

VSPM Academy of Higher Education



## Arvindbabu Deshmukh Mahavidyalaya, Bharsingi <u>DEPARTMENT OF PHYSICS</u>

#### VISION:

To create a learning environment where students become innovators, grounded in values and equipped with a passion for lifelong learning, contributing globally through research and service.

#### **MISSION:**

1) To develop knowledge in the subject and to create interest and passion towards Physics.

2) To develop scientific curiosity in students, to contribute our society through knowledge in physics.

3) To develop confidence for self and lifelong learning and to enrich the knowledge of current fields in physics learning.

4) To motivate the students for higher studies leading to research and to inculcate the basic skills and research attitude among the students.

5) To enhance experiment skills by moulding well equipped laboratories.

6) To provide platform to inculcate and nurture creativity through eminent scholarly lectures and sharing of resources.

7) To develop the understanding of professional and ethical responsibility towards society.

#### **ABOUT DEPARTMENT:**

The department has been imparting the quality education in the field of physics. The department has three full time qualified faculties, involved in teaching, research and extension activities. Department has well equipped laboratories. Department has collection of a good books in departmental library.

Faculty members of the department have used ICT tools for teaching and have participated in workshops, conferences. Faculty members are also engaged in mentoring the students. One of the faculty of the department, Dr.Amit Gadre has credited a Patent in 2021.

Department organizes seminar, workshops, guest lecturers, study tour for the students. Students actively participated in the departmental as well as college activities. Department also organizes career counselling program for the final year students which helps them to identify and focus on their career goals.

### **Courses/Programmes:**

Courses	Name of course	Specialization	No. of Seats
	Bachelor of	Physics, Chemistry, Mathematics	
	Science B.Sc.		
UG	(03 Year		60
	Programme)		
	Semester pattern		

## **Teaching Staff:**

S. N.	Name of faculty	Qualification	Designation	Date of Joining	Specialization	Area of Research	Photo
1	Dr. Anjali R. Gharpure	Ph. D., M.Sc., B.Ed.	Assistant Professor	04/09/2019	Solid State Physics	Luminescence	
2	Dr. Amit L. Gadre	Ph. D., M.Sc., B. Ed.	Assistant Professor	05/09/2019	Electronics	Polymer	
3	Mr. Bharat B. Madavi	SET, M.Sc., GATE	Assistant Professor	12/09/2019	Material Science	Material Science	

## Non- Teaching Staff:

Sr. No.	Name	Designation
1	Mr. Manoj Dhoke	Laboratory Assistant
2	Mr. Rahul Raut	Laboratory Assistant
3	Mr. Chavhan	Laboratory Attendant

## **Research Publications in the Journals notified on UGC website: -**

### Name of Faculty: Dr. Anjali Gharpure

S.N.	Title of Paper	Name of International/National Journal	ISBN/ISSN number	Year of publication
1	Review on Coumarin and its derivatives for their Pharmacological activity	Research Journey (International Journal)	E-ISSN: 2348-7143	2022
2	Photoluminescence Study of Na2S- Al2S3 Phosphor doped with <sub>Ce</sub> 3+	Int Res. J. of Science & Engineering, Special Issue A11	ISSN: 2322-0015	2021
3	Synthesis and photoluminescenceproperties of rare earth doped BaAl2S4 and MgAl2S4 phosphor	Journal of Physics: Conference Series <b>1913</b> (2021) 012037 IOP doi: 10.1088/1742- 6596/1913/1/012037,M ay 18,2021 (https://i opscien ce.iop.o rg/articl e/10.10 88/1742 = 6596/19 13/1/01 2037)	DOI: 10.1088/1742- 6596/1913/1/012037	2021
4	Synthesis and Photoluminescence Study of Ce <sup>3+</sup> dopedCaAl2S4 Phosphor	Alochana Chakra Journal Volume IX,Issue V, May/2020 DOI: 10.1088/1742- 6596/1913/1/012037 ( UGC Care)	ISSN NO: 2231- 3990	2020
5	Photoluminescence properties of Eu2+ doped BaAl2S4 phosphor	AIP Conference Proceedings (https://doi.org/10.1063	ISBN 978-0-7354- 1836-3	2019

