

EVIDENCES for CERTIFICATE COURSES

2020-21

Date:16, July 2020

To
The Principal
Kakatiya Government College
Hanamkonda.

Sir,

SUB: Dept. Of Chemistry – Request for permission to start a certificate course in Chemistry – reg
REF : Resolution taken in Departmental Meeting , dated 16-07-2020.

Adverting to the subject and reference cited above, a resolution is taken in Departmental meeting today i.e., 16-07-2020 to start a certificate course in Chemistry, entitled "**Introduction to Molecular Spectroscopy**" from 20-07-2020. The course is useful to all the students of B.Sc. . Duration of course will be one month.

Hence I request you to accord permission to start the above mentioned certified course.

Permitted
[Signature]
[Signature]
PRINCIPAL
KAKATIYA GOVT COLLEGE
Hanamkonda

Yours faithfully
[Signature]
Dr. B. Ramesh
Incharge, Dept of Chemistry
Department of Chemistry
Kakatiya Government College
HANAMKONDA.

NOTICE

Department of Chemistry intends to conduct certificate course in chemistry entitled

"Introduction to Molecular Spectroscopy" From 20th July, 2020

Interested students of I/II/III year are instructed to enroll your names in the department of chemistry from 16th July, 2020 through online mode.

- ❖ No. of participants in the certificate course: 60
- ❖ Last date of registration: 19th July, 2020
- ❖ Commencement of Certificate Course: 20th July 2020

R. V. B.

Incharge

Department of Chemistry
Incharge

Department of Chemistry
Kakatiya Government College
HANMANTHAPETA

Jyoti

Principal

PRINCIPAL
KAKATIYA GOVT COLLEGE
HANMANTHAPETA

- 1) Kanchha Saktisana - *Kanchha*
- 2) Dr. B. Ramesh - *RV*
- 3) Vasavi Srinivas - *Vasavi*
- 4) P. Sumalatha - *P. Sumalatha*
- 5) K. Vani - *Vani*
- 6) K. Suresh - *Suresh*

