

# ICT ENABLED TOOLS FOR EFFECTIVE TEACHING LEARNING PROCESS

2023-24

Sl. no	ICT ENABLED TOOLS
1	MOODLE
2	GOOGLE CLASSROOM
3	YOUTUBE CHANNEL
4	SMART BOARD
5	GOOGLE MEET
6	<b>GOOGLE FORM</b>
7	E-REPOSITORY
8	ONLINE RESOURCES
9	OTHERS SOFTWARES USED
10	<b>SPSS &amp; POWER BI</b>
11	N- VIVO (QUALITATIVE DATA ANALYSIS TOOL)
12	DEDOOSE
13	VOTER HELPLINE BY ELECTION COMMISSION, GOVERNMENT OF INDIA
14	ZOTERO
15	MENDELEY (REFERENCING SOFTWARE)
16	GRAMMARLY- LANGUAGE EDITING SOFTWARE
17	LATEX- SOFTWARE FOR TYPESETTING DOCUMENTS
18	ORIGIN- FOR SCIENTIFIC GRAPHING AND ANALYSIS

# Moodle

PROVIDENCE WOMEN'S COLLEGE  
Home Dashboard My courses

**CHE5B07: ORGANIC CHEMISTRY - II**

Anu Jose Chemistry Depthi Jose Chemistry Sareena C Chem Sr. Asha Thomas Chemistry

PROVIDENCE WOMEN'S COLLEGE  
Home Dashboard My courses

**Module V: Carboxylic Acids and Sulphonic Acids**

- URL Introduction Mark as done
- Page Watch Simulation Mark as done
- Page Preparation of Carboxylic Acids Mark as done

Virtual Learning Space of Providence Women's College, Calicut

- Distribution Mark as done
- Intensity of Distribution Mark as done
- Channel Management Decision, Conflicts & Cooperation Mark as done
- Channel Integration, Wholesaler & Retailer Mark as done
- Directing Marketing & Logistic Management Mark as done
- Outcome Measurement: Summary of the topic Delivering Val Mark as done
- Marketing of Services Mark as done
- Outcome Measurement: Minute Paper Mark as done

Module 5 E-Commerce and E-Marketing

E-Marketing: Concept, reason for the growth of e-marketing.

E-Commerce: Types, Business models, Marketing Strategies, M-Commerce, E-Payment & Security issues.

- E Marketing Mark as done
- Outcome Measurement: Differentiate E-marketing and Traditional marketing Mark as done
- E-commerce Mark as done
- Outcome measurement: Differentiate B2B and B2C Mark as done
- M-Commerce, E-Payment system and security issues Mark as done

Virtual Learning Space of Providence Women's College, Calicut

### Bacteriological analysis-1

**Presumptive test**

1. Medium: Lactose broth or MacConkey Broth  
Prepare the medium (MacConkey or Lactose broth) in single and double strength concentration.

Watch later Share

Ingredients	Gms / Litre
Pancreatic Digest of Gelatin	20.0 g/L
Lactose Monohydrate	10.0 g/L
Dehydrated Ox Bile	5.0 g/L
Bromocresol Purple	0.01 g/L

Watch on YouTube

Virtual Learning Space of Providence Women's College, Calicut My Courses

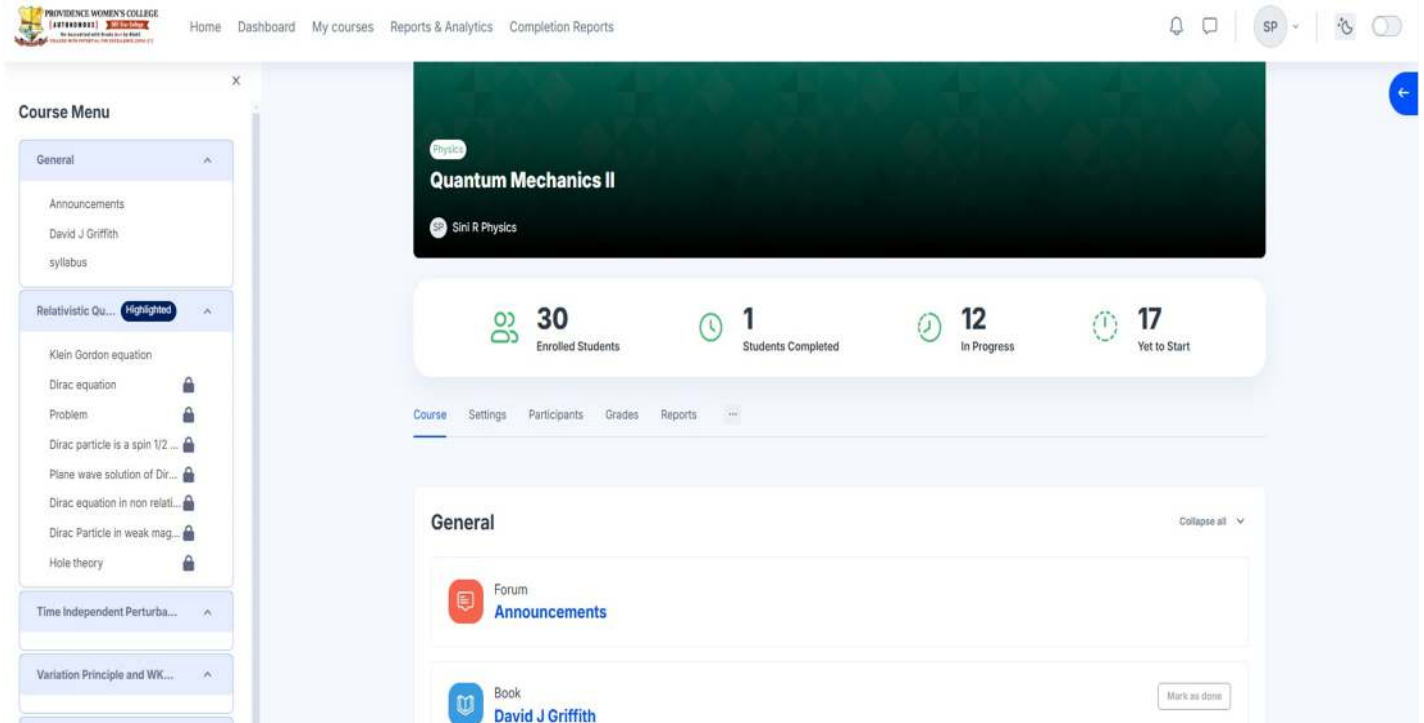
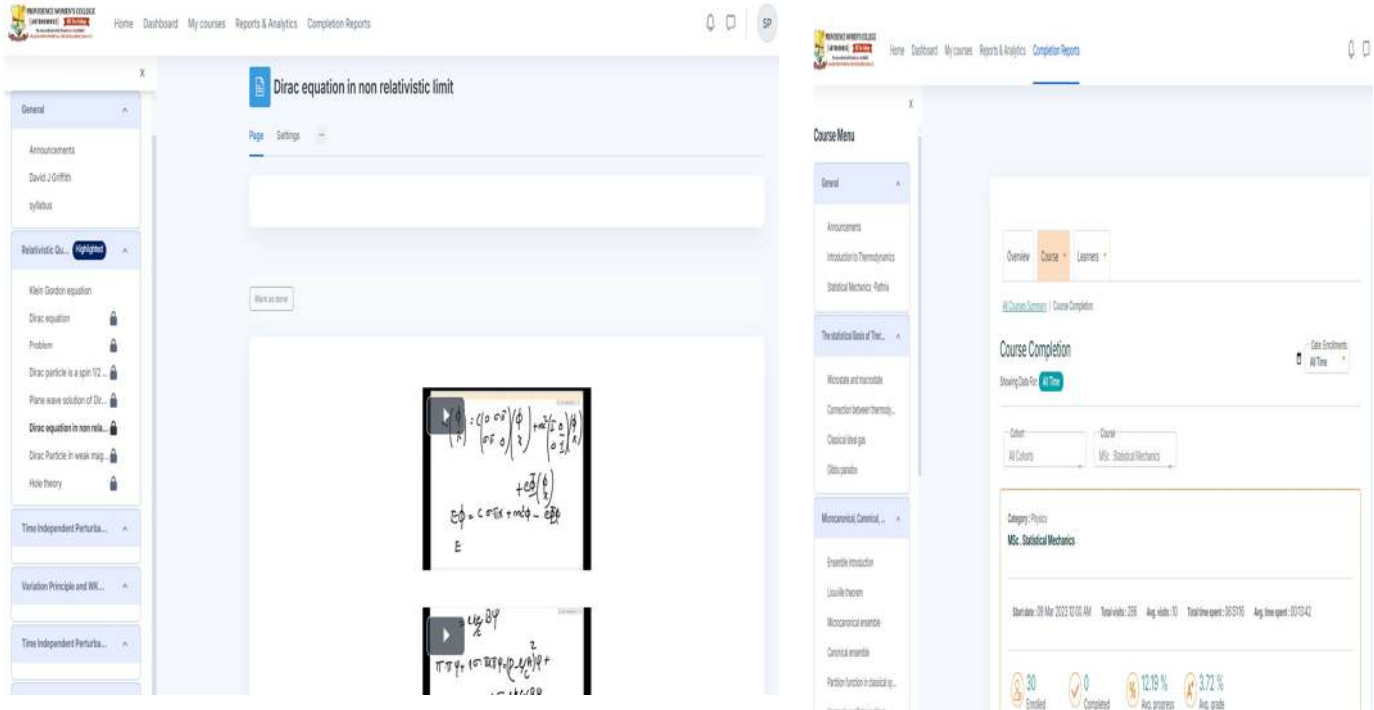
Ninikala I