		/1.5100478		
6	Wet chemical synthesis and photoluminescence study of SrAl2S4:Eu2+,Ce3+ phosphor	AIP Conference Proceedings (https://doi.org/10.1063 /1.5100416	ISBN 978-0-7354- 1836-3	2019
7	Synthesis and Photoluminescence properties of BaGa2S4 Phosphor doped with Ce3+	IJSRST4206   NCRDAMDS   January-February-2018 [(4)1: 443-445 ]	ISSN No. 2395-602X	2018

## Name of Faculty: Dr. AMIT L. GADRE

Sr. No.	Title with Page Number	Name of Journal	ISSN/ ISBN No.	Year of Publication
1	Spectroscopic Study of Thin Films of ZnO Nanomaterials Fabricated By Spin Coating Method - pp. 141 -148	Akshar Wangmay- International Research Journal ISSN No. 2229 - 4929	ISSN No. 2229 - 4929	2023
2	Review on Coumarin and Its Derivatives for Their Pharmacological Activity - pp. 17-22	Research Journey International E- Research Journal	ISSN No. 2348- 7143	2022
3	Future aspects of 5G Technology in India- A Review - pp. 493-498	Aayushi International Interdisciplinary Research Journal (AIIRJ)	ISSN No. 2349- 638x	2022
4	Synthesis and Study of Novel Polymers prepared by both Conventional and Microwave Synthesis Technique. Its application in detergent - pp. 151-155	International Research Journal of Science and Engineering (IRJSE)	ISSN No. 2322- 0015	2021
5	Uniaxial grown Potassium Dihydrogen Phosphate crystal by Sankaranarayanan- Ramasamy (SR) method and slow evaporation solution technique (SEST): A comparative Investigation - pp. 7- 14	International Research Journal of Science and Engineering (IRJSE)	ISSN No. 2322- 0015	2021
6	Effect of Zinc Oxide Nanoparticle fillers on Electrical Resistivity of Low Density Polyethylene - pp. 15 -18	International Research Journal of Science and Engineering (IRJSE)	ISSN No. 2322- 0015	2021

7	Biodegradation and Mechanical Properties study of 10% CEL + 7% PEG/LDPE Bio- composite film - pp. 19 - 25	International Research Journal of Science and Engineering (IRJSE)	ISSN No. 2322- 0015	2021
8	Characterization Study of Cellulose (CEL )+ Plasticizer PEG Added LDPE Biocomposite - pp. 08 - 13	Scholars Research Library Der Pharmacia Lettre, 2021	ISSN No. 0975– 5071	2021
9	Biodegradation study of CEL and PEG added LDPE Bio-composite film - pp. 243 - 246	B.Aadhar' International Peer- Reviewed Indexed Research Journal	ISSN No. 2278- 9308	2021
10	Characterization and DC Electrical Conductivity of ZnO / LDPE Nanocomposites - pp. 33 - 38	GP Globalize Research Journal Of Chemistry An International Peer Reviewed Journal of Chemistry	ISSN (Print) No. 2581–5911	2019

### Name of Faculty: Dr. Bharat B. Madavi

Sr. No.	Title with Page Number	Name of Journal	ISSN/ ISBN No.	Year of Publication
1	Biofuel From Madhuca Longifolia: A Review, pp.43-45	International Journal of Advance and Innovative Research Volume 6, Issue 2 (XXXIX):	ISSN No. 2394-7780	2019
2	Future aspects of 5G Technology in India- A Review - pp. 493-498	Aayushi International Interdisciplinary Research Journal (AIIRJ)	ISSN No. 2349-638x	2022
3	Review on Coumarin and Its Derivatives for Their Pharmacological Activity - pp. 17-22	Research Journey International E- Research Journal	ISSN No. 2348-7143	2022

