somnath	Somnath	Somnath	Somnath	Somnath
16	Patil Srikanth	MP-III-EM	444-029	Srikanth	Srikanth	Srikanth	Srikanth	Srikanth	Srikanth	Srikanth	Srikanth	Srikanth	Srikanth
17	P. Ashok Kumar	MP-III-EM	244-030	Ashok	Ashok	Ashok	Ashok	Ashok	Ashok	Ashok	Ashok	Ashok	Ashok
18	M. Ravi Naik	MP-III-EM	444-033	Naik	Naik	Naik	Naik	Naik	Naik	Naik	Naik	Naik	Naik
19	Y. Chandu	MP-III-EM	444-036	Chandu	Chandu	Chandu	Chandu	Chandu	Chandu	Chandu	Chandu	Chandu	Chandu
20	T. Saisailesh	MP-III-EM	444-057	Saisailesh	Saisailesh	Saisailesh	Saisailesh	Saisailesh	Saisailesh	Saisailesh	Saisailesh	Saisailesh	Saisailesh

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Coordinator

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