Mariyam Nashwa Com 2022\_25 nashwamariyam18@gmail.com Submitted for grading Grade Edit Monday, 8 May 2023, 6:49 PM

(87 words)  
Modern types of retailer stores

- 1) general merchandise retail stores
- 2) speciality

# Moodle



## Department of Physics

# Google Classroom

This screenshot shows the interface for a Google Classroom course titled "1 Sem Comp Physics 2023-2024 Maths & Chemistry". The left sidebar contains navigation options: Home, Calendar, Teaching, To review, Enrolled, To do, General physics PG, Archived classes, and Settings. The main content area features a blue header banner with the course title and a "Customise" button. Below the banner, there is a "Meet" section with a "Join" button and a "Visible to students" toggle. A "Class code" box displays "krqxeug". An announcement from "Aswathy S" dated 21 Dec 2023 reads: "Dear girls... Please find the complete lectures on thermodynamics." Below the announcement is a video thumbnail for "Thermodynamics - YouTube" with the URL "https://youtube.com/playlist?list=".

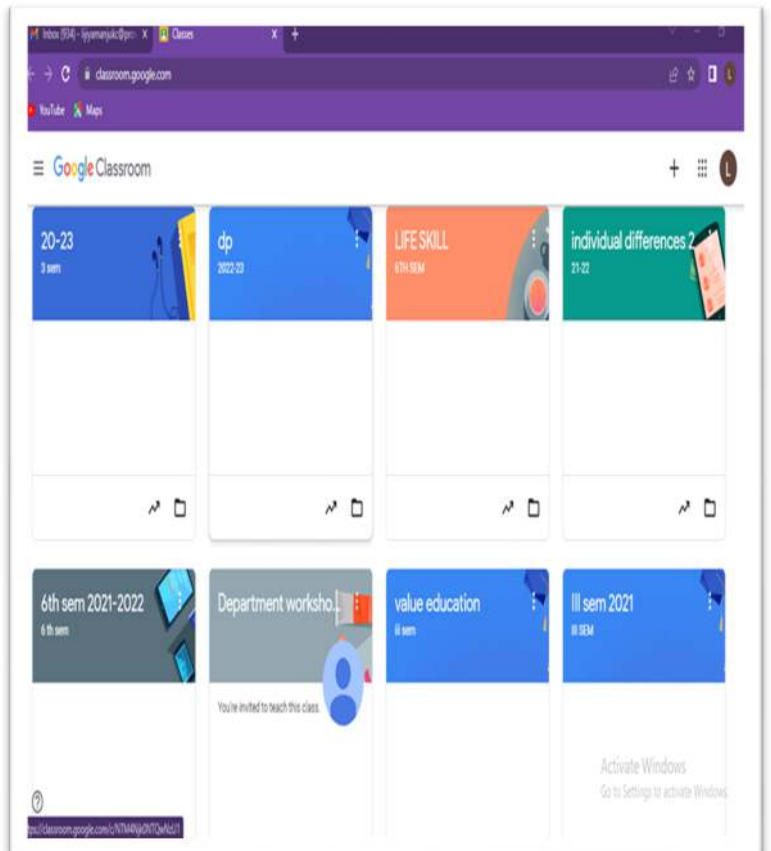
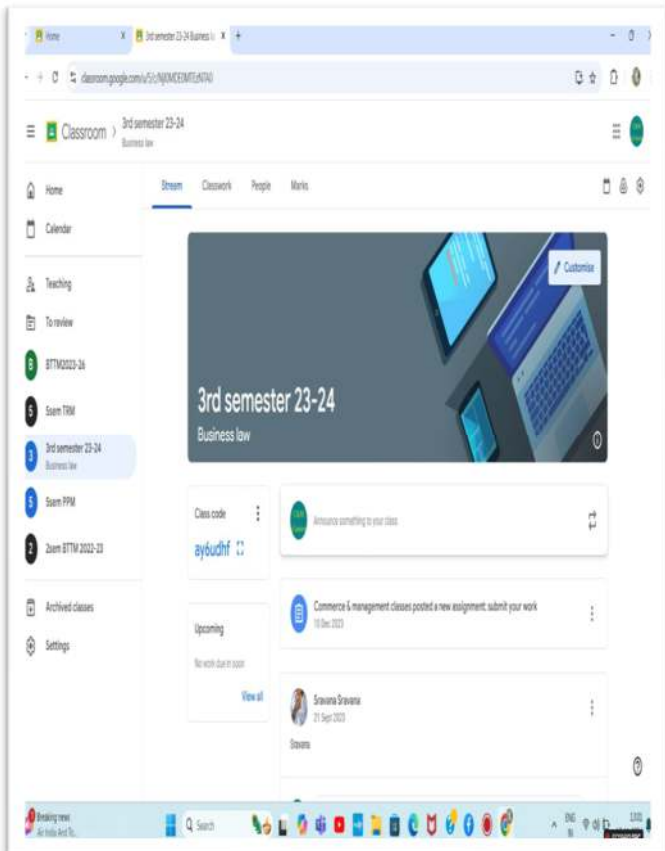
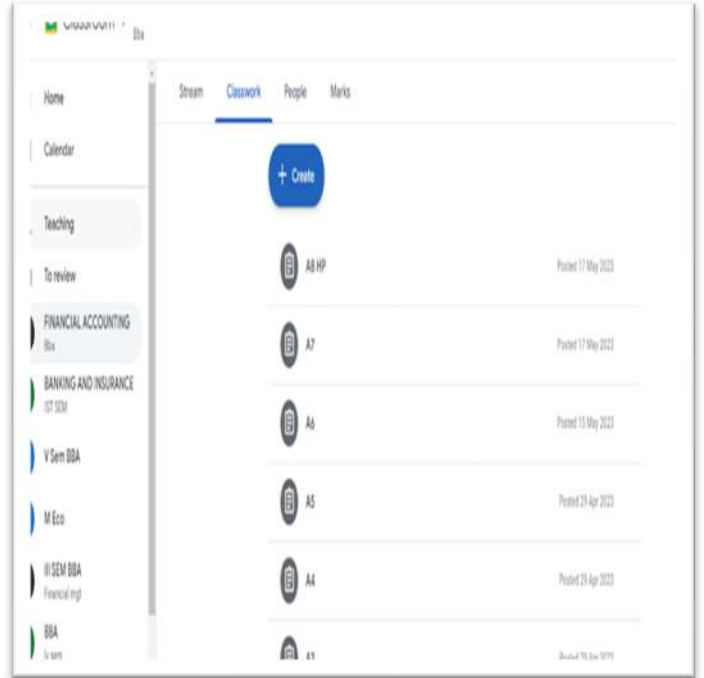
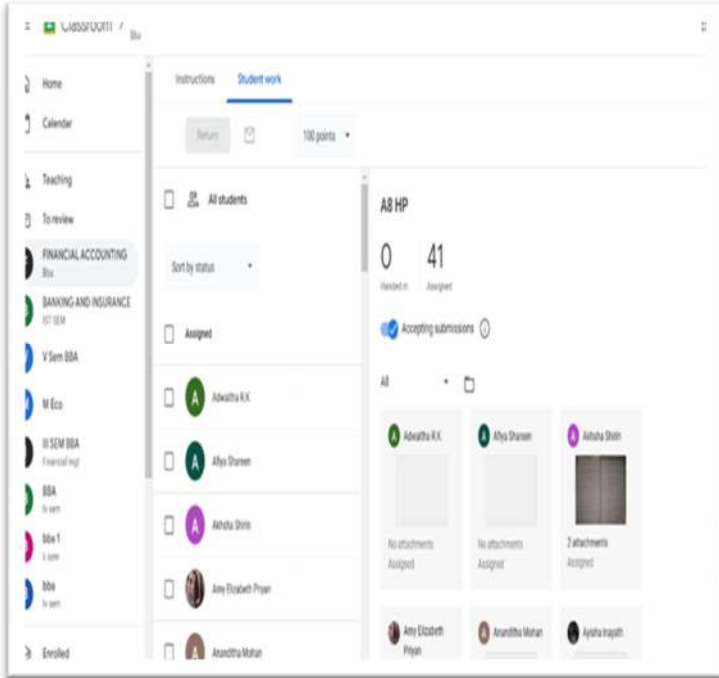
This screenshot shows the interface for a Google Classroom course titled "Environmental Chemistry Open Course". The left sidebar includes navigation options: Home, Calendar, Teaching, To review, Enrolled, To do, General physics PG, Archived classes, and Settings. The main content area features a purple header banner with the course title and a "Customise" button. Below the banner, there is a "Class code" box displaying "f6y67ak" and an announcement section with a "Visible to students" toggle.