## **Research paper presented in Conference/Seminar**

## Name of Faculty: Dr. Anjali R. Gharpure

S.N.	Conference organized by	Title of paper present	International/National/State level
Sessio	m 2022-2023		
1	108 <sup>th</sup> India Science Congress (ISC–108) RTMNU,Nagpur 3-7 <sup>th</sup> Jan 2023	Luminescence in Bismuth doped CaS Phosphor	National
Sessio	n 2021-2022		I
1	Arvindbabu Deshmukh Mahavidyalaya , Bharsingi,Dist-Nagpur	Photoluminescence Study of Na2S- Al2S3 Phosphor doped with Ce <sup>3+</sup>	National online conference on Emerging Trends in science and technology (NCETST- 2021
Sessio	n 2020-2021		
1	G.H. RaisoniCollege of Engineering, Nagpur	Synthesis and photoluminescence properties of rare earth doped BaAl2S4and MgAl2S4 phosphor	International Conference on Research Frontiers in Sciences (ICRFS 2021)
Sessio	n 2019-2020		
1	Kamla Nehru Mahavidyalaya,Nagpur	Synthesis and PhotoluminescenceStudy of Ce <sup>3+</sup> doped CaAl2S4 Phosphor.	InternationalConference on AdvancedFunctional Material AFM-2020
2	K.D.K.College of Engineering, Nagpur	Photoluminescence properties of Eu2+ doped BaAl2S4 phosphor	International Conference on Multidimensional Role of Basic Science in Advanced Technology (ICMBAT-2018) [ISBN No.: 978- 93-88703-07-4] AIP Conference Proceedings <b>2104</b> , 030051 (2019); https://doi.org/10.1063/1.510047 8 Published Online: 07 May 2019
3.	K.D.K.College of Engineering, Nagpur	Wet chemical synthesis and photoluminescence study of SrAl2S4:Eu2+,Ce3+ phosphor	International Conference on Multidimensional Role of Basic Science in Advanced Technology

Session	n 2018-2019		(ICMBAT-2018) [ISBN No.: 978- 93-88703-07-4] AIP Conference Proceedings <b>2104</b> , 020048 (2019); https://doi.org/10.1063/1.510041 6 Published Online: 07 May 2019
1	Sakarkheda Mahavidyalaya	Synthesis and Photoluminescence properties of BaGa2S4 Phosphor doped with Ce3+	National Conference on Recent Trends in Synthesis and Characterization of Futuristic Material in Science for the Development of Society (NCRDAMDS-2018) International Journal of Scientific Research in Science and Technology IJSRST4206   NCRDAMDS   January-February-2018 [(4)1: 443-445 Peer reviewed and Refereed International Scientific Research Journal Online ISSN : 2395-602X   Print ISSN : 2395-6011 UGC Approved Journal No : 64011 DOI : 10.32628/IJSRST4206 https://ijsrst.com/IJSRST4206

### Name of Faculty: Dr. AMIT L. GADRE

Sr. No.	Conference Organized By	Title of Paper Presented	International/ National/ State Level
	Se	ssion 2022-23	
1	DEPARTMENTS OF SCIENCE & IQAC, Late Rajkamalji Bharti Arts, Commerce and Smt. Sushilabai R. Bharti Science College Arni, Dist- Yavatmal (M.S.) India, On 12th April, 2022	Future aspects of 5G Technology in India- A Review -	International
	Set	ssion 2021-22	
2	Arvindbabu Deshmukh Mahavidyalaya, Bharsingi, Dist- Nagpur, Maharashtra., On 10th June 2021	Synthesis and Study of Novel Polymers prepared by both Conventional and Microwave Synthesis Technique. Its application in detergent	National

3	Arvindbabu Deshmukh Mahavidyalaya, Bharsingi, Dist- Nagpur, Maharashtra., On 10th June 2021	Uniaxial grown Potassium Dihydrogen Phosphate crystal by Sankaranarayanan-Ramasamy (SR) method and slow evaporation solution technique (SEST): A comparative Investigation	National
4	Arvindbabu Deshmukh Mahavidyalaya, Bharsingi, Dist- Nagpur, Maharashtra., On 10th June 2021	Biodegradation and Mechanical Properties study of 10% CEL + 7% PEG/LDPE Bio-composite film	National
	Se	ssion 2019-20	
5	DEPARTMENTS OF CHEMISTRY, SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI, INDIA AND ASSOCIATION OF CHEMISTRY TEACHERS, INDIA On December 5-7, 2019	Characterization and DC Electrical Conductivity of ZnO / LDPE Nanocomposites	National

