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## Address for Correspondence

**Dr. N. L. Tarwal**

**Convener, ICPM-MDF-2025**

Department of Physics, Shivaji University, Kolhapur-416 004 (Maharashtra) India

Ph. (O): +91(231)-260 9227, Mobile: +917057555960

E-mail: [conf\\_phy@unishivaji.ac.in](mailto:conf_phy@unishivaji.ac.in)



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# 5<sup>th</sup> International Conference on Physics of Materials & Materials Based Device Fabrication - 2025

**(ICPM-MDF-2025)**

**December 10-12, 2025**

**Organized by**

**Department of Physics**

**(UGC-DRS-I, DRS-II, ASIST, DSA-I & II, DST FIST- I & II,  
PURSE, RUSA Sponsored Department)**

**Shivaji University, Kolhapur-416004**

**Maharashtra, India.**





### Objectives of the Conference

The Department of Physics, Shivaji University, Kolhapur is ranked 5<sup>th</sup> in Materials Science research among all Non-agricultural Universities and Research Institutes in India. The International Conference on Physics of Materials & Materials Based Device Fabrication - 2025 (ICPM-MDF-2025), is a special event focused on the applications of various tools and techniques in the field of Materials Science. This conference aims to bring together scientists, technologists, researchers, and industrialists from across India to exchange ideas and explore potential collaborations in their areas of interest. The conference will cover both experimental and theoretical aspects of Materials Science, focusing on frontiers in the Physics of Materials and their applications in technologies with societal impact. By participating in ICPM-MDF-2025, you can contribute to the advancement of Materials Science and its applications in fields like energy and biomedicine. Specifically, studies of novel, advanced materials along with the mechanisms involved will be highlighted together with the applications of these materials in the following domains:

#### Topics To Be Covered

|                                                          |                                    |
|----------------------------------------------------------|------------------------------------|
| Catalysis                                                | Instrumentation                    |
| Nanomaterials                                            | Holography                         |
| Nanosensors                                              | Supercapacitors                    |
| Solar cells                                              | Bio-materials                      |
| Photonics                                                | Bio-sensors                        |
| Energy conservation                                      | Microwave application              |
| Aerogels                                                 | Biotechnology                      |
| Biophysics                                               | Quantum Computing                  |
| Materials for space applications                         | Nonlinear Optics                   |
| Thin and thick film devices                              | Fuel cells   Materials for Defence |
| Radiation effects in materials                           | Nanotechnology                     |
| Electrochromism                                          | Gas Sensors                        |
| Green Chemistry                                          | Quantum Dots                       |
| Batteries                                                | Neuromorphic devices               |
| Nano textiles                                            | Superconductors                    |
| Machine Learning                                         | Artificial Intelligence            |
| Computational Materials Science                          | Particle Physics                   |
| Radiation-induced modifications of Materials and Devices |                                    |
| Phase change Materials and Applications                  |                                    |

#### About Kolhapur

Nestled in the Western Ghats of Maharashtra, Kolhapur is a city steeped in history and tradition. Often referred to as "Dakshin Kashi" or "Mahateerth," it has been a hub of religious, cultural, and historical activities for centuries. Situated between latitudes 15°73' to 17°11' and longitudes 73°75' to 74°70', Kolhapur lies at an elevation of 546 meters above sea level. Its proximity to the Sahyadri Mountains makes it relatively immune to famine, ensuring a steady food supply for its inhabitants. Kolhapur is renowned for its intricate carvings, magnificent temples, and rich cultural heritage dating back to the 1<sup>st</sup> century BC. Its unique food culture, particularly the fiery Kolhapuri cuisine, has gained widespread popularity. The city's vibrant arts scene, diverse dialects, and love for sports contribute to its distinct identity. Whether you're a history buff, a foodie, or simply seeking a glimpse into India's diverse cultural tapestry, Kolhapur offers a captivating experience.

**Climate:** Kolhapur offers a pleasant and moderate climate in December , making it ideal for tourists and outdoor activities. Daytime temperatures average around 29-30°C, while nights are cooler, with lows of 15-18°C. This combination of cool, dry weather makes it one of the most favorable times to visit.

