



**Shri Shivaji Education Society Amravati's  
Shri Shivaji Science & Arts College  
Chikhli, Dist. Buldana-443201 (MS).**

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**DEPARTMENT OF PHYSICS**

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**ANNUAL REPORT-2025-26**

Department of Physics organized several co-curricular activities to enhance and explore the recent knowledge in various aspects of Physics during the session 2025-26.

**1) Department Activities:**

Faculty members of Physics Department actively organized following activities to enrich students' knowledge during academic session 2025-2026.

- i) University Level Intercollegiate Seminar Competition: This Competition is organized by Department of Physics on 05/02/2026 for B.Sc. class Students.
- ii) The Department of Physics successfully organized a State Level Model Making Competition on 20 February 2026. The competition received an overwhelming response from students across various schools and colleges. More than 100 models were presented by participants from different categories.
- iii) Department of Physics organized Certificate Course in Basics of Nanotechnology which is held during 01 September 2025 to 07 February 2026, under the PM-USHA Component 3.0 (Strengthening of College) Grant.
- iv) The Certificate Course on Renewable Energy was organized by the Department of Physic, under the PM-USHA Component 3.0 (Strengthening of College) Grant.

**2) Preparation of Practical Manuals and use of ICT:**

The teaching Faculty of the department prepared Practical manuals such as SEC, VSC for B. Sc. I and II year NEP students.

Faculty also uses various online teaching tools to deliver lectures for B.Sc. classes. Faculty members used following online for effective teaching & learning.

- i) Bridge Course is conducted to teach basic concepts of B.Sc.-I Practicals.
- ii) Faculties of department of Physics developed Question Bank and Google Website to provides the Study Material for B.Sc. students.

### 3) Research:

Dr. P. P. Padghan, a faculty member of the Department, has been granted an Indian Patent titled System for Predicting Degree of Maturity of Agricultural Products.

#### Paper Presented / Published in National / International / Journals / Proceedings with ISBN/ISSN:

Sr. No.	Name of Teacher	Title of Paper presented/Published	National/ International/ Journal Proceedings	ISBN/ISSN
1	Dr. Pallavi B. Nalle	To Investigate the Sintering Influence on Fabrication of Lanthanum Oxide nanoparticles via Sol-Gel Tractics Pg. no. 14-17	International	ISSN No.: 2277-1921
		The AI Revolution in Teaching Physics	Proceedings	
2	Dr. D. N. Bhoyar	Low-temperature H <sub>2</sub> S detection using Fe-doped SnO <sub>2</sub> /rGO nanocomposite sensor, RSC Adv., 2025, 15, 26308-26320.	Journal	
		Cu-SnO <sub>2</sub> decorated rGO nanohybrid for highly responsive low-temperature ammonia detection, Materials Science and Engineering: B, Volume 328, 2026, 119367	Journal	0921-5107
3	Dr. P. P. Padghan	System for predicting degree of maturity of Agricultural Products	Patent Granted	

### 4) Book/Chapter in Book Published

Sr. No.	Name of Teacher	Title of book/ Chapter in book	Publication Name	ISBN/ISSN
1	Dr. Pallavi B. Nalle	Modern Research in Science and Technology Role of AI in Education and Physical Sciences	Rushi Publication	ISBN No.: 978-81-995418-3-2
2	Dr. D. N. Bhoyar	A Text Book of Physics Solid State Devices-II	DnyanPath Publication (India)	978-93-6409-899-1

### 5) Best Practice:

- i) Bridge Course in Physics Practical was organized for the B.Sc. First Year Students.
- ii) University Level Innovative Model Making Competition: District Level Model Making Competition organized by Department of Physics, Shri Shivaji Science and Arts College, Chikhli Dist-Buldana. The competition was sponsored by Mrs. Y. T. Suradkar and Shri Shivaji science and Arts Chikhli.

**6) Extension Activities:**

Faculty of Physics Department is contributed through Fund Donation to ZP Primary School, Baygoan.

**7) Photographs:**



**University Level Intercollegiate Seminar Competition for B. Sc. Students Prize Distribution**



**State Level Model Making Competition Prize Distribution**



**Lecture on Basics of Nanotechnology under the PM-USHA Component 3.0**



**Lecture on Renewable Energy Sources under the PM-USHA Component 3.0**

  
**HoD**  
**Head of Physics Department**  
**Shri Shivaji Science & Arts Coll**  
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