## Name of Faculty: Mr. Bharat B. Madavi

Sr. No.	Conference Organized By	Title of Paper Presented	International/ National/ State Level
Session 2022-23			
1	DEPARTMENTS OF SCIENCE & IQAC, Late Rajkamalji Bharti Arts, Commerce and Smt. Sushilabai R. Bharti Science College Arni, Dist- Yavatmal (M.S.) India, On 12th April, 2022	Future aspects of 5G Technology in India- A Review - pp. 493-498	International
2	NASI, Nagpur Chapter in association with RTM Nagpur University, Nagpur	Synthesis of Phosphate Based Electrolyte Material for Solid Oxide Fuel Cell: (CePO4-CeP2O7) Composite	National
3	Department of Physics, School of Advanced Sciences, VIT-AP University , India,	Investigation of Structural and Electrical properties of Novel Cerium Orthophosphate (CePO4) for LT-solid oxide fuel cell"	National
4	International Union of Materials Research Society, Materials Research Society of India –IIT Jodhpur	Structural and electrical properties of Novel Cerium orthophosphate (CePO4) as solid electrolyte for low temperature solid oxide fuel cell	International

## VSPM Academy of Higher Education Arvindbabu Deshmukh Mahavidyalaya, Bharsingi DEPARTMENT OF PHYSICS

#### Annual Activity

#### Session 2018-2023

Departmental of Physics organised different Curricular and Extra Curricular activities to develop subject knowledge, personality development, enhance skills among the students. Following activities were conducted by the department during sessions 2018 to 2023.

#### **Departmental Activities:**

#### Session 2023-2024

#### **1.** Online Guest Lecture

The Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi organized an Online Guest Lecture on the topic '' Electrostatic " on 27 March 2024 at 11 AM. The online guest lecture was conducted on the zoom platform. The lecture was delivered by Mr. Pankaj Uikey, Assistant Professor Dept of Physics, Shri Lemdeo patil mahavidyalaya ,Mandhal,tah kuhi,Nagpur.

#### 2. Online Awareness Quiz on Chandrayaan Mission-3

The Department of Physics had organized the Inter-College online Awareness Quiz on successful launch of Chandrayaan mission-03 by Indian Space Research Organization (ISRO) on 26 August 2023. An online quiz was conducted on Google form. Objective behind conducting the Quiz was to create awareness and interest among students about Space science and the contribution of Indian scientists to explore the universe.

#### **3.** Energy Conservation Day:

The Department of Physics had organized a poster making competition to commemorate energy conservation day. Competition was conducted among B.Sc. Students. The competition was conducted on date 27 Jan 2024.

#### 4. Group Discussion

The Department of Physics had organized group discussion activity among students of B.Sc. students on date 12 March 2024.

#### 5. Seminar competition

The Department of Physics had organized a seminar competition in power point presentation mode among students of B.Sc. students on date 13 March 2024.

# 6. YouTube Live Streaming - Inauguration of Semiconductor Industry by Prime Minister

The Department of Physics had organized YouTube live streaming of the inauguration of the semiconductor industry by Prime Minister Shri Narendra Modi. As per direction from Joint Director Higher and Technical Education Nagpur, on 13th March 2024. YouTube live streaming arrangement was arranged in audio-visual room on 13 March 2024.

#### 7. Einstein Birth Anniversary- Celebration

The Department of Physics had organized Einstein Biography Reading and writing activity on Einstein Birth Anniversary on14th March 2024. Activity was conducted among students of B.Sc. Students of all Semester.