This screenshot shows a Google Classroom page displaying a list of courses. The courses listed are: "S6 2024" (55 students), "S4 Bcom 2024" (56 students), "S1 Bcom 2023-24 Marketing management" (55 students), and "Entrepreneurship Development" (61 students). Each course entry includes a colorful banner image and a "Customise" button.

This screenshot shows a Google Classroom page displaying a grid of course cards. The cards include: "Event Management", "TRAVEL GEOGRAPHY", "ATAO", and "FIP AUGUST 21". The left sidebar contains navigation options: Home, Calendar, Teaching, To review, Enrolled, To do, General physics PG, Archived classes, and Settings.

This screenshot shows a Google Classroom page displaying a grid of course cards. The cards include: "Development Admini...", "4TH SEM HRM DEVELOPMENT ADMINISTRATION", "SEM 2 HRM IDC", "BA HRM III DC SEMESTER 6", "I DC BA HRM-PA", "BA HRM III DC SEMESTER 6", "I DC BA HRM SEMESTER 1 SRIPA BURESH KUMAR", and "I DC BA HRM-PA". The left sidebar contains navigation options: Home, Calendar, Teaching, To review, Enrolled, To do, General physics PG, Archived classes, and Settings.

# Google Classroom



# YOUTUBE CHANNEL

**Channel dashboard**

Search across your channel

**Latest video performance**

**Adjustments**  
outstanding expenses adjustments final account

First 28 days 19 hours compared to your typical performance.

Ranking by views: 7 of 11

Views: 0

Impressions click through rate: 1.1%

Average view duration: 0:09

[Go to video analytics](#)

[See comments \(0\)](#)

**Channel analytics**

Current subscribers: **467**

Summary

Last 28 days

Views: 223

Watch time (hours): 6.1

[Go to channel analytics](#)

**Top videos**

Last 48 hours - Views

Net Operating Income Approach commerce class: 5

Commerce Classify demand curve slope down wards...: 3

Capital structure decision EBIT EPS analysis calculation...: 2

**News**

**YouTube Content RoundUp**

The latest Roundup is here

Catch up on the latest news and updates with this month's Content Roundup

[Check it out](#)

**Ideas for you**

Become a YouTube Partner sooner.

Big news - now you can access fan funding and select shopping features earlier in your channel.

Videos Shorts Live Posts Playlists Podcasts Promotions

Filter

Video	Visibility	Restrictions	Date ↓	Views
Module 1				
E marketing	Unlisted	None	Feb 12, 2024 Uploaded	48
Computation of tax liability problems	Unlisted	None	Jan 31, 2024 Uploaded	49
Application of IIT in Business	Unlisted	None	Jan 31, 2024 Uploaded	89
Computation of Tax Liability	Unlisted	None	Jan 30, 2024 Uploaded	134
Module 1: Quantitative Techniques	Unlisted	None	Jan 29, 2024 Uploaded	116

Vidya K T

@vidyakt559

271 subscribers · 16 videos

Easy Everyday Economics

Manage videos

Videos Shorts Playlists Community

Sort by

- CAPITAL MARKET Public · Playlist (27)
- MICRO ECONOMICS Public · Playlist (6)
- Development Economics Public · Playlist (1)

Videos Shorts Playlists Community

- MICRO ECONOMICS Public · Playlist (6)
- Development Economics Public · Playlist (1)
- History part 1 Public · Playlist (5)
- International Economics Private · Playlist (17)
- Kerala Economy Public · Playlist
- Indian economy

Commerce & management classes

@commerceandmanagementclasses283

96 subscribers · 119 videos

More about this channel ...more

Subscribed

Home Videos Playlists

Structure of Branch accounts

Commerce & management classes · 84 views · 3 years ago

classification and accounting system

For You

Performance

Lectures on Indian Constitution

@lecturesonindianconstitution422

Switch account Google Account Turn on incognito Share channel

Playlists

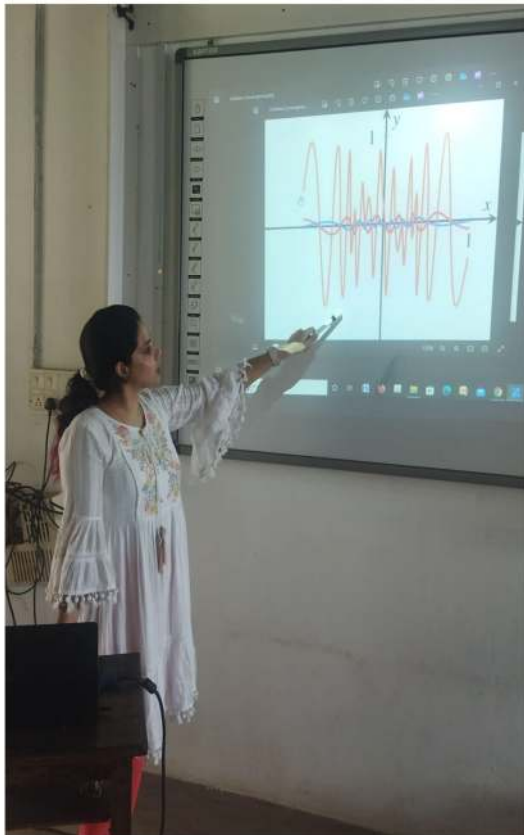
- Indian Politics and Law with John Wargo Playlist
- Indian Constitution Semester II Unlisted · Playlist
- Private · Playlist

Your videos

Downloads

Your movies

# SMART BOARD





# GOOGLE MEET

Arathi Suresh (Presenting)

## UNDERSTANDING TYPES OF M&A

**HORIZONTAL**  
Merger of 2 or more businesses that offer similar products or services and work in the same industry

**VERTICAL**  
Companies in 2 different value chains merge which result in increased value due to expanded value chain

**CONGLOMERATION**  
Companies operating in completely different industries merge. The merged company's value more than the sum of its parts

**MARKET-EXTENSION**  
Companies offering same products to different audiences or market segments. This leads to a different audience targeted with the resulting product line

Arathi Suresh

Keerthana Murali Krishna M Fathima Nashwa ANANYA P VISMAYA CP NIVEDITHA RAJU Sheza Sharaf 55 others Ninikala K

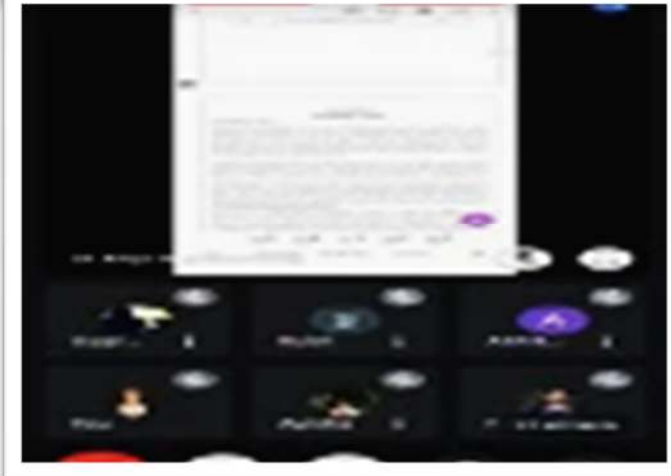
5:00 PM | biv-giqn-uxz

Balance Together (Presenting)

## Posthumanism

- Posthumanism is a way of thinking about the intersection of human, nonhuman, and technological worlds. It originated in science fiction in the 1970s, first in the novel and 2001 A Space Odyssey.
- This theoretical perspective changed how humans considered themselves to be exclusive and in control.