Department of Chemistry
KAKATIYA GOVERNMENT COLLEGE, HANAMKONDA

Certificate Course in Chemistry

Introduction to Molecular Spectroscopy

20/07/2020 – 21/08/2020

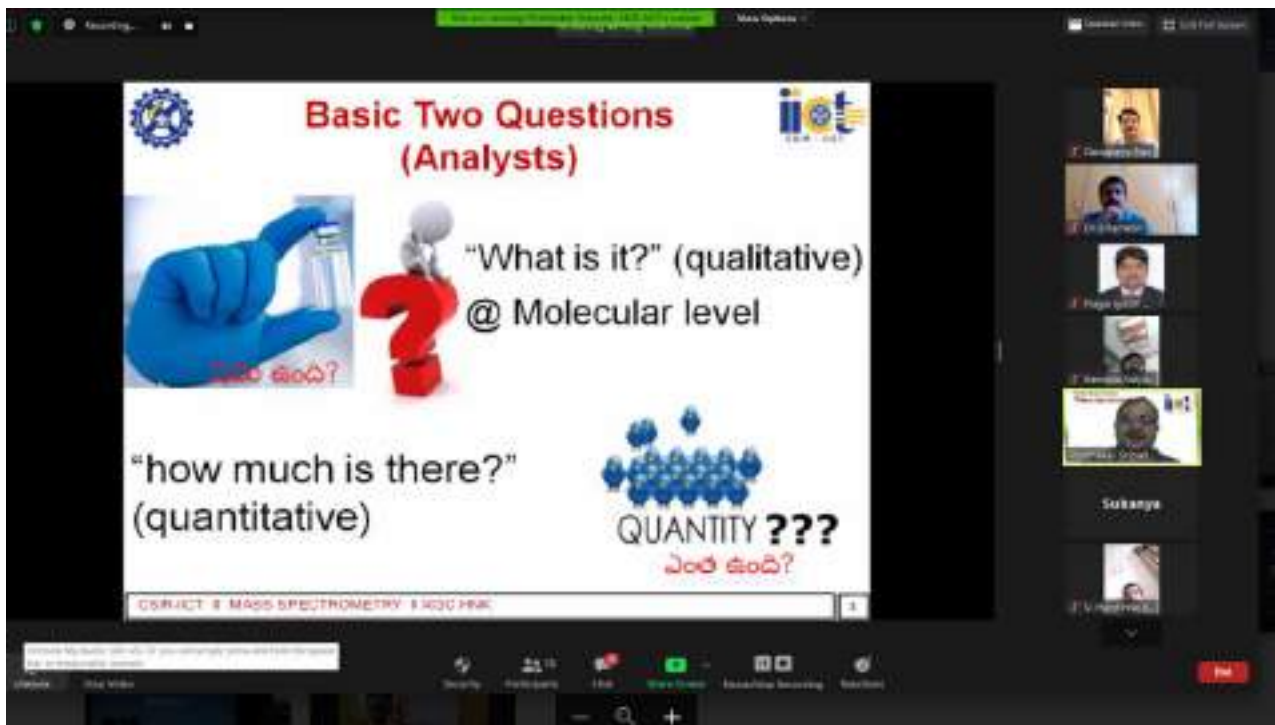
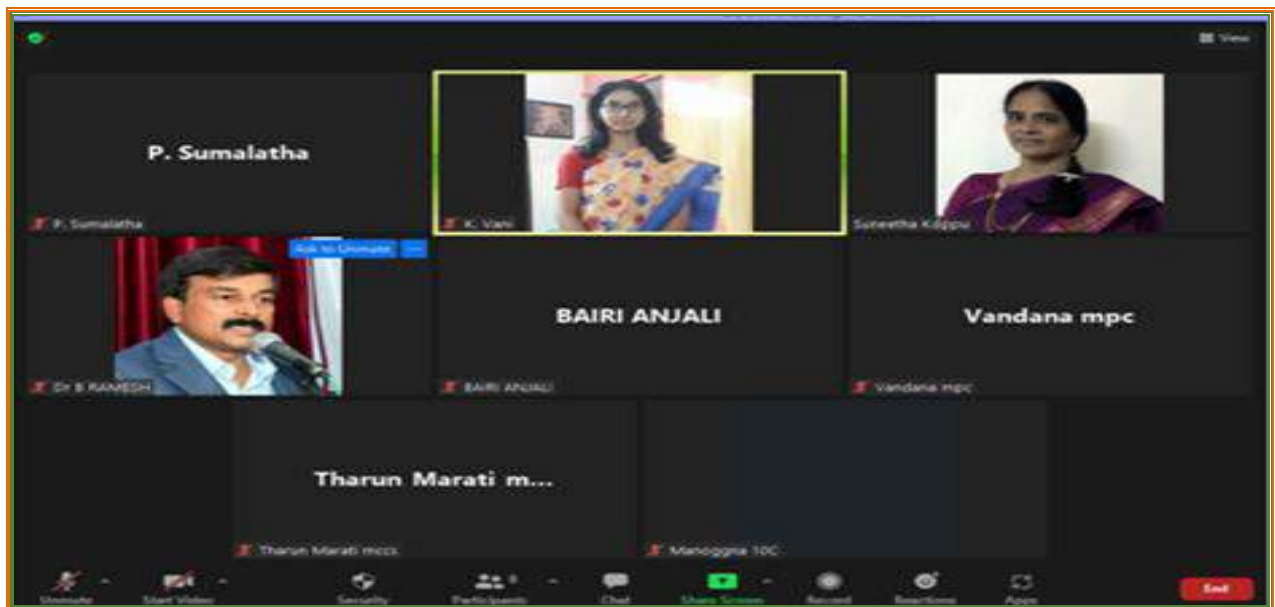
Syllabus

