

H.P.T. Arts and R.Y.K. Science College, Nashik



**Department of Physics** 

# WELCOMES NAC PEER TEAM



His 'effect' cammever fade away.



### H.P.T. Arts and R.Y.K. Science College, Nashik







### **Faculty Members**



Name	Designation	Qualifications	Teaching Experience (Till Dec. 2023)
Dr. S. P. Roy	Asso. Prof.	M.Sc. PhD	34 years
Dr. U.G. Mhaske	Asso. Prof.	M.Sc. B.Ed, SET, PhD	17 years
Dr. S.B. Pagar	Asst. Prof.	M.Sc, SET, Ph.D	17 years
Mr. P.S. Kothawade	Asst. Prof.	M.Sc, SET	16 years
Mr. S.P.Gupta	Asst. Prof.	M.Sc, SET	13 years
Mr. D.J. Dhiman	Asst. Prof.	M.Sc, SET	13 years
Mr. M.G. Dhanwate	Asst. Prof.	M.Sc, SET	15 years
Dr. S.R. Kumavat	Asst. Prof.	M.Sc. M.Phil. PhD.	2 years
Mr. V.A. Joshi	Asst. Prof.	M.Sc, SET	6 years
Dr. S.S.Gundale	Asst. Prof.	M.Sc. PhD.	3 years
Mr. R.B. Bhusare	Asst. Prof.	M.Sc, SET	13 years
Mr. T.R.Bhoiye	Apeparta Raneffi of P	nysics M.Sc, SET	3 years





- Dr. U.G. Mhaske completed Ph.D.
- Dr. S.B. Pagar completed Ph.D.
- **Dr. M.D. Deshpande** received **'Best Entrepreneur**' award from G.E. Society
- **Mr.D.J.Dhiman** had been granted a patent of Innovation for Synthesis of material for solar cells by Patent Office, **Government of Australia**.
- **Dr.U.G. Mhaske** is member of the NSS committee nominated by College.
- **Dr. S.P. Roy** is working as Credit Course Coordinator for Undergraduate students for all the Science departments



### **Physical Facilities**







# **Courses for UG and PG**



### Undergraduate

- Fundamentals of Physics
- Optics
- Classical Mechanics
- Quantum Mechanics
- Statistical Mechanics
- Electronics
- Solid State Physics
- Electrodynamics
- Astronomy

### **Post Graduate**

- Quantum Physics
- Nuclear Physics
- Semiconductor Technology
- Functional Materials
- Nano Materials
- Communication Physics
- Industrial Instrumentation
- Computational Physics

### **Program Specific Outcomes (PSO)**

#### **B.Sc. (Physics) :**

**PSO1**: Students completing this course will have understanding of matter through courses like solid state physics, atomic and molecular physics, nuclear physics mathematical methods of physics, classical and quantum mechanics.

**PSO2:** The course is going to help in general to improve scientific attitude. The emphasis is given on the development of experimental skills, data analysis, calculations, and also on the limitations of the experimental method and data and, results obtained.

**PSO3:** This course is going to creates interest in the subject and **improves technological aspect**.

Accordingly, mini-projects, hands-on activities, projects, models and demonstrations, skill development subjects are included in the syllabi.

#### M.Sc. (Physics):

**PSO1:** To foster scientific attitude, provide in-depth knowledge of scientific and technological concepts of **Physics.** 

**PSO2:** It enrich the knowledge through problem solving, minor/major projects, seminars, tutorials and On job training.

**PSO3:** The continuous assessment is an integral part of the NEP, it will facilitate the systematic and thorough learning of student towards better understanding of the subject.

**PSO4:** The review of research articles/papers, participation in scientific events, study visits, etc. will help the students to establish **the research foundation**.