#### Session 2022-2023

#### 1. Online Guest Lecture: (11-12-2022)

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi organized a Online Guest Lecture on the topic "**Ultrasonic** "on 11<sup>th</sup> December 2022 at 11am. This Online Guest Lecture was conducted on zoom platform. Guest of online guest lecture was Dr. Lekhraj Hatwar, Assistant Prof. K.R.Pandav Mahavidyalaya, Nagpur.

#### 2. Online Quiz competition on Energy Conservation Day: (14-12-2022)

Department of Physics had organized Inter-College online Quiz on "Energy Conservation Day 14<sup>th</sup> December" to create awareness about how useful and important is to conserve energy for future. Students from different colleges from different colleges had participated in Online awareness quiz. Quiz conducted on dated 13.03.2023 through Google form on time 11:00 AM to 12:00 PM. Quiz consist of 15 MCQ questions each carry two marks and it was mostly related to renewable and non-renewable energies

#### 3. Tree Plantation Activity (28-12-2022):

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi had organized Tree Plantation Activity on 28-12-2022. Aim of this activity is to understand the importance of trees in environment, how trees are helpful to reduce pollution among the students. Students from B.Sc. PCM group were participated in Tree Plantation Activity. Activity was conducted on date 28.12.2022 from 11:00 AM to 12:00 PM. Different plant sapling including medical plants were collected by the students and planted in college premises.

#### 4. Einstein Birth Anniversary- Celebration (14-03-2023):

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi celebrated **''Einstein Birth Anniversary''** on 14<sup>th</sup> March 2023. On this occasion Documentary on Life Journey of Einstein was shown to B. Sc. students in Audio-visual room in college. In this documentary whole life journey on Einstein life was shown in short documentary and explained to students.

#### 5. Online Guest Lecture (21-03-2023):

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi organized a Online Guest Lecture on the topic "**Fiber Optics** "on 21<sup>st</sup>Marchl 2023 at 11am. Guest of online guest lecture was Dr. Kailash Gedekar, Assistant Prof. K.D.K. College of Engineering, Nagpur. He starts his topic with power point presentation. He explained basic terms related to optical fiber by giving example. He also explained about types of optical fiber, losses, applications and sensors. He summarized whole topic with the help of nice video.

#### 6. Departmental Student Seminar:

Seminar activity for the students of B.Sc. Science was conducted in the academic year 2022-2023. Students had presented seminar in Power Point presentation mode with topic from syllabus of Physics subject. Seminar activity of odd semester student was conducted from 11<sup>th</sup> Nov.to 15<sup>th</sup> Nov.2022 and even semester student from 10<sup>th</sup> April to 12<sup>th</sup> April 2023.

#### 7. Online Workshop on "Introduction to Virtual Lab":18th April 2023

Dept of Physics has organized an online workshop on "Introduction to Virtual Lab" on 18<sup>th</sup> April 2023. The guest speaker was Prof. Sayali Kanhav, Dept of Physics, Assistant Professor St. Vincent Pallotti College of Engineering & Technology, Nagpur. Mrs. Prof. Sayali Kanhav informed the students about the effective use of virtual lab for practical. She told that the virtual lab can be accessible through website.

#### 8. Extension Activity-Bird Feeder Activity: 28-04-2023

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi has organized Bird Feeder Activity on 28-04-2023. Aim of this activity is to save the birds and indirectly our environment and provide water and food to the birds. Students from B.Sc. PCM group were participated in Bird Feeder Activity. Activity was conducted on date 28.04.2023 from 11:00 AM to 12:00 PM. Students make different types of bird feeders. Students planted these bird feeders in botanical garden in our college. This activity helps students to understand the importance of birds which have ecological value as important element of natural system.

#### 9. Group Discussion activity:

Group Discussion (G.D.) activity was conducted by department of Physics in odd and even semester on date 09/11/2022 and 06/04/2023. Students of B.Sc. F.Y, S.Y and T.Y were participated in this departmental Group Discussion activity with various topic selected from physics subject syllabus. A group of students has been formed for GD. The main purpose of this GD activity was to improved student thinking, listening and speaking skills. It is an effective tool in problem solving, decision making and personality assessment.

