

*Shri Sharda Bhavan Education Society's*

**INDIRA GANDHI (SR.) COLLEGE, CIDCO, NEW NANDED.**

**DEPARTMENT OF PHYSICS**

**REPORT ON GUEST LECTURE**

**(2018 - 2019)**

**SUBMITTED BY**

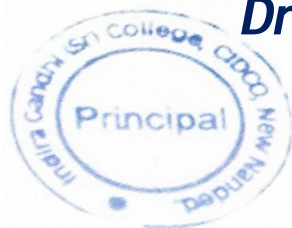
***Mrs. Rathod B. A.***

***H.O.D., Department of Physics***

**SUBMITTED TO**

***Dr. G. N. Shinde***

***Principal***



# Report

Shri Sharda Bhavan Education Society's

**Indira Gandhi Sr. College , Nanded.**

**Department of Physics**

## **Guest lecture on “ Vector Atom Model and Molecular Spectra”**

The department of Physics had organized a guest lecture on the topic “Vector Atom Model and Molecular Spectra” on 02/02/2019 at 12.00 noon in the ICT hall. The chief guest and speaker for the lecture was Dr. Kalyankar A. N. , Assistant Professor , Bahirji Smarak Mahavidyalaya , Basmathnagar.

The guest used power point presentations to explain the given topic in an elaborative way. The students of all the three years of B.Sc. were present for the guest lecture.

The guest not only explained the topic in detail but also explained about the scope of the topic and also the marking scheme in the syllabus and the weightage of each topic as far as the university exams are concerned.

He explained rotational and vibrational spectra of molecules by different examples . Also Raman scattering and nuclear fission were discussed in brief.

The students gave very good response to the event . Even some students who were not having optional Physics attended the lecture. Total 45 students attended the lecture.





Felicitation of Dr. Kalyankar A.N. at the hands of H.O.D. Mrs. Rathod B. A. on 02/02/2019






Dr. A.N. Kalyankar addressing the students on 02/02/2019






Dr. A.N. Kalyankar addressing the students on 02/02/2019

  
(Dr. G. N. Shinde)  
Principal  
Indira Gandhi Sr. College  
CIDCO, NEW NANDED



  
Mrs. Rathod B. A.  
H.O.D.  
Dept. of Physics



Shri Sharda Bhavan Education Society's

# INDIRA GANDHI (SR.) COLLEGE

CIDCO, NEW NANDED (Maharashtra) - 431603

Reg.No.:- N.G.C.2000/NMV/ (1/2000) M.S. 3 Dt.28 June 2000

(Affiliated to Swami Ramanand Teerth Marathwada University, Nanded)

NAAC Accredited "B" Grade with CGPA: 2.62 & ISO 9001:2008 Certified

Best College Award By S.R.T.M. University, Nanded

ASHOKRAO SHANKARRAOJI CHAVAN  
B.Sc., M.B.A  
PRESIDENT

D.P.SAVANT  
B.Sc.,(Hons)  
SECRETARY

DR. G.N. SHINDE  
M.Sc., M.Phil.,Ph.D.  
PRINCIPAL

Ref No. : - IGC/2018-19/ 410

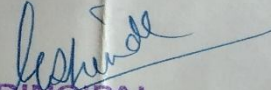
Date : 01/02/2019

To,  
Dr. Kalyankar A.N.  
Bahirji Smarak Mahavidyalaya ,  
Basmath.

Subject : Regarding inviting you for guest lecture organized on 02/02/2019  
by the Department of Physics.

Resp. Sir ,

With reference to above subject , I hereby invite you to provide  
guidance to the students of Department of Physics as a guest lecturer. The  
guest lecture is organized on 02/02/2019 at 12:00 noon.