10:11 AM | xon-vern-gop

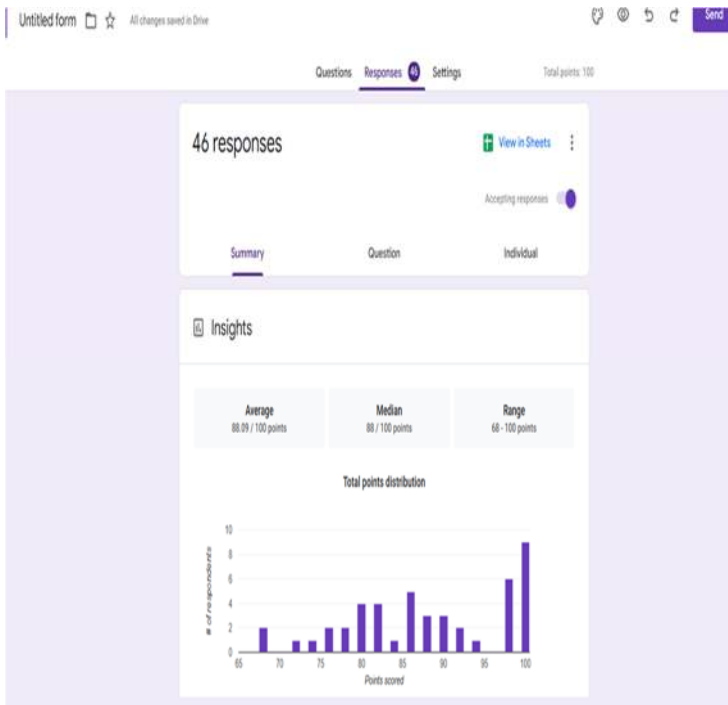


Diyana Shada

Nuha Anamika

You Gopika [Return to top](#)

# GOOGLE FORM



Contact Information

Questions Responses 35 Settings

Hiba.C
Jothika k R
Dilmiya
Naqsha mariyam v
Nithya EN
Vidhula M
Asmira pp
Haneena Parveen cp
ANJUMOL P

Email

35 responses

sreeavanthika453@gmail.com

# E-REPOSITORY

< Digi Library

Name ↑	Modified	
Ancient and Medieval Political Thought	Modified 27 Sep 2022	...
Comparative Politics	Modified 26 Sep 2022	...
Comparative Politics	Modified 18 Sep 2022	...
Foreign policy	Modified 30 Jan 2023	...
Foundation of Political Science	Modified 26 Sep 2022	...
gender and politics	Modified 24 Jul 2024	...
India's Foreign Policy	Modified 26 Sep 2022	...
Indian Government and Politics	Modified 26 Sep 2022	...
Indian Polity	Modified 18 Sep 2022	...
International Relations	Modified 26 Sep 2022	...

Q ...

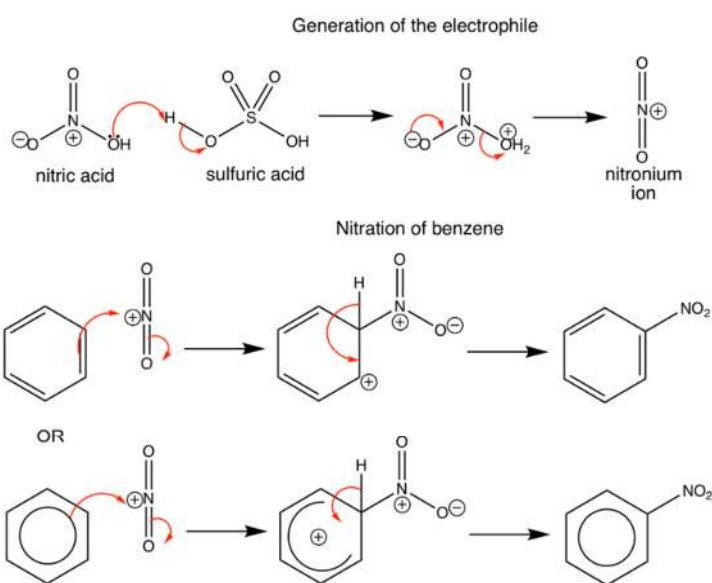
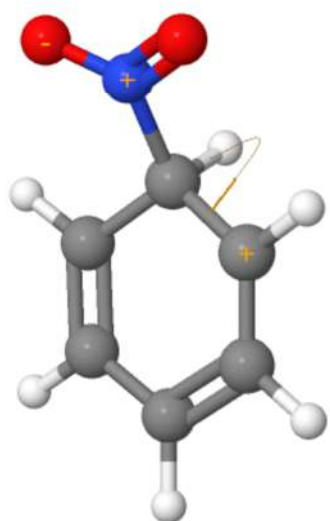
Department of Politics and International Relations

Digi library : repository of books and reading materials



# Online resources

## PhET Simulations

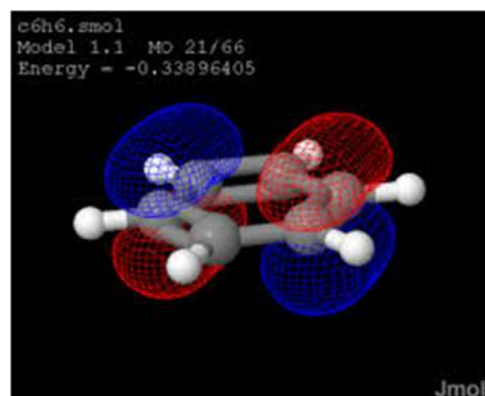
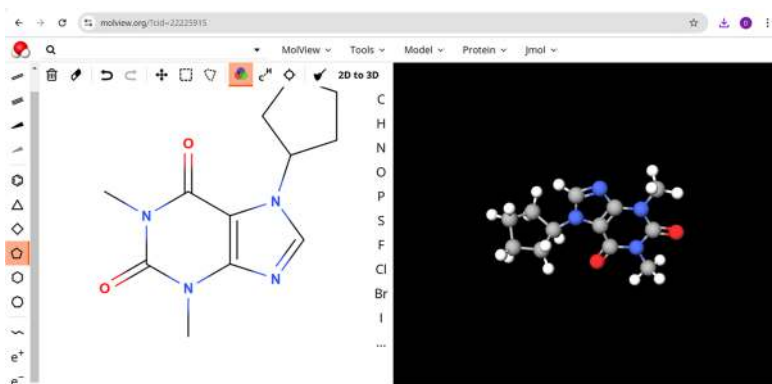
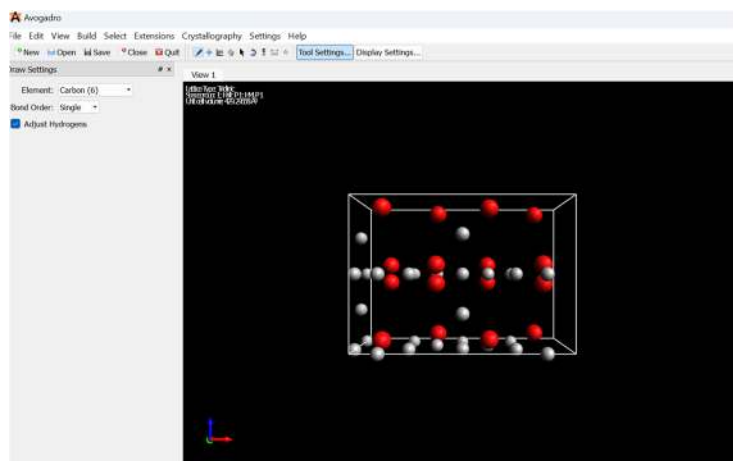
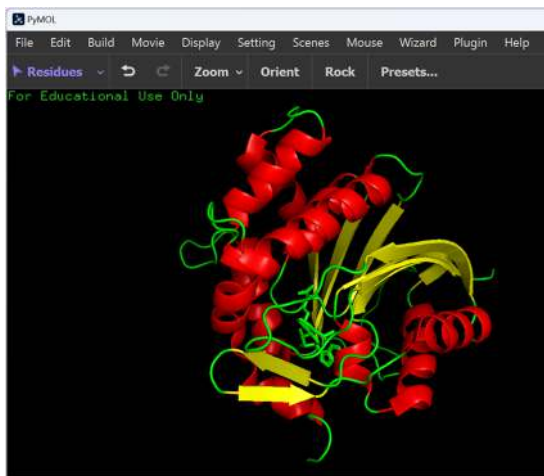