**PSO5:** It will familiarize with recent scientific and technological developments.

**PSO6:** It will help students to build-up a progressive and successful career in Physics.



### **Department Research**



- Department Research Lab = 02 (Computational and Experimental)
- Department Total Research Articles =29
- Department Total Guides = 2
- Research Funding: CSIR: Rs. 300000/-
- Department Number of Ph.D. Student = M. Phil (3) + Ph.D. (5)







# **Research Lab Equipments**















- Digital Balance
- Muffle furnace
- Sonicator
- Millipede XY programmable system
- Water bath digital complete
- Tank ultrasonic
- Hot air oven
  - Keithley meter
  - Precision balance
  - Gas sensing unit
  - Two probe system
  - Autoclave
  - Furnace 1200°C
  - GM Counter
- Michelson Interferometer
- Micro controller kit



### **Faculty Participation in Various Activities**



Sr. No.	Activity	No of Staff
		Involved
1	Awarded with Ph.D	2
2	Refresher/ Orientation Courses attended	13
3	Conferences (Workshop / Seminar etc. attended / organized	33
4	Guest lecturers delivered / Worked as Resource Person	9
5	Reviewer	2
6	Published Research papers	2017-2022 - 121 2022-2023 - 41
7	Projects (major/minor) completed	2
8	Research guide	2
9	Awards received	5
10	Appointed on behalf of BOS	2
11	Participation in University committees/ LIC / selection committee / any other	1
12	participation in Syllabus framing	8
13	Social activities / extension activities initiated	2



### Courses conducted by Department apart from university syllabus



Sr. No.	Title of the course conducted	<b>Duration of Course</b>	Total No. of Students	Academic Year
1	<b>Refresher Course</b>	27 <sup>th</sup> Nov-12 <sup>th</sup> Dec 2018	26	2018-19
2	C certificate	30 <sup>th</sup> Aug-29 <sup>th</sup> Sep 2022	19	2022-23
3	Credit Course	11 <sup>th</sup> -17 <sup>th</sup> Dec 2021	25 27	2022-23
4	Poster Exhibition	28 <sup>th</sup> Feb 2023	125	2022-23
5	PTTS	<b>17<sup>th</sup> -27<sup>th</sup> March 2023</b> Departartment of Physics	40	2022-23



### **Refresher Course**



Refresher Course was held from 27<sup>th</sup> November to 12<sup>th</sup> December 2018. Total No. of participants: 26. The topics of the Course was Solid State Physics and Quantum Mechanics.





### C Programming Course



C programming course was held on 29<sup>th</sup> August to 30<sup>th</sup> September 2022. Total participant was 19.





Course Outcome CO1; Develop a solid foundation in C syntax, Data types, operators and control structures

**CO2:** Apply **logical thinking** to design and implement efficient algorithms using C



# Physics Training and Talent Search(PTTS)



PTTS was held in 17<sup>th</sup> March to 21<sup>st</sup> March 2023. Total participants were 40. Students from other colleges also participated. Physics Training and Talent Search- a program run by the Infosys Science Foundation aimed at identifying and nurturing talented undergraduate and postgraduate students interested in physics research through intensive training sessions and exposure to leading experts in the field.



#### **Program Outcome:**

**PO1:** Develop advanced conceptual understanding and problem-solving abilities in core areas of physics through exposure to expert-led sessions and intensive training. PO2: Cultivate research aptitude and critical thinking by engaging in interactive learning, discussions, and collaboration with peers and mentors from premier institutions.



# Problem solving session for competitive examinations



The Department of Physics places a strong emphasis on **developing analytical thinking and problem-solving skills** among M.Sc. Physics students. Our faculty members provide dedicated coaching aimed at preparing students for **competitive and national-level entrance exams** such as:

16-08-2019 to 16-11-2019 04-12-2019 to 12-03-2020

CSIR-NET (JRF/LS) GATE (Physics) SET (State Eligibility Test) JAM (Joint Admission Test for M.Sc.) TIFR, JEST, and other institutional research entrance tests



# Activities conducted by Department



Activity	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Guest Lectures	02	02	04	03	01	01	02	15
Seminar					01			01
Conference								-
Workshop	02	01					01	04
Poster Exhibition					02		01	03
Competitions	01 State Toper- Atharv Khairnar	01	01	01	01	01	01	<b>0</b> 7
Social outreach programmes	01	02	01		03	01	02	10
Study Tour		01	01	01	01	01	02	07
<b>Refresher Course</b>	27 <sup>th</sup> Nov-12 <sup>th</sup> Dec 2018		Departartmeni	of Physics				01



# Study Tours





Homi Bhabha centre for Science Education





- We visited reputed institutes such as BARC, TIFR, HBSCE, IIT, Gargoti and GMRT centre.
- Our Department organises study tour for Our T.Y.B.Sc. And M.Sc. Students every year.
- We also visited Science Centre at Worli, Mumbai and Yashwantrao Chavan Planetarium in Nasik.

