B.L.D.E.Association's
S.B.Arts and K.C.P. Science College,Vijayapur.

PG DEPARTMENT OF CHEMISTRY

GUEST LECTURE 2022-23

Topic: IR and Raman Spectroscopy

For

PG Dept of Chemistry Students

Date: 09th April. 2023 **Time: 10:00 am.**

VENUE

Seminar Hall,

S.B.Arts and K.C.P.Science College,

Vijayapur

.P. G. Department of Chemistry

Guest lecture

By

Mr. Vinayak Bellad

Notice

Date: 03/04/2023

All the PG Dept of Chemistry students are hereby informed to attend the guest lecture organized by PG Department of Chemistry on the Topic: **IR and Raman Spectroscopy** on 09/04/2023 in seminar hall at 10:00 am.

Co-ordinator
P.G.Department of Chemistry
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Vijayapur-586101.

IQAC, Co-ordinator
S.B.Arts & K.C.P.Science College.
Vijayapur.

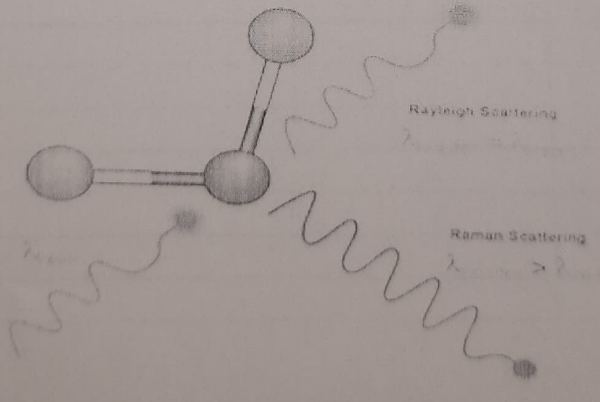
Principal,
S.B. Arts and KCP Science College
VIJAYAPUR

REPORT

Topic: IR and Raman Spectroscopy

Infrared spectroscopy (IR spectroscopy or vibrational spectroscopy) is the measurement of the interaction of infrared radiation with matter by absorption, emission, or reflection. It is used to study and identify chemical substances or functional groups in solid, liquid, or gaseous forms. It can be used to characterize new materials or identify and verify known and unknown samples. The method or technique of infrared spectroscopy is conducted with an instrument called an **infrared spectrometer** (or spectrophotometer) which produces an **infrared spectrum**. An IR spectrum can be visualized in a graph of infrared light absorbance (or transmittance) on the vertical axis vs. frequency, wavenumber or wavelength on the horizontal axis. Typical units of wavenumber used in IR spectra are reciprocal centimeters, with the symbol cm^{-1}.

Raman Spectroscopy is a non-destructive chemical analysis technique which provides detailed information about chemical structure, phase and polymorphy, crystallinity and molecular interactions. It is based upon the interaction of light with the chemical bonds within a material. Raman is a light scattering technique, whereby a molecule scatters incident light from a high intensity laser light source. Most of the scattered light is at the same wavelength (or color) as the laser source and does not provide useful information – this is called Rayleigh Scatter. However a small amount of light (typically 0.0000001%) is scattered at different wavelengths (or colors), which depend on the chemical structure of the analyte – this is called Raman Scatter.



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S.B Arts and K.C.P Science College – Vijayapura

P. G. Department of Chemistry

Guest Lecturer-2022-23

Guest Lecture: Prof. Vinay Bellad **Date:** 09/04/2023

Topic : IR and Raman Spectroscopy Session:01

Attendance

Sl. No	Name of the student	Signature
1	Sahebagoud. Kumatagi	
2	Keshav. S. chatter	
3	Chandrashekhar. N. Konnurmath	
4	ketan. chinchakhandi.	
5	mohammedZuber Terdal	
6	Mahesh. Halabar	M.B. Halabar.
7	Shyamaray. Valasang.	
8	ShreePadaraj. G. Kulakarni	
9	Goudappagouda. B. Angadageri	
10	Vidyashri R Chavan	
11	Lakhmi. M. Patil	
12	Kaveri. Uagi	E.O.C.
13	Akshata. A. Mahanur	
14	Rashmi. G. Dashyal.	
15	Apeksha. p. Shirshyad	
16	Aishwarya. P. Asangi	
17	Laxmi S. Kadadevar	
18	Danamma, P. Shivagoor	
19	Saraswati G Mathapati	
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P. G. Department of Chemistry

Guest Lecturer-2022-23

Guest Lecture: Prof. Vinay Bellad **Date:** 09/04/2023

Topic : IR and Raman Spectroscopy Session:02

Attendance

Sl. No	Name of the student	Signature
1	Vidyashri R Chavan	
2	Kaveri. Utagi	K.O.U
3	Akshata. A. Mardnur	AAmardur
4	Rashmi. G. Dashyal.	Rdalyal
5	Apeksha. P. Shirshyad	
6	Aishwarya. P. Asangi	Akasangi
7	Laxmi. S. Kadadevar	
8	Danamma. P. Shiragoor	
9	Saraswati G Jathapati	
10	Lakshmi. M. Patil	
11	Goudappagouda. B. Angadageri	Bangadageri
12	Shreepadaraj. G. Kulakarni	
13	Kiran. Chinchalchandi	Kiran.
14	Shyamaraj. Valasang.	
15	Chandrashekhar. N. Bennurmath	
16	Sabebagoud. Kumatagi	
17	Keshav. S. chattar	K.S.chattar
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