## **Department of Physics**

### **About the Department**



- Faculty of science started in 1992.
- Department established in June 1992.
- First batch Out (Alumni first batch) April 1995.

In the beginning, the department started with 30 students on roll having only one faculty member appointed on Ad – hoc on non – grant basis. The department offers only U.G. program with nine core and applied papers. Later on, Dr. K.P.Kadam was appointed as Lecturer on regular and permanent basis in 1993. With full government grants, Mr. D.G. Kalpande was appointed as Laboratory Assistant in 2003. Then, Mr.N.M. Khobragade was appointed as Lecturer initially on contract basis and later on he was appointed on regular basis in 2009. In the year 2010, Mr. G. R Yerawar was appointed as Assistant Professor on regular and permanent basis. Department had organized many workshops for students and one UGC sponsored National Conference NCATMSA – 2011. New choice based system semester pattern for U.G. courses was introduced in 2013 – 2014.

In CBS system, there are six core and applied theory papers per semester are assigned. The papers like Nano – technology, Astrophysics, Bio – Physics were newly included ncurriculum. All the three faculty members are actively engaged in teaching, research,co- curricular activities and extension activities. Department shifted to new and well equipped laboratory constructed through UGC funding in 2014. This department is having a very good culture of cultivation of educational values, maintenance of discipline, effective diffusion of required attitudes amongst the students so as to

make them competent and very conductive and co – operative atmosphere for learning and teaching activities.

#### **Faculty Profile: Teaching**



**Dr. K. P. Kadam Assistant Professor & Head**M.Sc. (Physics), B.Ed., Ph.D.

• **Specialization:**Communication Electronics & Spectroscopy

• Date of Appointment :13/09/1993

• Teaching Experience: 26 Years

• Research Papers Published: 51

 Administrative Responsibility: In charge of Science Faculty

 Working Committees: Staff Club, Staff Council, Students Grievance Redressal Cell, Staff Grievance Cell, ICC, Purchase Committee, Students Council, Disciplinary & Campus Maintenance, IQAC, Entrepreneurship & Skill development Comm.



Mr. N.M. Khobragade Assistant Professor M.Sc. (Physics), PGDCS, B.Ed., M.Phil

Specialization: Digital Electronics

• Date of Appointment :27/08/2009

• **Teaching Experience**: 09 Years

Research Papers Published: 05

 Administrative Responsibility: NSS Co – ordinator

Working Committees: Nature & Science Club,
 Prize Distribution Committee



Mr. G. R. Yerawar Assistant Professor M.Sc. (Physics), NET-JRF, JEST - 2007

**Specialization:** Condensed Matter Physics

• Date of Appointment: 30/11/2010

• Teaching Experience: 08 Years

Research Papers Published: 09

Working Committees: Co – ordinator of RUSA, IQAC Criterion Head, Research Committee, UGC Proposal Preparation Committee, Nature & Science Club, and Prize Distribution Committee.

#### **Faculty Profile: Non - Teaching**



Mr. A. D. Dongare Laboratory Attendant H.S.C.

- Date of Appointment: 12/01/2004
- Worked as Laboratory Attendant in Chemistry department.
- Work Experience: 15 Years
- Presently working as Laboratory
  Attendant in Physics department.

#### **Co - Curricular Activities**

## **Bridge Course:**

Every year department conducts the one week bridge course for newly admitted students of B.Sc. I. In bridge course, the faculties of department taught the fundamentals of subject required to understand the degree level curriculum. The purpose of course is to bridge the learning gap between intermediate and degree curriculum. After completion of course, a sample test on fundament knowledge is taken in order to identify the learning ability of students and we classify the students as advance learners and slow learners.



Bridge Course 2017 - 2018



Bridge Course 2018 - 2019

## **Seminar Competition:**

Department of Physics had organized seminar competition for 2017 - 18& 2018 - 19 on various topics of Physics to enhance the subject knowledge, presentation skills, stage daring of students. In seminar competition, students of B.Sc. Physics took part and deliver the power point based seminars on various topics. The faculty members of department judge their performance and prizes are given to top performers. About 25 - 30 students participated in seminar competition.





#### **Extra - Curricular Activities**

### **Teachers Day Celebration:**

Every year department celebrates teachers on 5<sup>th</sup> September on the occasion of birth day of Dr. Sarvapalli Radhakrishnan. The birth day of Dr. Radhakrishnan is celebrated as self-governance day and students of B.Sc. plays a role of teachers and engage the lectures of various classes on that day. The faculty members and students gave speeches on the life and work of Dr. Radhakrishnan.





## **National Science Day Celebration:**

Department celebrates National Science Day on 28<sup>th</sup> February every year in the memory of First Indian scientist Dr. C.V. Raman awarded with Nobel. The program started with brief introduction by Dr. K.P.Kadam and then guests and chairpersons gave prizes to best performers of seminar competition. The chairperson and guests of program unbox the "Physics Informer: A volume containing information about Nobel Laureates in Physics" and announce the formal publication of it. Some students from B.Sc. share their views about scientific attitude. On that occasion, the chairperson Dr. H.R. Virulkar sir guided the students and explained the brief idea about scientific attitude and its need for society.