#### **Program Outcome:**

PO1: Develop a deep understanding of experimental techniques, scientific equipments and data
PO2: Discover potential career paths in scientific research , engineering and technology



### **Guest Lectures**





Program Outcome: PO1: Develop a deep understanding of experimental techniques, scientific equipments and data PO2: Discover potential career paths in scientific research , engineering and technology

**Guest Lecture by Dr Dhole-SPPU** 

Guest Lecture by Dr Dhoble-Nagpur Univ



### **Students Achievements**



- ≻ NET/SET Qualified : 06
- ≻ 4 Students Qualified JAM 2024 Exam and got admitted in reputed Institutes.
- > Students pursuing Ph.D. at various Institutes : 06 .
- T.Y. B.Sc. & Ph. D. Students represented our College at State & University level in Aavishkar (S.P.P.U., Pune).
- Paper Published in reputed Journals:20
- Poster presentation Raman Memorial conference –University of Pune Duration: 14<sup>th</sup> to 15<sup>th</sup> Feb 2020 : Neeta Bisht, Barve H.,Trilokchand Kumawat & Siddharth Karkhanis
- ➢ Miss Sonal Bagade stood 4<sup>th</sup> Rank in BSc PHYSICS in SPPU in 2019-20
- Miss Samiksha Shelar was selected as a member of Cricket team under SPPU in the year 2023-24
  Departartment of Physics



# **T.Y.B.Sc. Enrollment of Students**



Year	Total No. of Students	Male	Female
2018-19	29	16	13
2019-20	35	14	21
2020-21	24	11	13
2021-22	28	18	10
2022-23	28	24	4
2023-24	18	11	7





### **M.Sc.- I Enrollment of Students**



Year	Total No. of Students	Male	Female
2018-19	24	14	10
2019-20	24	4	20
2020-21	26	9	17
2021-22	25	6	19
2022-23	19	6	13
2023-24	22	13	9





### T.Y.B.Sc. Result Analysis



	TYBSc												
Year	Total students	No. of student s in Grade "O"	No. of student s in Grade "A+"	No. of student s in Grade "A"	No. of student s Grade " B+"	No. of student s in Grade "B"	No. of student s Grade "C"	No. of student s Grade "D"	No. of student s Grade "F"	No. of student s Absent	Total No. of student s Appear ed	No. of student s Pass	Total result in %
2018-19	29	0	14	9	0	1	0	0	5	0	29	24	82.76
2019-20	35	0	20	14	0	1	0	0	0	0	35	35	100.00
2020-21	24	0	17	7	0	0	0	0	0	0	24	24	100.00
2021-22	26	0	8	5	0	6	0	0	7	0	26	19	73.08
2022-23	28	1	10	10	0	0	0	0	7	0	28	21	75.00
2023-24	17	4	7	5	0	0	1	0	0	0	17	17	100.00



### Average Result: 86.62%



### M.Sc Result Analysis



	MSc-II												
Year	Total students	No. of student s in Grade "O"	No. of student s in Grade "A+"	No. of student s in Grade "A"	No. of student s Grade " B+"	No. of student s in Grade "B"	No. of student s Grade "C"	No. of student s Grade "D"	No. of student s Grade "F"	No. of student s Absent	Total No. of student s Appear ed	No. of student s Pass	Total result in %
2018-19	23	0	1	3	5	4	3	1	6	0	23	17	73.91
2019-20	20	2	5	7	4	1	1	0	0	0	20	20	100.00
2020-21	23	0	0	22	1	0	0	0	0	0	23	23	100.00
2021-22	25	0	7	12	0	0	0	0	6	0	25	19	76.00
2022-23	19	0	11	5	1	0	0	0	2	0	19	17	89.47



### Average Result: 88.86%

# Our Students Received Best Student Award of the College



Siddhart Karkhanis 2019-20



Ms. Rasika M.Suryawanshi 2022-23





Ms. Samiksha Shelar 2023-24



# **Outstanding Student Case Study**



#### Dr.Babar Rohit Milind Research fellow HUN-REN Wigner Research Centre for Physics, Hungary. Institute for Solid State Physics and Optics <u>Theoretical Solid State Physics Department</u> Semiconductor Nanostructures Research

Group





- > B.Sc. 2006-2009 , MUMBAI UNIV
- MSc. 2009-2011 HPT/RYK College, SPPU ,Pune
- > Ph.D. 2019 IISER, Pune
- Post Doc. 2020-2022 Linkoping University,Sweden