  
PRINCIPAL

Indira Gandhi (Sr.) College  
CIDCO, New Nanded

Telephone No. Office (02462) 227426



Shri Sharda Bhavan Education Society's

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B.Sc.,(Hons)  
**SECRETARY**

**DR. G.N. SHINDE**  
M.Sc., M.Phil., Ph.D.  
**PRINCIPAL**

Ref No. : - IGC/2018-19/

Date : 02-02-19

To,  
Dr. Kalyankar A.N.  
Bahirji Smarak Mahavidyalaya ,  
Basmath.

Subject: Regarding paying vote of thanks for guiding our students as a guest lecturer.

Resp Sir,

With reference to above subject, I hereby pay you vote of thanks for providing guidance to the students of Department of Physics as a guest lecturer on the topic "Vector Atom Model & Molecular Spectra" on 02/02/2019 at 12:00 noon.

Principal

**PRINCIPAL**  
Indira Gandhi (Sr.) College  
CIDCO, New Nanded

Students present on 02/02/2019

	Name of Student	Class.	Signature
01.	Tiwari Jyoti Manoj	B.Sc. 5Y.	<u>Jyoti</u>
02.	Lamdade satyabhama	B.Sc. 5Y.	<u>Sat</u>
03.	Nayana Nagnath Ambuse	B.Sc. 5Y.	<u>Ambuse</u>
04.	Ambilge shivangi Balaji Rao	B.Sc. 5Y.	<u>Shivangi</u>
5]	Muskate Bhagyashri Bhagwan	B.Sc. 5Y.	<u>Bhagwan</u>
6]	Suryawansi kavita Rajaram	B.Sc. 5Y.	<u>Kavita</u>
7]	Shinde Subhasini Jeevamma	B.Sc. 5Y.	<u>Subhasini</u>
8]	Sawant maya Nagorao	B.Sc. 5Y.	<u>Maya</u>
9]	Kotgire Apeksha Uthamrao	B.Sc. 5Y.	<u>Apeksha</u>
10]	Kodgilwar Mayuri Ravindra	B.Sc. 5Y.	<u>Mayuri</u>
11]	Nalbalwar prity Rajeshwar	B.Sc. 5Y.	<u>Prity</u>
12]	Thakur Nishwarya Kishor	B.Sc. 5Y.	<u>Nishwarya</u>
13]	Thorat sheetal Balaji	B.Sc. 5Y.	<u>Sheetal</u>
14]	Kalam Peiti Shri Ram	B.Sc. 5Y.	<u>Peiti</u>
15]	Ratodekar Abhaini Bahadur	B.Sc. 5Y.	<u>Abhaini</u>
16]	Bodke shivkanya Trymbak	B.Sc. 5Y.	<u>Bodke</u>
17]	Gaikwad Rohini Bhujaang	B.Sc. 5Y.	<u>Rohini</u>
18]	Maske Kirti Kalba	B.Sc. 5Y.	<u>Kirti</u>
19]	Vaishnavi Narsingh Rao Jadhav	B.Sc. 5Y.	<u>Vaishnavi</u>
20]	Rathod payal Ram	B.Sc. 5Y.	<u>Rathod</u>
21]	Tiwari Manisha Manoj	B.Sc. T.Y.	<u>Manisha</u>
22]	Rachalwar Apurva Shivaji	B.Sc. T.Y.	<u>Apurva</u>
23]	Sangewar shital Ganesh	B.Sc. T.Y.	<u>Shital</u>
24]	sharma Aman Vaidyanath	B.Sc. T.Y.	<u>Aman</u>
25]	Kolhe Sambhaji Baburao	B.Sc. T.Y.	<u>Sambhaji</u>
26]	Mahato Vidya Anril	B.Sc. T.Y.	<u>Vidya</u>
27]	Telange sadashiv Nyameshwar	B.Sc. T.Y.	<u>Sadashiv</u>
28]	Swami Rushikesh Ravindra	B.Sc. T.Y.	<u>Swami</u>