## Chemtube3d

## Virtual Lab

Department of Chemistry

# Department of Chemistry



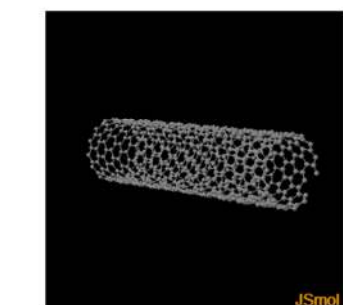
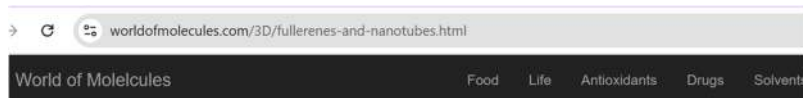
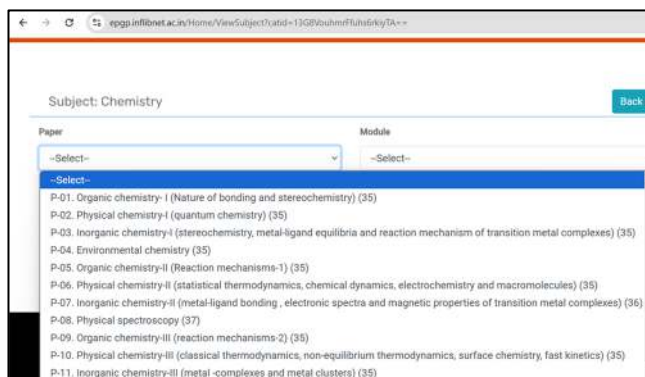
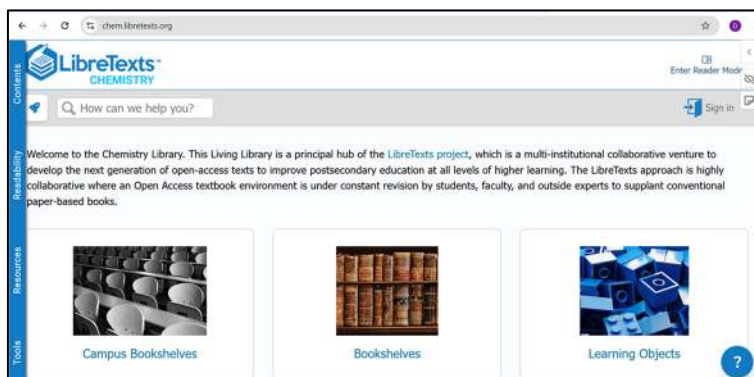
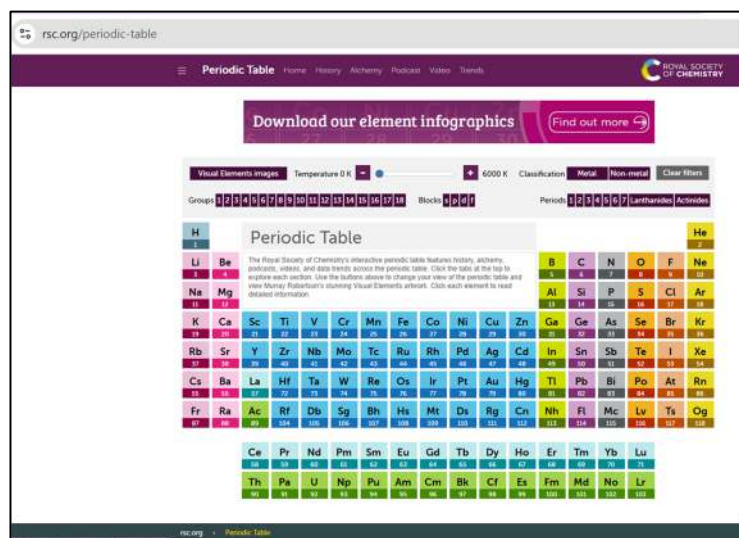
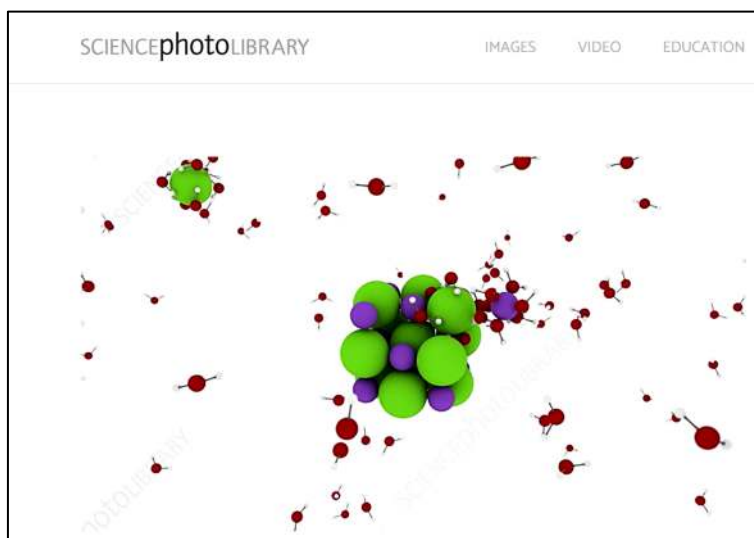
## Visualizers

BIOMAN website showing an interactive diagram of photosynthesis. The diagram illustrates the light-dependent reactions of photosynthesis, showing the flow of electrons and protons through Photosystem II, Photosystem I, and ATP Synthase. The text "Photolysis (step II): Light strikes chlorophyll in Photosystem II. This causes electrons to become excited (gain energy)." is displayed. The diagram also shows the Stroma and Thylakoid Space, with H<sub>2</sub>O and H<sup>+</sup> ions. A "NEXT" button is visible at the bottom.



## Photosynthesis Interactive

# Department of Chemistry



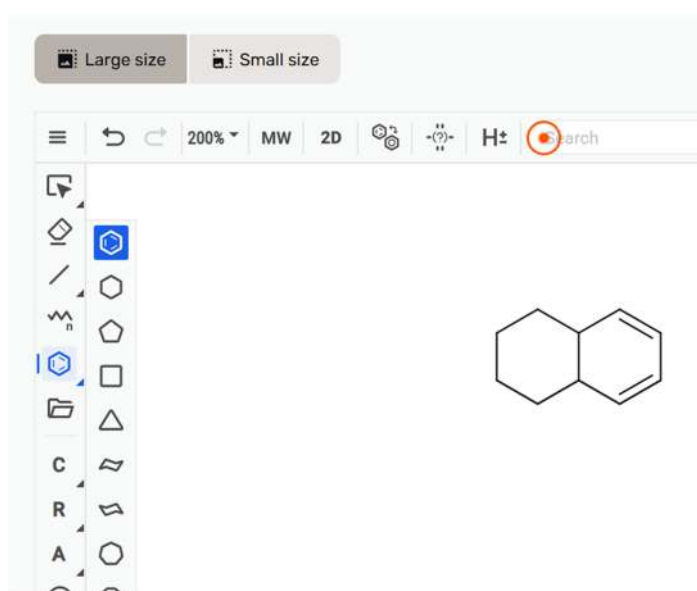
**How big is a Nanotube?**  
Nanotubes are stiffer than steel, and are essentially rolled-up sheets of carbon hexagons. Electrically, nanotubes can be insulators, semiconductors, or conductors and are expected to exhibit magnetoresistance qualities.

**Try this!!**

**Measure the diameter of a Nanotube.**

Rotate the nanotube/

You are looking looking down the barrel. Draw a diameter between two carbon atoms, by double clicking on one carbon atom using the left mouse button, dragging the cursor to the second carbon atom and double clicking.



----->spin on -----> spin off  
----->space fill/cpk ----->stick -----> ball-and-stick

# CANVA APP

**one day  
Tour  
package to  
Thrissur**

**PACKAGE PRICE**  
₹1,800 (1 OR 2 PERSON)  
₹1,500 (GROUP OF 3 -4 PEOPLE )  
₹1,200 (GROUP OF 6-10 PEOPLE)

**Inclusions**  
\*Traveling expenses  
\*Entry fees of all attraction  
\*Breakfast, Lunch and Dinner  
\*Tour guide service