	सीनेट	की सिफारिश पर		
	भारतीय विज्ञान शिध	क्षा एवं अनुसंधान संस्थान	। पुणे	
	के श	ासक मंडल द्वारा		
	बाबर	रोहित मिलिंद		
		को		
	विद्या	वाचस्पति		
		की उपाधि		
	अप्रैल 2019 में नि	नेर्धारित अपेक्षाएँ पूर्ण करने पर		
	संस्थान की मुहर के अधीन श	ानिवार, 1 जून 2019 को प्रदा	न की गई।	
		and a		
	The Boa	ard of Governors of the	2	
	Indian Institute of Science upon the recom here	ce Education and Re mendation of the Senate	search Pune	
	Babar	Robit Milind		
	th	e degree of		
	DOCTOR O	F PHILOSOPHY	X	
	on having completed Given under the seal of the in:	the requirements in April stitute on Saturday, the 1°	l 2019 °of June, 2019	
and the second	J	Tayon Ulgan ha	Sky	
	अध्यक्ष, शासक मंडल	अध्यक्ष, सीनेट	कुलसचिव Posistrar	

	2022-01-18 \FM-2022-0002
Certificate of postdoctoral fellowship	
This is to certify that Rohit Bahar (860113- fellow at the Department of Physics, Cher University, in the field of Theoretical Physics. SEK 25 000 per month during the period period, Rohit worked on state-of-the-art first in wide band gap semiconductors with poten	2633) has been a full-time postdoctoral nistry and Biology (IFM) at Linköping Rohit Babar was granted a fellowship of 1 2020-02-01-2022-01-31. During this principles calculations on colour centres tial applications in quantum technology.
If you require any further details for enquiry	please feel free to contact me.
Linköping, 22-01-18	
453	
Igor Abrikosov Professor, Theoretical Physics	
Linköping University Department of Physics, Chemistry and Biolo 581 83 Linköping	gy (IFM)
igor.abrikosov@liu.se	

UNKÖPING UNIVERSITY



# Social Contribution with blend of



Science and Spiritual



#### Gajanan Maharj Seva Mandal पचपीटी आहिंस जेंड आरवायके सायप्र कॉलेज

💽 GPS Map Camera 🗸

Nashik, Maharashtra, India 16/2/a, Bandawane Nagar, Anandvan Colony, Cidco, Nashik, Maharashtra 422010, India Lat 19.972914° Long 73.750119° 20/02/2025 01:20 PM GMT +05:30 Solar Workshop



### Social Contribution of Staff



### Energy Swaraj Yatra:

A national journey in a solar –powered bus, is the core of the Energy Swaraj Movement, aiming to unite climate change mitigation efforts. Started in 2020 and continuing until 2030. A visit to our College, an initiative taken by Dr. P.P.Joshi from Physics Department on behalf of Science Forum.





### **Curriculum Planning**



Preparation of college academic calendar by IQAC

**Preparation of master time-table** 

Circulation of master plan and time-table to departments

**Departmental meeting** 

Framing the Departmental Calendar

Assignment and distribution of work load

**Departmental and individual time-table** 

**Preparation of teaching plan** 

**Execution of teaching plan** 

**Review by HOD** 

**Continuous Internal Evaluation** 

**Feedback from students** 

Monitoring by IQAC (Lecture Monitoring Committee)





### **Evaluation Methods**









# Students make various projects which is included in the syllabus for UG as well as PG.

- Design projects that align with the physics curriculum, ensuring they cover essential topics and learning outcomes.
- Encourage students to work in teams, promoting peer-to-peer learning and communication skills.
- Assessment Methods: Students are assessed considering factors like creativity, application of physics concepts, teamwork, and presentation skills.