- 29) Santakke vivek vijay B.sc-F.Y 78
- 30) saiptasad shivaji Bachawae B.sc-FY (Sal)
- 31) Pathan shahed Ayub B.sc-FY -~~Pathan~~
- 32) Akash Bhimrao Ghogre B.sc-FY Akash
- 33) Santosh Pandhari Rahite B.sc-F.Y ~~Santosh~~
- 34) Ingale sagar Jaytam Ingale
- 35) Kadam peanav Vitthalaao B.sc-sy ~~Kadam~~
- 36) more madhar Gopinath B.sc-sy more
- 37) Ghungrale Sai Ambadas B.sc-sy Sai
- 38) Rahije Janaedan Padmakar B.Sc I (Rahije)
- 39) kasbe devanand sadashiv B.sc-Ind ye Kasbe
- 40) Harshvardhan K Thakur B.Sc II year (Harsh)
- 41) Kadam Shubhay M B.Sc II year Shubh
- 42) Siddhesh Sanjay Lokade B.Sc II year Siddhesh
- 43) Pawar Namrata Ashokrao - - - (Pawar)
- 44) Jadhav Pallavi Gaurav - - - (Pallavi)
- 45) Telange Kamal Ananteshwar - - - (Kamal)
- 46) Gaikwad Rohan Rajendra B.sc-FY (Rohan)
- 47) Kulkarni Kirti Rajendra B.sc-FY (Kirti)
- 48) Kulkarni Nageshwar Gajanan B.sc-FY (Nagesh)
- 49) Patil Rajal Ram B.sc-FY (Rajal)
- 50) Patil Manisha Rajendra B.sc-FY (Manisha)
- 51) Patil Shivaji Ananteshwar B.sc-FY (Shivaji)
- 52) Patil Gaurav Ananteshwar B.sc-FY (Gaurav)

*Shri Sharda Bhavan Education Society's*

*INDIRA GANDHI (SR.) COLLEGE, CIDCO, NEW NANDED.*

**DEPARTMENT OF PHYSICS**

**REPORT ON ONE DAY NATIONAL WEBINAR**

***(2020 - 2021)***

***SUBMITTED BY***

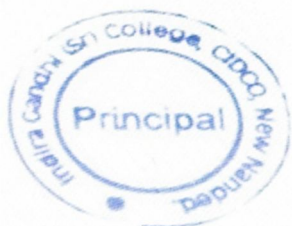
***Mrs. Rathod B. A.***

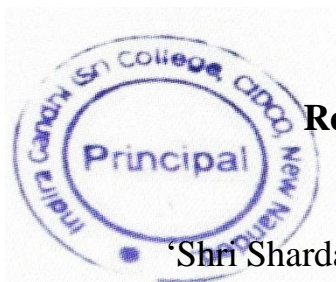
***H.O.D., Department of Physics***

***SUBMITTED TO***

***Dr. R. P. Mali***

***Principal***





## Report on One Day National Webinar

'Shri Sharda Bhavan Education Society's', Indira Gandhi Sr. College, Nanded, Department of Physics had organized 'One Day National Webinar' on the topic 'Gamma Ray Interaction Studies with Matter' on 12<sup>th</sup> June 2021. The chief guest as well speaker for this seminar was Dr. Pravina S. Ugile (Pawar), Associate Professor, Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. The President as well as Inaugurator for the said seminar was Dr. R.P. Mali Sir, Principal, Indira Gandhi Sr. College, Nanded.

The Webinar started with the welcome of the guest as well as felicitation of the dignitaries. The motive behind selecting such a topic was to create awareness among the participants about the radiation hazards and the adverse effects of exposure of our body to radiations.

The principal in his presidential note stated that during the Covid – 19 pandemic, we have frequently heard about some tests like CT-scan, HRCT, etc. which were performed frequently by people without the prescription of the doctor. Such tests should not be performed at random as the radiations to which our body is exposed are hazardous.