**Exclusion**  
\*personal expenses  
\*additional charges of food and drinks

*Athirappilly waterfalls*

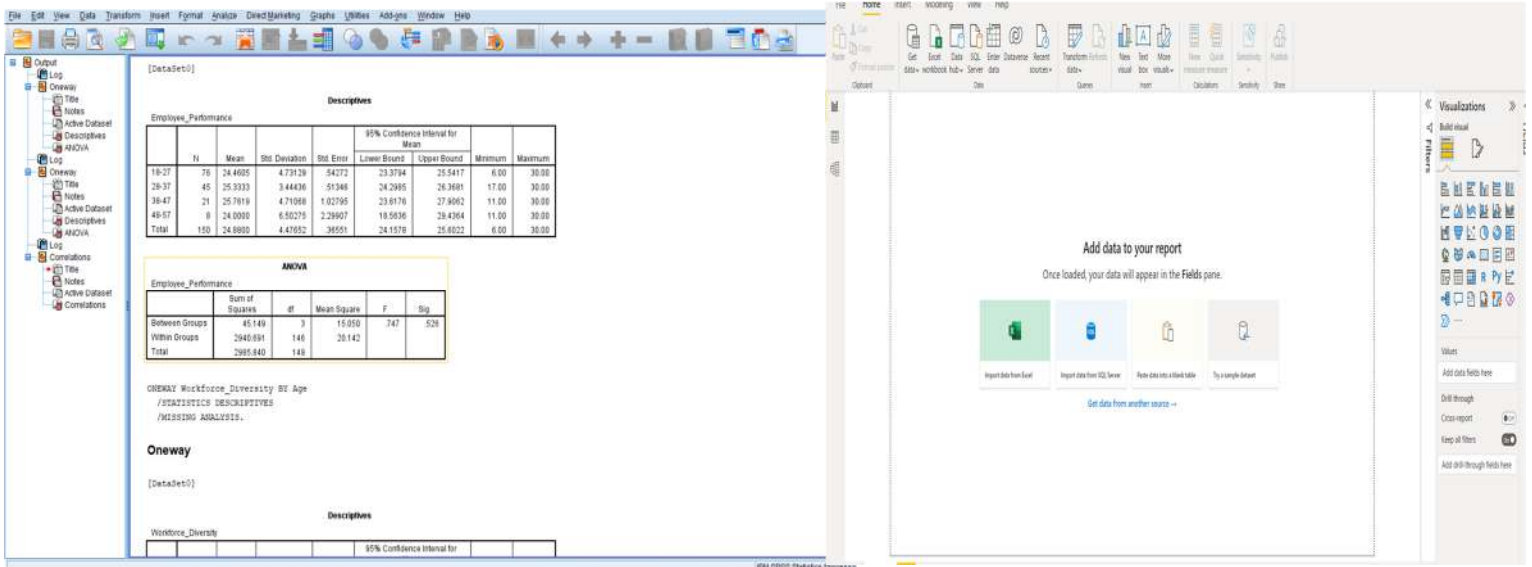
*Thumboomuzhy dam and butterfly park*

*Thrissur zoo and museum*

# INTRODUCTION TO GOOGLE EARTH

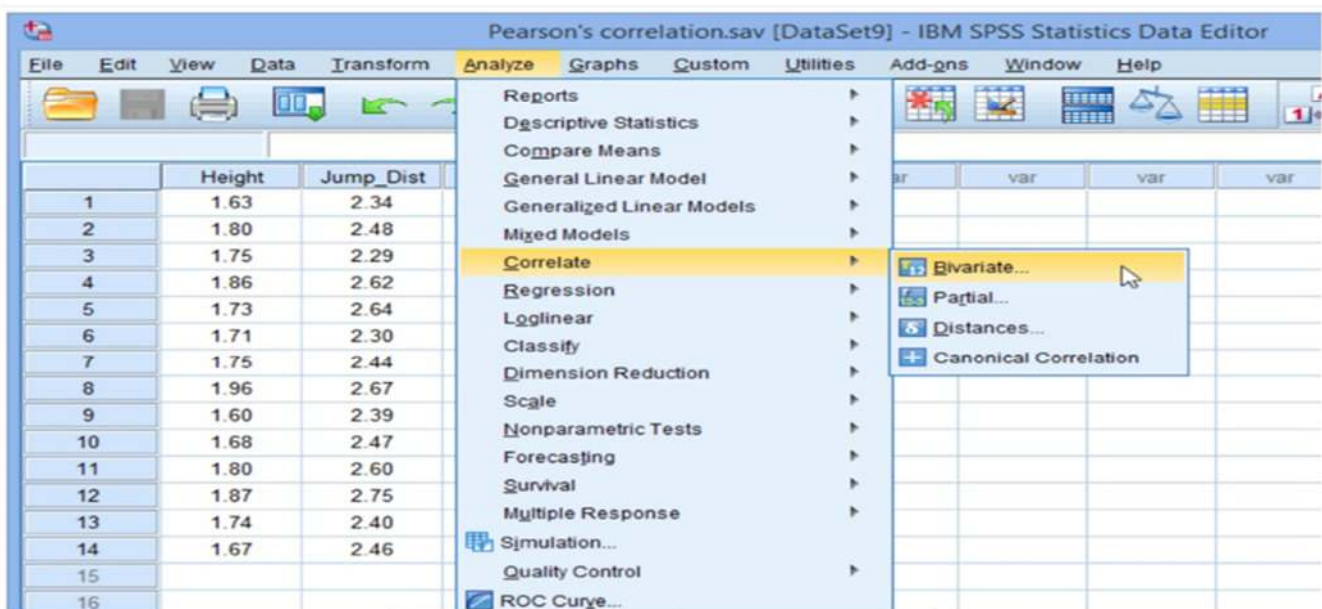
Google Earth Basics Tutorial

# OTHERS SOFTWARES USED

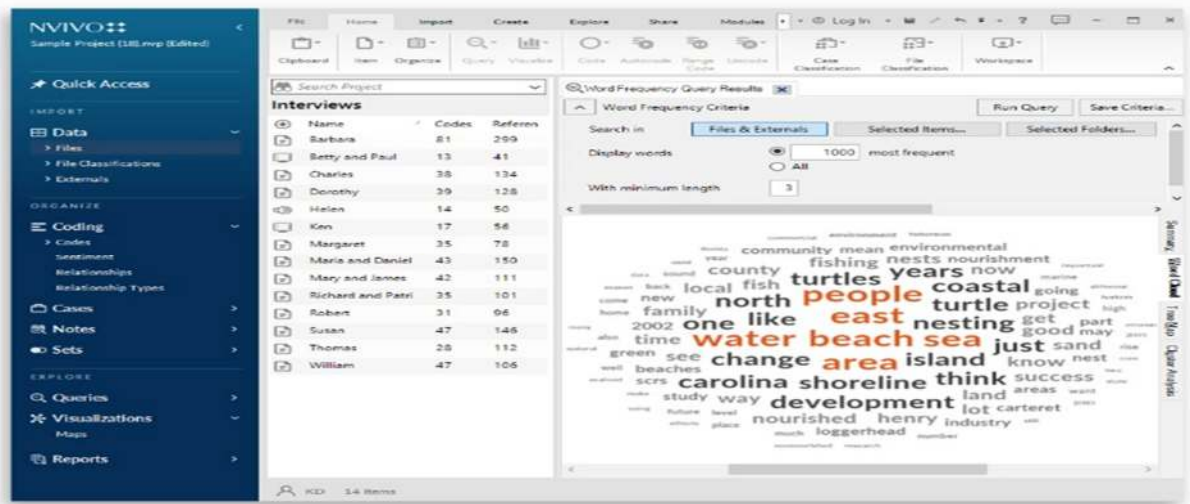


## SPSS & Power BI

### Step-2 Analyze > Correlation -> Bivariate



# N- VIVO (Qualitative data analysis tool)



## Dedoose



[Sign Up](#) [Download](#)

[Home](#) | [Features](#) | [Pricing](#) | [Resources](#) | [About](#)

**Great Research.**  
**Made Easy!**

A cross-platform app for analyzing qualitative and mixed methods research with text, photos, audio, videos, spreadsheet data and more

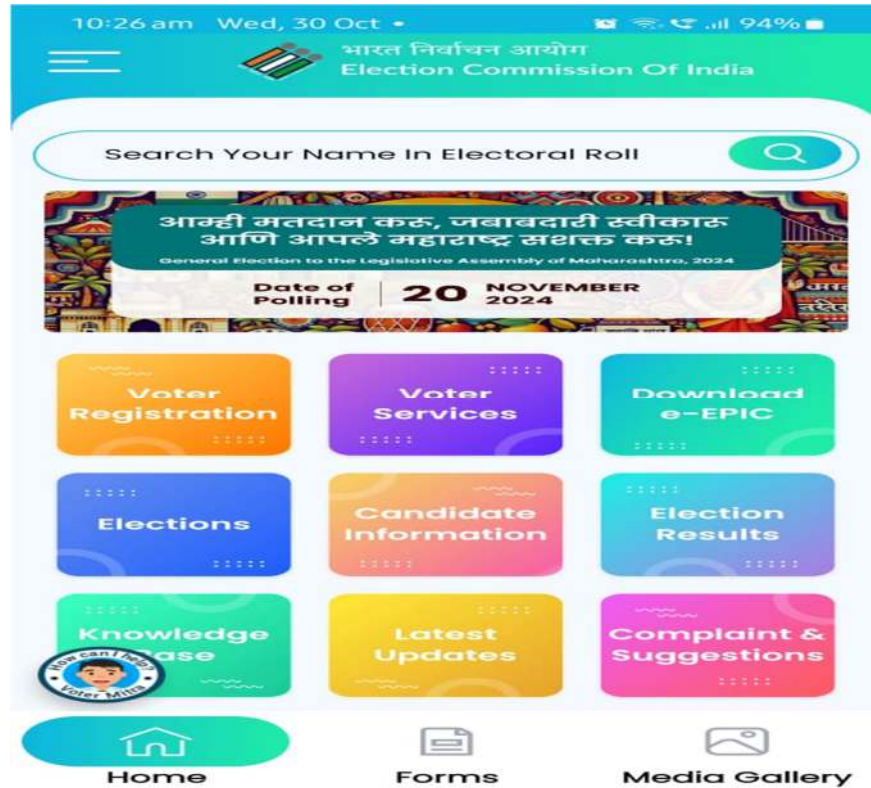
The screenshot shows the Dedoose software interface. On the left is a navigation pane with sections for 'Parent Education History', 'Pre-Writing Activities', 'Reading by Mother', 'Reading Routine', 'Reading Frequency', and 'Reading Duration'. The main window displays a list of codes and a word cloud.

