



**International Conference on
Automotive Materials &
Manufacturing 2023**



**SHAPING PROGRESSIVE
MOBILITY THROUGH EMERGING
MATERIALS & MANUFACTURING
TECHNOLOGY**



**AM & M
2023**

4TH EDITION

31st May - 2nd June 2023

Organized by



In Association with



Outreach Partner



DIRECTOR'S MESSAGE

We are pleased to announce the 4th edition of International Conference on Automotive Materials and Manufacturing AMM 2023. After the grand success of first two editions in 2010 and 2014, the 3rd conference was held on online platform in 2020 due to pandemic situation. Now, setting in to the new-normal life, we are happy to take up this topic again for addressing emerging needs for alternate materials and manufacturing processes.

The theme of the conference is **“Shaping Progressive Mobility through Emerging Materials and Manufacturing Technology”**. The objective of this conference is to create a platform to establish synergies for Material Researchers, Producers and Manufacturing innovators. The automotive industry is continuously working on improving fuel efficiency, lightweighting of structures, safety requirements, impact on environmental, expected reductions in product development cycles, changing mobility solutions such as e-mobility and so on. AMM 2023 will bring together the industry leaders and technocrats in the field of materials and manufacturing technologies from automotive, defense and aerospace industries to discuss about varied subjects such as advanced materials, plastics and composites, manufacturing processes, additive manufacturing, e-mobility, design and simulation, Industry 4.0, AI/ML etc.

This 3-day conference will be held at **ARAI – Homologation and Technology Center (HTC)** campus in Chakan Industrial area during **31st May to 2nd June 2023**. The conference will host 15 technical sessions deliberating 50 contributory papers, 15 keynote addresses and also panel discussion revolving around the theme of conference.

Materials manufacturers and test agencies are always keen to develop new technologies and innovations for application in manufacturing of unique products. Keeping an eye on this aspect, an exhibition, **AM&M EXPO 2023**, is also being organized concurrently, wherein various manufacturers will showcase their products, technologies, techniques, services etc.

This conference is being organized in association with **SAE India & ASM Pune** chapter.

We are bringing out this first announcement of AMM 2023, inviting professionals, engineers and academicians to present their work in the field of materials and manufacturing technology.

We look forward to your active participation in this event through technical papers, expo, sponsorship and association.



Dr. Reji Mathai

Director, ARAI

Chairman - Organizing Committee
AMM 2023

CONFERENCE SCHEDULE

	AMM 2023	AMM Expo 2023
31 st May 2023	Inaugural Session & Technical Sessions	Inauguration and Exhibition
1 st June 2023	Technical Sessions	Exhibition
2 nd June 2023	Technical Sessions, Panel Discussion and Valedictory session	Exhibition

CALL FOR PAPERS

Abstract are invited from industry professional and academicians for participation in AMM2023. Abstracts are to be sent to the Convener at amm2023@araiindia.com on or before 31st Dec. 2022. Simultaneously, authors would be required to submit abstracts at MyTechZone, link for submission will be shared shortly. Abstract should be limited to maximum 300 words, emphasizing significance of analytical / experimental study and originality of contribution with results.

TOPICS

- ▶ Light-weight materials
- ▶ Advanced Material Characterization Techniques
- ▶ Plastics and Composite Materials
- ▶ Surface Coating
- ▶ Material Modelling and simulation
- ▶ Integrated Computational Materials Engineering (ICME)
- ▶ Materials for e-mobility
- ▶ Alternate Fuels
- ▶ Automotive Fluids
- ▶ Forging and Forming Processes
- ▶ Metal Joining Processes
- ▶ Process Improvements in Foundry and Forging
- ▶ Process Design & Simulation
- ▶ Additive Manufacturing (3D printing)
- ▶ Heat treatment processes
- ▶ Recycling and Reuse
- ▶ Failure analysis and Process development
- ▶ Industry 4.0 and Artificial Intelligence for Material Science and Manufacturing

GUIDELINES TO AUTHORS

- ▶ Technical Papers are required to follow SAE technical paper writing guidelines as summarized at <https://www.sae.org/participate/volunteer/author>
- ▶ Papers accepted for publication and presentation in AMM 2023 will be given SAE paper numbers and will find place in SAE database.
- ▶ Few papers may be selected only for oral presentation and not for SAE publication.
- ▶ Paper contents should not have been published elsewhere.

Abstracts will be evaluated by Technical Paper Review Committee (TPRC). Draft manuscripts of selected abstracts will be invited for evaluation according to SAE technical paper quality guidelines.

EVALUATION CRITERIA

- ▶ Quality of data & validity of analytical techniques
- ▶ Long-term reference value
- ▶ Technically new, innovative or constructive reviews
- ▶ Professional integrity
- ▶ Clear presentation
- ▶ Soundness of conclusions

IMPORTANT DATES

- ▶ Receipt of abstracts: 31st Dec. 2022
- ▶ Acceptance of abstract: 31st Jan. 2023
- ▶ Receipt of draft manuscript: 1st Mar. 2023
- ▶ Receipt of final manuscript: 15th April 2023

Awards: Best Technical Paper will be awarded with suitable prizes

AMM EXPO 2023

A grand exposition (AM&M EXPO 2023) of technologies, products and equipment pertaining to automotive materials and manufacturing is being organized concurrently. AM&M Expo 2023 will be open for all, especially industry personnel, students, teachers, R & D Institutes and interested public. It will provide a great opportunity to share and disseminate information and conduct business meetings in separate allocated halls. Stalls of 3m x 3m size are available and will be allocated on first-come-first-served basis.

Please contact amm2023@araiindia.com for stall booking.

SPONSORSHIP

Sponsorships for the conference are welcome.

Please contact amm2023@araiindia.com for sponsorships details.

GLIMPSES OF EARLIER AMM CONFERENCES



VENUE

The Automotive Research Association of India

Location



Homologation and Technology Center (HTC)

Plot No. E1/1, MIDC Chakan Phase – III, Pune – 410501, Maharashtra (India)

FOR REGISTRATION & FURTHER DETAILS, PLEASE CONTACT



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HOD: ARAI Academy

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