The guest started her presentation with the basics of 'Nuclear Physics' and very well explained the nuclear radiation and health effects. She also showed in her presentation, the set up used for research of the effects of radiation on matter, specifically the gamma radiations. Nuclear radiation and Health Physics was covered elaborately.

The seminar was given a very good response. About 84 participants from all over the country including faculty as well as students joined registered for the seminar. The national seminar received international touch due to two foreign participants who joined from Beirut Arab University, Lebanon.

The 'Vote of Thanks' was given by Miss Ashwini Gubre.



Shri Sharda Bhavan Education Society's

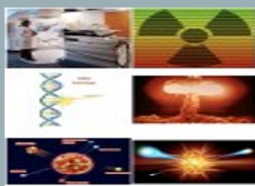
## Indira Gandhi Sr. College, CIDCO , Nanded.

Department of Physics organized one day National Webinar on the topic  
"Gamma Ray Interaction Studies with matter"



DR. R.P MALI,  
PRINCIPAL,  
INDIRA GANDHI SR. COLLEGE,  
NANDED – 431603  
M.S. INDIA

On 12<sup>th</sup> June 2021 at 04.00 p.m.



**Chief guest:**

DR. PRAVINA S. UGILE (PAWAR),  
ASSOCIATE PROFESSOR,  
DEPARTMENT OF PHYSICS  
DR. BABASAHEB AMBEDKAR  
MARATHWADA UNIVERSITY,  
AURANGABAD.

- No Registration fees.
- E – certificate will be issued to the participants.



Join Zoom Meeting:

<https://us04web.zoom.us/j/3723769113?pwd=N09JZHUzU2hOenRxBXhjZGIEQ3JrUT09>

Mrs. Rathod B.A.  
Organizing Secretary & H.O.D.

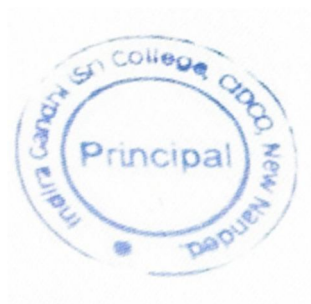
Dr. R.P. Mali  
Convener and Principal

Dr. P. S. Ugile-Pawar

### Outline of Presentation:

1. Radiation
2. Life and Radiation
3. Nature and Origin of Radiation
4. Types of Radiation
5. Radiation Units
6. Standards
7. Ionizing Radiation Health Effects
8. Categories of Exposure
9. Reducing Exposure
10. Radiation Protection
11. Interaction of Ionizing Radiation with Matter
12. Experimental Setup and Measurements
13. Software's for Shielding Effectiveness
14. Nuclear size and its determination.


Nuclear Physics Laboratory, Physics Department, Dr. B. A. M. University, Aurangabad



12-06-2021

## COHERENT SCATTERING

Coherent scattering occurs when there is phase relationship among scattered neutrons. This represents the scattering which can produce interference thus provide structural information.



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The image shows a presentation slide with a title 'COHERENT SCATTERING' and a definition. Below the text is a cartoon illustration of three neutrons, represented as small figures with a large 'N' on their backs, standing in a row and moving in phase. The slide is dated '12-06-2021' and has the number '52' in the bottom right corner. A vertical strip on the right side of the slide contains four small portrait photos of participants. At the bottom of the slide, there are several small navigation icons.

Dr. Pravina Pawar madam addressing the participants on 12/06/2021



**Photographs of State-of-Art Facilities**

**Nuclear Physics Research Laboratory**  
(Research Head : Dr. Mrs. P. P. Pawar)

12-06-2021 154

Dr. Pravina Pawar madam addressing the participants on 12/06/2021

*Dr. R. P. Mali*  
Principal  
Indira Gandhi (Sr.) College  
CIDCO, New Nanded

Dr. R. P. Mali  
Convener & Principal

*B. A. Rathod*

Mrs. Rathod B.A.  
Organizing Secretary & H.O.D.