#### **10. Industrial Study Tour:**

Department of physics conducted Industrial Study Tour for the students on 2<sup>nd</sup> May 2023 at MIDC Government I.T.I. Katol. The main purpose of Industrial Study Tour was to create awareness among the students about practical knowledge of the subject and their application in industries.

Students visited different sections where they were informed about the testing facilities, various instruments like in Electric motors (ac and dc), Electronics, Filters, motor mechanics and civil drayman trades, cutting and welding tools, etc.

#### Session 2021-2022

#### 1. Online Guest Lecture:

Department of Physics of ArvindbabuDeshmukh Mahavidyalaya, Bharsingiorganizeda Online Guest Lecture on 26<sup>th</sup> October 2021 on the topic **''Nanotechnology and It's Applications''**. Dr. Vijay R. Raghorte, HOD, Department of Physics, N. K. S., Model College, Karanja was guest speaker. This Guest lecture conducted through Zoom meeting app. Zoom meeting link was share on WhatsApp group on 26<sup>th</sup> October 11:00 A.M.

#### 2. Online Quiz competition on Energy Conservation Day:

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi had organized Inter college online Quiz competition on Energy Conservation Day 14<sup>th</sup> **December** to create awareness about use of renewable energy and impact of non-renewable energy on environment among the students.

#### 3. One day online state level workshop:

Department of Physics, Arvindbabu Deshmukh Mahavidyalaya, Bharsingi organized a one day online state level workshop on Introduction to Medical physics on **22nd December 2021**. Aim of this activity is to aware the students about different fields in subject physics and develop their interest about the subject. Dr. Satish Manohar Pelagade, Associate Professor & RSO, Department of Medical Physics Gujarat Cancer & Research Institute Ahmadabad was the resource person of one day online state level workshop. Topic of the workshop was "Introduction to Medical Physics". Workshop was held on zoom platform.

#### 4. National Science Day 28th February

Department of Physics organizedonline state level Poster Competition onNationalScienceDay on 28<sup>th</sup> Feb 2022.

#### 5. Birth Anniversary of Albert Einstein on 14<sup>th</sup> march:

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi convened an offline Seminar Competition for B.Sc. Science (all Semester) to commemorate the Birth Anniversary of Albert Einsteinon14<sup>th</sup> march 2022. Students from B.Sc. F.Y, B.Sc. S.Y and B.Sc. T.Y participated in offline seminar competition. Students presented seminar mostly topic related to Albert Einstein discoveries.

#### 6. Departmental Student Seminar:

Seminar activity was conducted in department of Physics on 14<sup>th</sup>March 2022 & 11<sup>th</sup> April 2022. Students of F. Y. B.Sc. (Sem-II<sup>nd</sup>), S.Y. B. Sc. (Sem-IV<sup>th</sup>) and T. Y. B. Sc. (Sem- VI<sup>th</sup>) participated in this departmental seminar activity with various topic selected from physics subject syllabus.

#### 7. Career Counselling Program:

Department of Physics and Career counselling and placement cell has organized **Career Counselling Program** for final year students (B.Sc., B.A., B.Com.) on **06/04/2022** at11 am.

Dr. Hitesh Wasvani and Dr. Atul Charde MBA department, Nabira Mahavidyalaya, Katol was the resource person of the program.

#### 8. Field visit to sub Power house station:

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingihas arranged a Field visit to sub Power house station(66/33 KVA) located in IndarwadaBharsingi Tah. Narkhed Dist. Nagpur. Many students from B.Sc. Science group had visited power station along with college teaching staff on dated **07/04/2022**.

#### 9. Online Guest Lecture:

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi organized a Online Guest Lecture on the topic "**Operational Amplifier**" on **19<sup>th</sup> April 2022** at 11am. Online guest lecture was delivered by Dr.YogeshMore,Assistant Professor, Bhiwapur Mahavidyalaya, Bhiwapur

#### **10. Group Discussion activity:**

Group Discussion (G.D.) activity was conducted in department of Physics on **25<sup>th</sup> April 2022**. Students of F. Y. B. Sc. (Sem- II<sup>nd</sup>), S.Y. B. Sc. (Sem-IV<sup>th</sup>) and T. Y. B. Sc. (Sem- VI<sup>th</sup>) were participated in this departmental Group Discussion activity with various topic selected from physics subject syllabus.