# **Student Progression**



Sr. No.	Name of student	Progression type	Academic year	Where
1	Patil Rani Navnath	Asst. Prof CHB	2017	KTHM
2	Malpure Makrand Rajendra	Asst. Prof.	2017	KVNN
3	More Tushar Sudhakar	Asst. Prof CHB	2018	KTHM
4	Jamdhade Mangesh Ramesh	Asst. Prof CHB	2019	KTHM
5	Aherrao Girish Ghanashyam	SET	2019	SPPU
6	Karkhanis Siddharth	PhD	2021	MTU
7	Kedare Ravina Dinkar	SET	2021	SPPU
8	Bhoye Tejas Ramesh	Asst. Prof CHB	2021	HPT & RYK
9	Mankar Monica Vasant	Teacher	2021	Jr. College
10	Kumavat Trilokchand Liladhar	PhD	2021	NIT Surat
11	Gidhad Chatali Sopan	SET	2021	SPPU
12	Gore Yogesh Lakshman	Asst. Prof CHB	2022	MGV
13	Neeta Bisht	Researcher	2022	Germany
14	Bhavale Vaishali Shantaram	MSc	2022	Fergusson
15	Barve Harshada Anand	PhD	2022	SRTMU
16	Dr. Kumavat Sandip Rohidas	Asst. Prof CHB	2022	HPT & RYK
17	Wakade Amol Macchindra	Asst. Prof CHB	2022	KTHM
18	Bagade Sonal Santosh	Asst. Prof.	2022	NIT Bhopal
19	Nabila Fatema Ashfaque Khan	CTET	2022	CBSE
20	Nathe Pallavi Bhausaheb	SET	2023	SPPU
21	Joshi Mayur Ratnakar	Data Scientist	2023	ADA
22	Somase Satish Nandkishor	Teacher	2023	ZP School
23	Kolhe Ashwini Shantaram	Teacher Departartment of Physics	2023	School
24	Dipali Patil	Developer	2024	Wipro



### Prominent Alumni's





Dr. S.V. Sali Professor,Director School of Physical Sciences, KBC NMU



Prof. N.D. Kulkarni PVG's Engg. College Nashik.



Mr. Ajit Gaikwad Sub Inspector,CRPF



**Prasad Kukade** 



Dr. G.B. Mogal K.T.H.M. College, Nashik



Mr. Kunal Nagpure



Mr. Gangurde Khandu BSNL Nashik



Dr. Amol Rahane K.T.H.M. College,Nashik



Mr. Satyajeet Gunjal

Departmenteonft Policysics15/3/25



Dr. V.S. Khairnar MET's BKC Engg. College,Nashik



Prof. Makarand Malpure GGS Engg. College , Nashik



M.J. Joseph Pvt Coaching Institute



### Alumni's Contribution





Alumni Interaction with Staff (Alumni Meet)

#### **Alumni Interaction with Students**



### Career Paths and opportunities for students



- Graduates with B.Sc. and M.Sc. degrees in Physics from G. E. Society's H.P.T. Arts & R.Y.K. Science College, Nashik, are equipped with a robust foundation in theoretical and applied physics, positioning them for diverse career trajectories in academia, industry, research, and beyond. The department's emphasis on **experiential learning, industry collaborations, and research-oriented pedagogy ensures students develop analytical, technical, and problem-solving skills** critical for thriving in global and interdisciplinary domains.
- The department's research center, collaborations with institutions like Uppsala University, and funded projects (e.g., DST, BCUD, CSIR) provide a strong foundation for academic research.
- Skills in instrumentation, data analysis, and computational physics open doors to roles in sectors like renewable energy (e.g., solar panel technology, highlighted in the department's projects), electronics, and telecommunications. Courses such as *Industrial Instrumentation* and hands-on training with tools like the Keithley Source Meter prepare students for technical positions in manufacturing or R&D.



### Departmental Support for Career Advancement



- Skill Development: Certificate courses (e.g., C-programming), internships, and workshops bridge the gap between academia and industry.
- Industry Exposure: Guest lectures by professionals (e.g., Dr. Omprakash Kulkarni) and visits to organizations like BARC and Nehru Planetarium provide real-world insights.
- Research Mentorship: Guidance from faculty engaged in major projects (e.g., CSIRfunded research) ensures students gain hands-on research experience.
- Competitive Exam Preparation: NET/SET coaching and seminars by university professors (e.g., Prof. Anjali Kshirsagar) aid students aiming for academic careers.





### **Best Practices**

- 1: National Graduate Physics Examination (NGPE)
- **2: Science Day Celebration**
- 3: T.Y.B.Sc. Credit Course (Hands-on Activity)

**Innovative Practices** 

- Develop an **e-learning platform** with recorded lectures, resources, and self-assessment quizzes.
- Host an annual **Physics exhibition** to showcase student projects and experiments.
- Organize science outreach programs to inspire school students.