1. Electromagnetic Radiation.
2. Types of Molecular Spectra.
3. Selection Rules.
4. Determination of Bond Length of rigid diatomic molecules.
5. Introduction of IR Spectroscopy.
6. Energy levels of Simple Harmonic Oscillator.
7. Modes of vibration in Poly atomic molecules.
8. Introduction of UV- Spectroscopy.
9. Bonding and Anti-bonding molecular orbitals.
10. Electronic energy levels of molecules (σ , π , n) and Types of electronic Transitions.
11. Chromophore, Auxochrome, Bathochromic shift, Hypsochromic Shifts.
12. Principle of NMR spectroscopy.
13. Factors affecting chemical shift.
14. Basic principles of Mass Spectroscopy.
15. Determination of Molecular formula and mass spectrum of various compounds.






Incharge
Department of Chemistry
Kakatiya Government College
Hanamkonda



Department of Chemistry
Kakatiya Government College, Hanamkonda

Valedictory Programme
Date: 21-08-2020

Online Certificate Course in Chemistry
Introduction to Molecular Spectroscopy
(from 20.07.2020 to 21-08-2020)

KAKATIYA GOVT.COLLEGE, HANAMKONDA
Dist: WARANGAL., TELENGANA - 506001
(Affiliated to Kakatiya University, Warangal)
(e-mail: warangal_jkc@gmail.com, website: <https://gdcts.cgg.gov.in/hanamkonda.edu>)

DEPARTMENT OF CHEMISTRY
CERTIFICATE OF ACHIEVEMENT

This is to certify that Mr. / Ms. _____ of
B.Sc. - I / II / III yr. has successfully completed the certificate course in
Introduction to Molecular Spectroscopy conducted by the
Department of Chemistry, during the period from: 20/07/2020 to
21/08/2020 and secured A grade

Course Coordinator In-charge Principal
Dept.of Chemistry

Date: 15th October, 2020

The Principal
Kakatiya Government College
Hanamkonda.

Sir,

SUB: Dept. Of Chemistry – Request for permission to start a certificate course in Chemistry – reg
REF : Resolution taken in Departmental Meeting , dated 15th October, 2020.

Adverting to the subject and reference cited above, a resolution is taken in Departmental meeting today i.e.15-10-2020 to start a certificate course in Chemistry, entitled "**Fundamentals of chromatography**" from 17th, October 2020. The course is useful to all the students of B.Sc. . Duration of course will be one month.

Hence I request you to accord permission to start the above mentioned certified course.

Permitted
[Signature]
15/10/2020
PRINCIPAL
KAKATIYA GOVT COLLEGE
HANAMKONDA

Yours faithfully
[Signature]
Dr. B. Ramesh
Incharge, Dept. of Chemistry
Department of Chemistry
Kakatiya Government College
Hanamkonda

NOTICE

Department of Chemistry intends to conduct certificate course in chemistry entitled with **"Fundamentals of Chromatography"** from 1st October, 2020 to 16th November, 2020.

Interested students of final II year are restricted to second year students in the department of chemistry through online form-15th October 2020.

- ◆ No. of participants in the certificate course: 70
- ◆ Last date of registration: 16-10-2020
- ◆ Commencement of Certificate Course: 1st October, 2020.

R. Siva
 IN-CHARGE
 DEPARTMENT OF CHEMISTRY
 KAKATIYA GOVT. COLLEGE
 HANAMKONDA

[Signature]
 PRINCIPAL
 KAKATIYA GOVT. COLLEGE
 HANAMKONDA

Ist y } B.Sc. IIb - 12
 B.Sc. BSC - 12
 M.Sc. MSc - 12
 M.Sc - 12
 B.Sc. IIIa - 12

IInd y } B.Sc - 12
 M.Sc - 12
 B.Sc. BSC - 8
 M.Sc. MSc - 8



Department of Chemistry
KAKATIYA GOVERNMENT COLLEGE
HANAMKONDA

A Certificate Course in Chemistry

Fundamentals of Chromatography

Objectives

This course aimed at imparting skills on use of various chromatographic techniques. Chromatography technique is used to separate the various substances of a mixture.

