



# GURU NANAK COLLEGE (AUTONOMOUS)

Re-Accredited at 'A' Grade By NAAC

Affiliated to the University of Madras

Guru Nanak Salai, Velachery, Chennai -600042

## Report

1. Event Title: National level online workshop on introduction to spectroscopy and bonding in covalent compounds
2. Category: National level online workshop
3. Department: Chemistry
4. Date: From 6/06/2020 to 9/06/2020
5. No. of participants:91

**Report description:** National level online workshop was organized by the department of Chemistry, Guru Nanak College, Velachery, Chennai 42.

**Report:** The Department of Chemistry has organized a National level online workshop on introduction to spectroscopy and bonding in covalent compounds from 6<sup>th</sup> June 2020 to 9<sup>th</sup> June 2020. The Principal Dr. M.G. Ragnathan inaugurated the programme. This workshop strengthened the basic concepts in spectroscopy and bonding in the covalent compounds. Prof.S. Srivathsan, Head (Retd.), Department of Chemistry, Guru Nanak College explained the chemical bonding in the covalent molecules and compounds. Dr.S. Swarnalakshmi, Asso.Prof. of Chemistry (Retd.), Guru Nanak College highlighted the principles and applications of different types of spectroscopy like rotational, vibrational, electronic, NMR, mass and raman spectroscopy. College students (both UG and PG) and faculty members across the nation were benefitted from this workshop. There were 91 participants who actively participated in the online workshop. E certificates were issued to the participants. This workshop was supported by DBT Star College Scheme, Government of India.

Recording

Raman Spectroscopy

- Scattering spectroscopy
- Primary process – Scattering
- Secondary processes
- rotational absorption or emission
- Vibrational absorption or emission
- Vibrational- rotational absorption or emission

$$\bar{\nu}_{\text{Rotational Raman}} = \bar{\nu}_i \pm \Delta\bar{E}_{\text{rotn.}}$$

$$\bar{\nu}_{\text{vibn. - rotn.}} = \bar{\nu}_i \pm [\Delta\bar{E}_{\text{vibn.}} + \Delta\bar{E}_{\text{rotn.}}]$$

Chitra R, Vijay Mass, Praveen kumar, Punit Puri, Sofiya, Prathibha Adrian, J.Diana, A. Karthick Raja, S. Dhanalaksh..., prajeeth, Roshni Shanmu..., Mukund Kannan, Bhubaneswari E, K.TAMIL SELVAN, mary george, Sarvani S, Gayathiri E, Bharathi GR, Porchezhyan V, noob artist, Suresh, Indhumathi V

75 Participants, Chat, Share Screen, Record, Reactions, Leave



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 Guru Nanak Salai, Velachery, Chennai – 600 042

Post Graduate and Research Department of Chemistry

**Certificate of Appreciation**

This is to certify that **Aafreen Fathima N**, Women's Christian College, Chennai has successfully completed the **four days National Online Workshop** on **"Introduction to Spectroscopy and Bonding in Covalent Compounds"** organised by the Post Graduate and Research Department of Chemistry, Guru Nanak College (Autonomous), Guru Nanak Salai, Velachery, Chennai with the support of DBT Star College Scheme, Government of India during **6-9, June 2020**.

**Dr. M. G. RAGUNATHAN**  
 PRINCIPAL

**Mr. MANJIT SINGH NAYAR**  
 GENERAL SECRETARY & CORRESPONDENT