### **National Graduate Physics Examination**



**Objectives:** To get scholarship for the **higher** education. To encourage students to take-up physics as a career.

The Practice: The physics department have been honoured as a National Graduates Physics Examination (NGPE) centre since 1995. It is the platform and opportunity for graduate students to check the knowledge and understanding of subject at National level. Around 40 to 50 students enrolls for the exam

#### **Program outcome:**

PO1: Demonstrate a deep understanding of fundamental physics concepts and their practical applications.PO2: Build confidence and competence for other national and international level examinations.





Nashik, Maharashtra, India Patil Lane Number 4, Kasi, Rameswaram, Shop no 4, College Rd, Krishi Nagar, Nashik, Maharashtra 422005, India Lat 20.005869° Long 73.761232° 21/01/24 10:05 AM GMT ±05:30



### **Science Day Celebration**



#### **Objectives:**

- To celebrate the achievement of Sir C.V. Raman.
- To spread scientific knowledge and enthusiasm among students, teacher and the general public.
- To inspire young students to take up science as a career and motivate them to explore its wonders.
- To showcase projects, experiments and discoveries in various fields of science.

#### > Context:

- The National counsel of Science and technology communication (NCSTC) proposed the idea of celebrating Science day to promote scientific awareness and enthusiasm among the general public.
- It is annual event in India and we, department of physics also participate in this celebration.





### Science Day Celebration



### > The practices:

- The physics department celebrates Science day every year on the occasion of National Science day.
- We organise several competitions like poster, rangoli making including science exhibition in order to celebrate the National science day and hands on activity.
- F.Y.B.Sc, S.Y.B.Sc. and T.Y.B.Sc students explains the hands on activity, learning Science through experiments for school children's.
- B,Sc. And M.Sc students participate in Poster competition, rangoli competition.
- The Students of Kilbil High School and Madhavrao Lele High school visited our science exhibition till now.
- Around 100 to 250 students visits our department on 28th February. **Program Outcome**
- **PO1**: Effectively communicate scientific ideas and discoveries to a diverse audience, enhancing public interest in science.
- **PO2**: Inspire themselves and others to pursue science as a **meaningful career path.**





### T.Y.B.Sc. Credit Course (Hands on activity)



#### > **Objective:**

- To provide a direct personal experience of scientific concepts.
- Todevelopskillssuchasobservation,measurement, experimentation and critical thinking.Toconnect scientific concepts to everyday life and real worldscenarios.
- The Context: As per the Savitribai phule pune universityguidelines, students should have to earn minimun 8 extra credit points at graduation level.In some regards, our department have conducted a credit course for T.Y.B.Sc students entitled "Hands on activity" during college time for 6 days and 7 Hrs. daily.
- Problem Encountered and Resources Required:

As this practice is for T.Y.B.Sc. Students only so department arrange the program by not affecting the academic time table. The practice is in department level so the program conducts smoothly.

#### **Program Outcome**

**PO1:** Gain hands-on experience in implementing theoretical knowledge through experiments and activities.

**PO2:** Sharpen essential scientific skills such as observation partartment of Physics measurement, experimentation, and critical thinking.





# Measures to implement NEP 2020



- One day workshop was held in our College for S.Y.B.Sc Physics Syllabus framing NEP 2020 on 22<sup>nd</sup> April 2025 sponsored by SPPU.
- 1. Framing of physics syllabus as per the NEP-2020. Our 10 teachers have participated in drafting the syllabus for UG and PG Physics Courses.
- 2. Minor physics syllabus framed by considering multiple disciplines.
- Skill based education: Focus on developing practical skills ad program solving abilities by introducing (OJT) on-job-Training program.
- 4. Research oriented learning : first step was by introducing **research methodology** course.
- Assessment reforms: implement assessment like PPT presentation, MCQ questions via Google form or offline.
- 6. Industry-academia partnership: sign MOU with industry as well as schools.
- 7. Student-centred approach: for slow learners-encourage students to meet the teacher in spare time to
- 8. Students are encouraged for seminar presentation









### Future plans of Department



- To encourage the students to enroll MOOC/SWAYAM online Courses.
- > To organize national conferences and workshops.
- To motivate the students to attend summer/winter internship programmes.
- To Publish research articles in peer reviewed Journals periodically.
- Establishment of Department-Industry collaboration.