#### Session 2020-2021

#### 1. Online workshop:

Department organized Online Webinar on 10<sup>th</sup> February 2021 on the topic Wonders of the Stars and Galaxies for B.Sc. students.Mr B.T.Tatte Associate Professor of Dept.of Physics from Balbhim College Beed(MS.) was speaker.

#### 2. National Science Day program:

Department of science of Arvindbabu Deshmukh Mahavidyalaya, Bharsingi organized a state level online quiz competition on 27<sup>th</sup> February 2021 for UG students on the occasion of National Science Day. Aim of this activity is to encourage the students and develop their interest about the subject. Competition was hosted on Google forms and zoom platform.

#### 3. Online Guest Lecture:

Department of Physics of Arvindbabu Deshmukh Mahavidyalaya, Bharsingiorganizeda Online Guest Lecture on 22 January 2021 on the topic "Electromagnetic Theory". Mr. Parikshit Choudhary, Department of Physics, Bhalerao Science College, Saoner was guest speaker. This Guest lecture conducted through Zoom meeting app. Zoom meeting link was share on WhatsApp group.

#### Session 2019-2020

#### 1. One day workshop:

On 2<sup>nd</sup> oct 2019, on the occasion of 150<sup>th</sup> birth anniversary of Mahatma Gandhi and 115<sup>th</sup> birth anniversary of Lal Bahadur Shastri, Department of Physics organised one day 'Student Solar Ambassador Workshop-2019' on Solar Energy with collaboration of IIT Bombay.

#### 2. Guest Lecture:

Department has organized Guest Lecture on the topic entitled **Number System& Digital Electronics**for B.Sc. final year students on 05/03/2020. The objectives of the program are to develop subject knowledge and to increase skill and confidence about the subject.

#### 3. Student seminar:

Department has organized student seminar of B.Sc. final year students. Aim of this activity is to encourage the students and develop their interest about the subject. Seminars of B.Sc. final year students were conducted in Department from  $3^{rd}$  to  $4^{th}$  Feb.2020.

#### 4. Career counselling programme:

Department organized Career counselling programmes for B.Sc. final year students on 2nd March 2020. Aim of this activity is to aware the **students** about different opportunities in higher education with respect to job.

5. Department has organized flower decoration and mehandi competition under the annual event AVISHKAR 2019-20 on 27/01/2019. Aim of these activities is to motivate the students and promote their skills.

#### Session 2018-2019

Students from Physics Department actively participated in tree plantation programme and Swachh Bharat Abhiyan conducted by the institution.

#### **Use of ICT Tools:**

Department of Physics uses the Information and Communication Technology (ICT) in the teaching and learning process to get the better understanding of the concept to students. ICT provides various advantages and benefits which solves problems in the educational field.

Following ICT tools such are used in the academic year 2020-2021 for teaching and learning:

- Power Point Presentation: Teachers and students prepared PPT using MS Power Point Application to present and demonstrate their topics in effective and efficient manner.
- Use of Apps: Different types of apps like Zoom, Google meet, WebEx are used for online teaching learning process and meetings.
- Google form: Google forms are used for taking online exam in MCQ patterns, online quiz competition, feedback of any program.
- Google class room: Google class rooms are used for online teaching learning process. E-content, videos can be uploaded.

## Department photos (Staff room, laboratory photo)



#### **Highlights of the Department**



#### **Induction Program**



**Field Visit** 

Field Visit



**Einstein Birth Anniversary Program** 



#### **Career Counselling Program**







**Career Counselling program** 



**Extension Activity** 



**Online Physics Webinar** 



Study Tour at Raman Science Centre



Study Tour at Raman Science Centre



**Study Tour at Raman Science Centre** 