- Parent Education History
- Pre-Writing Activities
- Reading by Mother
- Reading Routine
  - Reading Routine
  - Morning Reading Routine
  - Bedtime Reading Routine
- Reading Frequency
- Reading Duration

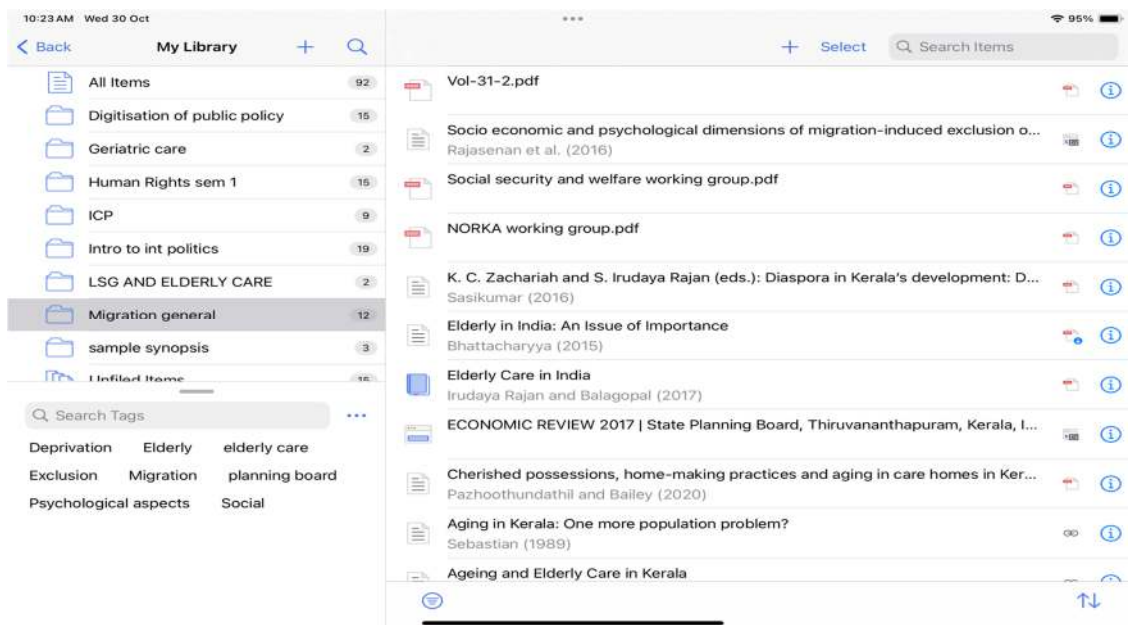
The word cloud contains the following words: Reading Routine, Bedtime Reading Routine, Morning Reading Routine, Great Quotes, Talking with Child, Reading by PE, Morning Reading Routine, Parent Reading Routine.



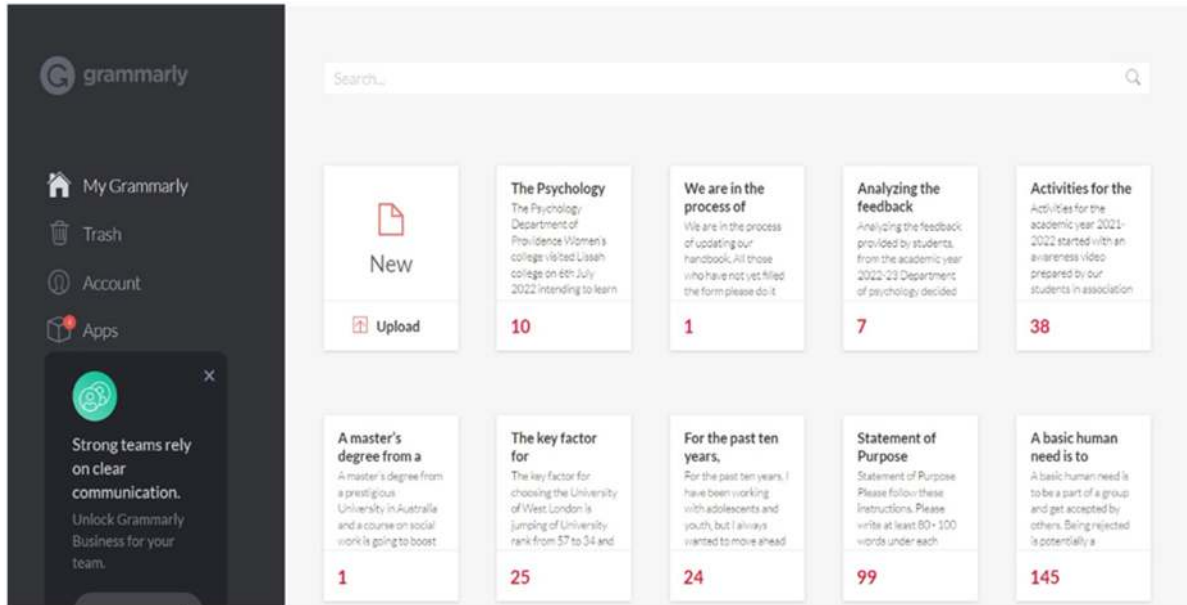
# Voter Helpline by Election Commission, Government of India



## Zotero



# Grammarly



## MENDELEY (Referencing software)

### Mendeley

- Steps-1 Log in to Mendeley.com-Sign in
- Step-2 Download Mendeley desktop and install on computer
- Step- 3 Open mendeley Go to tools-Install Microsoft word plugin
- Step-5 In view option-select citation style(APA/MLA/IEEE)
- Step-6 Open word- Select references- change styles to MLA/APA/IEEE
- Step-7 Open Mendeley-click Import Data to Mendeley



# Grammarly- Language Editing Software

Department of Physics

... methoxyphenilcalix[4]-resorcinarene on protonating its composite with Ag and GO nanoparticles

We experimentally studied the fluorescent properties of C-4-hydroxy-3-methoxyphenilcalix[4]-resorcinarene(CHMPCR). The absorption spectra of the samples were measured using a UV-Vis Spectrophotometer (UV- 2450 Shimadzu). The Photoluminescence (PL) spectra were recorded using Horiba scientific Fluoromax-4C Spectrofluorometer. The time-correlated single-photon counting method was used for the measurements of fluorescence lifetime. Calix4resorcinarene

resordi... - Correct your spelling

# Latex- Software for typesetting documents-Department of Physics

The screenshot displays a LaTeX editor interface with a document titled "Synopsis\_template.tex". The left sidebar shows a table of contents with sections like "Introduction", "Brief Literature Review", "Motivation", "Major Contributions", "Organization of the Thesis", "Overview of the Thesis", "Conclusion", "Details of visible output", "Refereed Journals", and "references.bib". The main text area contains a paragraph discussing nonlinear optics (NLO) and the synthesis of calix[4]resorcinarene. The text includes references to Maiman, Franken, and Bloembergen, and lists various materials like KDP, LiNbO<sub>3</sub>, CdS, and CdSe. A chemical structure diagram of calix[4]resorcinarene is shown at the bottom right, featuring four resorcinol units connected by methylene bridges, with R<sub>1</sub> and R<sub>2</sub> substituents.

not be verified experimentally due to the lack of intense light sources. Classical experiments in NLO were successfully performed soon after Maiman invented the Ruby laser. The first few successful NLO experiments in the laser era were the second harmonic generation by Franken et.al. in 1961, the sum frequency generation, and optical rectification by Bass et.al. in 1962. By the end of 20th century, Bloembergen et.al. developed a semi-classical theory for NLO describing three-wave and four-wave mixing at optical frequencies.

145 Researchers in this field primarily focus on developing unique materials and strategic designs that will improve the efficiency and tunability of optical nonlinearity in a desired manner. Numerous disciplines are benefited from the advancements in NLO, including sensor design, optoelectronics, biophotonics, quantum optics, optical imaging, information processing, and communication.

147 In the earliest period of NLO, studies of inorganic materials like potassium dihydrogen phosphate (KDP), Lithium niobate (LiNbO<sub>3</sub>), etc., and semiconductors such as cadmium sulfide (CdS), Cadmium selenide (CdSe), etc. were progressed, which are used for a harmonic generation.

148 Primary works in NLO were focussed on inorganic materials and in the following decades, poly conjugated organic materials gathered attention due to their large molecular hyperpolarizability and tunable structure-property relations.

149 NLO studies of organic  $\pi$ -conjugated molecules are more encouraged since the  $\pi$ -electrons are more polarizable than the localized sigma electrons

150 In the next decade, nanotechnology opened new ways to engineer nanoparticles (NPs), which have many advantages over their bulk counterparts, such as plasmonic properties, surface functionalization, stability, and compatibility, making them apt to combine with organic/ inorganic molecules (cite(CAI2001339)).