The applications range from a simple, verification of purity of a given compound to the quantitative determination of the components of the mixture.

Mode of the course: The program will be organized through online mode.

Course Duration: 10 Hours

Eligibility: B.Sc. Second/Final Year students

No. of participants: 70

IInd y B.Sc. BSC (MSc) 12
 IInd y B.Sc. (M) 12
 IIIrd y M.Sc - 12
 IInd y B.Sc. (M) 12
 Ist y B.Sc - 12
 IInd y M.Sc - 12
 Ist y M.Sc. MSc - 8

R. Siva
 IN-CHARGE
 DEPARTMENT OF CHEMISTRY
 KAKATIYA GOVT. COLLEGE
 HANAMKONDA

Course Module:

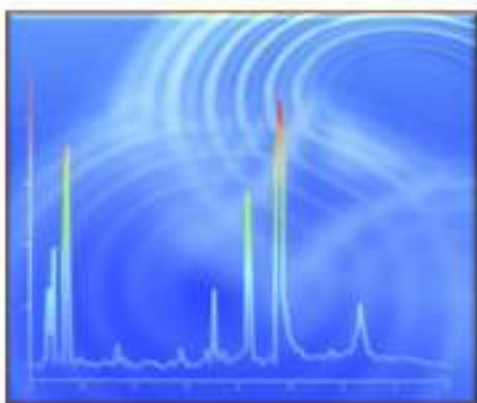
1. Classification of chromatographic methods
2. Principles and fundamentals of chromatography.
3. Principles and uses of Thin Layer Chromatography
4. Principles and uses of Paper Chromatography
5. Principles and uses of Column Chromatography
6. Principles and uses of Ion – Exchange chromatography
7. Principles, working and use of Gas chromatography.
8. Programmed temperature gas chromatography.
9. Principles and applications of High Performance Liquid Chromatography.
10. Optimization of various chromatographic parameters and Data acquisition software.


INC: arca
Department of Chemistry
Sakshi Government College
MATHAMKONDA



Department of Chemistry
Kakatiya Government College,
Hanamkonda

Online Certificate Course in Chemistry
Fundamentals of Chromatography
(From 17.10.2020 to 26-11-2020)



**Inaugural
Programme**
Date: 17.10.2020

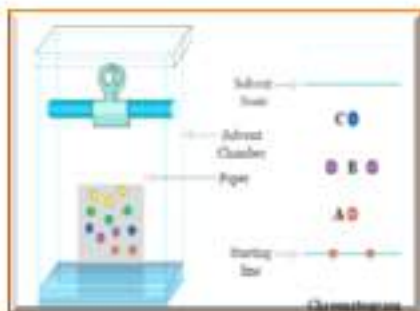




Department of Chemistry
Kakatiya Government College,
Hanamkonda

Online Certificate Course in Chemistry
Fundamentals of Chromatography

(From 17.10.2020 to 26-11-2020)



Valedictory Programme

Date: 26-11-2020



KAKATIYA GOVT.COLLEGE, HANAMKONDA
Dist: WARANGAL., TELENGANA – 506001



(Affiliated to Kakatiya University, Warangal)
(e-mail: warangal.jkc@gmail.com, website: <https://gdcts.egg.gov.in/hanamkonda.edu>)

DEPARTMENT OF CHEMISTRY

CERTIFICATE

This is to certify that Mr. / Ms. _____ of
B.Sc. - I / II / III yr. has successfully completed the certificate course in
Fundamentals of Chromotography conducted by the **Department of Chemistry**,
during the period from: 17/10/2020 to 26/11/2020 and secured grade **A**

Course Coordinator

**In-charge
Dept.of Chemistry**

Principal