National Science day 2017 - 2018

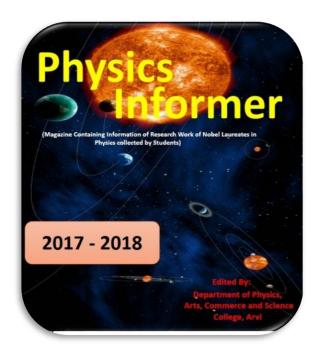


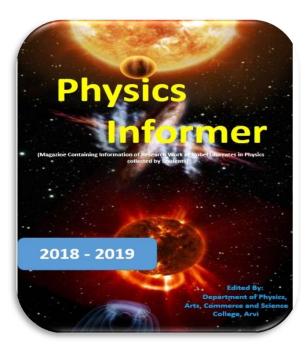


National Science day 2018 2019

## **Publication of Physics Informer:**

The department of Physics every year publishes magazine consist of all the material related to the invention of Nobel Laureates in Physics. This yearly magazine published by department "PHYSICS INFROMER" is the outcome of information about inventions of Nobel Laureates in Physics. The above said information and material is collected by faculties of department from students throughout the year. In order to aware the students about invention in physics by Nobel Laureates, the birth anniversary of Nobel Laureates in Physics is celebrated by collecting and sharing the information among the undergraduate students regarding their contribution in Physics. And the formal publication of magazine is done on the occasion of National Science Day.







**Formal Publication of Physics Informer** 

## Shastrapooja:

Department had organized Shastrapooja on the occasion of Vijayadashami Dasera on 18<sup>th</sup> October 2018. On that day the various instruments of our department are worshipped. The main purpose of the program is to remember the usefulness of the instruments and their need in our daily use. The head of department Dr. K.P.Kadam sir, Mr. Nagesh Khobragade, Mr. Ganesh Yerawar, Mr. Roushan Sheikh were prominently present on that occasion. Also Dr. Anil Dahat, Dr. Vijaya Muley, Mr. Manohar Kolhe, Mr. Dnyaneshwar Kalpande had attended the program and took part in worship.



Shastrapooja 2017 - 18 & 2018 - 19

## **Extension Activities**

## **Sky Watch Program:**

The department had organized sky watch program for students and peoples of Arvi on the occasion of Lunar Eclipse on 31<sup>st</sup> January 2018. On that day, head of department Dr. K.P.Kadam sir had explained the phenomenon of eclipse to gathering. The faculty members of department, staff members of college and students of various schools were prominently present on that occasion. The entire lunar eclipse was observed through a telescope of 700m focal length and 60 mm diameter of objective. During eclipse, various phases of moon were observed through telescope.



## **Judges for Science Exhibition:**

The faculty members Mr. Nagesh Khobragade, Mr. Ganesh Yerawar and Mr. Roushan Sheikh were worked as experts for science exhibition on the occasion of National science Day at Krishak English School, Arvi and at Nobel Kids School, Arvi on 28<sup>th</sup> February 2019.

In science exhibition at Nobel Kids school, Arvi, about 65 different models on the various facts of science were prepared by students from 5<sup>th</sup> to 10<sup>th</sup> class. Also in exhibition at Krishak English School, Arvi, about 35 models on the various facts of science were prepared by students and teachers of school.









Mr. Nagesh Khobragade, Mr. Ganesh Yerawar and Mr. Roushan Sheikh in Science Exhibition

#### **Students Achievement:**

One of the student Miss. Puja S. Bannagare had participated in State level seminar competition 'Scintillation, 19' at Bajaj College of Science, Wardha on 19<sup>th</sup> March 2019. Under Scintillation, 19 she had participated in various scientific events and had appreciated.



## Research Publication by faculty for 2017 – 2018:

- Dr. K.P.Kadam had published research paper 'Investigation under Dc glow discharge spectroscopy' in Aayushi International interdisciplinary Research Journal ISSN 2349 638x, special issue No.25, Impact factor: 4.574
- Mr. Nagesh Khobragade had published research paper 'Investigation under Dc glow discharge spectroscopy' in Aayushi International interdisciplinary Research Journal ISSN 2349 – 638x, special issue No.25, Impact factor: 4.574
- Mr. G.R. Yerawar had published research paper 'Investigation under Dc glow discharge spectroscopy' in Aayushi International interdisciplinary Research Journal ISSN 2349 638x, special issue No.25, Impact factor: 4.574

# Research Publication by faculty for 2018 – 2019:

- Dr. K.P.Kadam had published research paper 'Effect of Intermolecular Interactions on LPG Gas Sensing in the thin film of Zn/ Cucl<sub>2</sub>' in International Journal of Current Engineering and Scientific Research ISSN PRINT2393 8374, ISSN ONLINE 2394 0697 Volume 6, Issue No. 1, 2019 Impact factor (SJIF): 6.263
- **Dr. K. P. Kadam had** published research paper 'Variation of electrolytic current when applied voltage during glow discharge' in International E Research Journal ISSN:2348 7143Special Issue: 110(I), 2019 Impact factor (SJIF): 6.261
- Mr. G. R. Yerawar had published research paper 'Effect of Intermolecular Interactions on LPG Gas Sensing in the thin film of Zn/ Cucl<sub>2</sub>' in International Journal of Current Engineering and Scientific Research ISSN PRINT 2393 - 8374, ISSN ONLINE 2394 – 0697 Volume 6, Issue No. 1, 2019 Impact factor (SJIF): 6.263