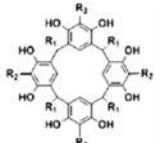
151 By suitably engineering the NPs' characteristics, such as size and surface area-to-volume ratio, one can tailor their nonlinear response for specific applications like optical communications, sensing, imaging, etc. Carbon-based nanomaterials realized the fabrication of nanosized photonic devices with their distinct NLO properties.

materials with different properties to form a composite material.

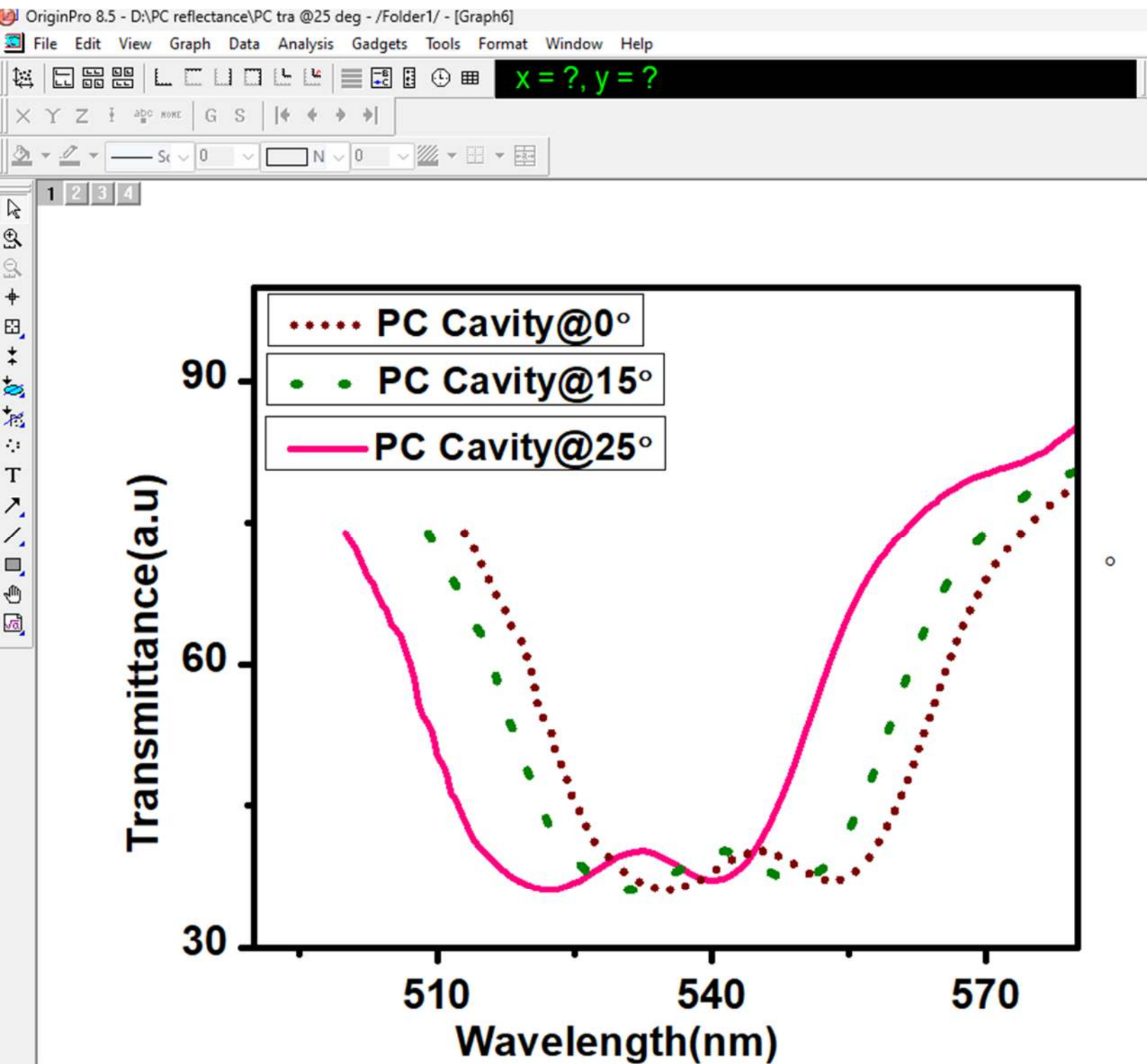
In this context, the main objective of the present work is to perform the detailed experimental analysis of the third-order NLO effects of certain calix[4]resorcinarene molecules and the strategies to further enhance their NLO effects via hybrid system formation with organic nanoparticles, inorganic nanoparticles, and photonic crystal structure for photonic applications.

### 1.1 Brief Literature Review

Calix[4]resorcinarene is a supramolecular system consisting of four units of resorcinol connected by methylene bridges. The basic structure of calix[4]resorcinarene is shown in Fig 1 and can be modified by adding a variety of functional groups at R<sub>1</sub> and R<sub>2</sub>. Timmerman and his colleagues synthesized various calix[4]resorcinarene by varying groups at R<sub>1</sub> and R<sub>2</sub>. The groups at R<sub>1</sub> can be altered by choosing different aldehydes as the reagent for forming calix[4]resorcinarene. The groups at R<sub>2</sub> can be changed through an electrophilic substitution reaction since the position between two OH groups in the aromatic ring of resorcinol has a high electron density. The macrocyclic structure of calix[4]resorcinarene, with its unique cone-shaped design and cavity, exhibit a range of supramolecular properties, including host-guest chemistry, molecular recognition, self-assembly, encapsulation, and catalysis.



# Origin- For scientific graphing and analysis-Department of Physics



# Mendeley software- to manage citations for articles, books, documents

Mendeley Desktop

File Edit View Tools Help

Attention Mendeley Users! Mendeley Reference Manager is better than ever and PDF Search is on its way! Try it today. Learn more

My Library

- All Documents
- Recently Added
- Recently Read
- Favorites
- Needs Review
- My Publications
- Unsorted
- Create Folder...

External Library

Groups

- Create Group...

Trash

- All Deleted Documents

Filter by Authors

- All
- Abdul-Redah, T.
- Abith, M.

All Documents Edit Settings

★	●	📄	Authors	Title	Year	Published In	Added
☆	●	📄	Timmerman, Peter; Verboom, Willem; Reinhoudt, David N	Tetrahedron report number 390 - Resorcinarenes	1996	Tetrahedron Letters	09-05-23
☆	●	📄	Mihailo L.J. Mihailovic and Zivorad Cekovic	Oxidation and Reduction of Phenols	1971	The Chemistry of The Hydroxyl Group : Part 1	08-12-23
☆	●	📄	Essiben, Jean-françois D; Ndanga, Eric A; Hedin, Eric R; Joe, Yong S	Optical Properties of One- and Two-Dimensional Periodic Photonic Structures	2018	Int. Journal of Engineering Research ...	02-12-23
☆	●	📄	M. G. Pravini S. Fernando, K. A. I. L. Wijewardena Gamalath	Nonlinear optical properties of photonic crystals	2018	world Scientific News	01-12-23
☆	●	📄	Min, Kyungtaek; Choi, Serok; Choi, Yunkyoung; Jeon, Heonsu	Enhanced fluorescence from CdSe/ZnS quantum dot nanosphers embedded in a one-dimensional photonic crystal backbone structure	2014	Nanoscale	17-04-23
☆	●	📄	Raineri, F.; Cojocaru, Crina; Monnier, P.; Levenson, A.; Raj, R.; Seassal, C.; Leta...	Ultrafast dynamics of the third-order nonlinear response in a two-dimensional InP-based photonic crystal	2004	Applied Physics Letters	19-11-23
☆	●	📄	Hu, Xiaoyong; Liu, Yuanhao; Tian, Jie; Cheng, Bingying; Zhang, Daozhong	Ultrafast all-optical switching in two-dimensional organic photonic crystal	2005	Applied Physics Letters	19-11-23
☆	●	📄	John, Siji Alappattu; Satheesan, Athulya Kadepath; Pushpan K., Simi; Keloth, Ch...	Photonic crystal cavity-mediated improved absorptive nonlinearity of C-4-hydroxy-3-methoxyphenicalx[4]resorcinarene	2023	Physical Chemistry Chemical Physics	12-07-23
☆	●	📄	Sakho, El hadji Mamour; Oluwafemi, Oluwatobi S.; Sreekanth, P.; Philip, Reji;...	Improved nonlinear optical and optical limiting properties in non-covalent functionalized reduced graphene oxide/silver nanoparticle (NF-RGO/Ag-NPs) hy...	2016	Optical Materials	26-06-23
☆	●	📄	Husaini, Saima; Teng, Huayu; Menon, Vinod M.	Enhanced nonlinear optical response of metal nanocomposite based photonic crystals	2012	Applied Physics Letters	26-06-23
☆	●	📄	Boyd, R. W.; Sipe, J. E.	Nonlinear susceptibility of composite optical materials in the Maxwell Garnett model	1992	Physical Review A	24-06-23