### Places of Tourist's interest in Kolhapur

**Temples & Cloisters:** Goddess Mahalaxmi, Jotiba, Goddess Trymbuli, Narsinhwadi, Bahubali, Katyayani Devi, Khidrapur, Kaneri Cloister, Shankaracharya's Cloister, etc.

**Historical Places:** New Palace, Shalini Palace, Bhavani Mandap, Town Hall, etc.

**Hill Stations & Lakes:** Panhala Fort, Vishalgad Fort, Dajipur Sanctuary, Rankala Lake, Kotiteertha, etc.

#### About the Shivaji University, Kolhapur

**Shivaji University**, established in 1962, is a prominent educational institution named after the legendary Maratha warrior, Chhatrapati Shivaji Maharaj. Founded with the aim of serving the regional needs of South Maharashtra, the university has grown to encompass three districts: Kolhapur, Sangli, and Satara. With a student body of approximately 3 lac. Shivaji University offers a diverse range of programs across various faculties including Arts, Social Science, Science, Commerce, Education, Fine Arts, Law, Medicine, Pharmacy, Engineering, and Technology. Rooted in the rich cultural heritage of South Maharashtra, the university has played a pivotal role in providing educational opportunities for all segments of society. Inspired by the progressive leadership of Chhatrapati Shahu Maharaj, Kolhapur emerged as a center of learning in the early 19<sup>th</sup> century, attracting students from both South-Western Maharashtra and Northern Karnataka. While initially focused on regional needs, Shivaji University has evolved to become a leading institution of higher education and research in India. Its commitment to academic excellence and its contribution to the development of the region have solidified its reputation as a valuable asset to the educational landscape. More about Shivaji University, Kolhapur and Department of Physics can be seen at [www.unishivaji.ac.in](http://www.unishivaji.ac.in) and <https://www.unishivaji.ac.in/dptphy/websites>, respectively.

#### Accommodation

- 1) Request for accommodation has to be made at the time of registration. Kindly note that participants need to pay for the on-campus accommodation & Hotel charges, as per Shivaji University rules.
- 2) Accommodation to a limited number of registered participants can be provided in the Guest House/ Research Scholar Hostel/ Boys Hostel/ Girls Hostel of the Shivaji University, Kolhapur.
- 3) List of Hotels will be shared on your email.

#### How to Reach the Shivaji University, Kolhapur?

Kolhapur is well-connected by air, rail, and bus.

- **Air:** Kolhapur airport offers flights to and from major cities like Mumbai, Hyderabad, Bangalore, Tirupati, and Ahmedabad.
- **Rail:** Chhatrapati Shahu Maharaj Terminus, Kolhapur, is well-connected to Miraj, Pune, Mumbai, Delhi, Belgavi, Bangalore, Nagpur, Ahmedabad, Solapur, and Hyderabad
- **Bus:** Kolhapur has a good bus network connecting it to other cities in Maharashtra and beyond.

Shivaji University is conveniently located just 5 km from the airport and 4 km from the railway terminus and Central Bus Stand.

For those arriving at nearby airports:

- **Belgaum/Belgavi:** You can take a bus to Kolhapur.
- **Pune:** You can take a bus or train to Kolhapur.

### Souvenir and Sponsorship Opportunities

Souvenir consists of the technical program, delegates list, and abstracts. It will be shared to all participants. Advertisements in this book provide a golden opportunity for industries and others, to advertise their products and services for future business and growth.

The conference souvenir, will contain the technical program, delegate list, and abstracts. It will be distributed to all participants.

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#### Abstract Submission and Prizes

Please submit your abstract for your original research work using google form after registration.

<https://forms.gle/1zVTafnS3u36Jheu7> All future communication regarding your submission will be conducted via email.

Prizes will be awarded for the best posters presentations. Posters should be 1 meter x 1 meter in size.

To download the abstract template, please scan the QR code

**Registration fee includes Registration** Kit, Breakfast, Lunch, Dinner and High Tea

|                     |           |
|---------------------|-----------|
| Students (UG/PG)    | : ₹ 1500  |
| Research scholar    | : ₹ 2500  |
| Faculty             | : ₹ 3000  |
| Industrial person   | : ₹ 5000  |
| Accompanying person | : ₹ 2000  |
| Foreign student     | : USD 200 |
| Foreign delegate    | : USD 400 |

#### Important Dates:

**Last date of Registration & Abstract submission: November 25, 2025**

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