



Chapter News Letter



Editor

Ajay Tare

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Vice Chairman

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Dr. Kruttika Apshankar-Kher

EDITORIAL . . . ✍



Dear Members,

Greetings to you and your families; hope you have enjoyed and celebrated Diwali very enthusiastically.

At the outset, we must congratulate ASM Pune chapter for its achievements last year.

We have received many awards and accolades during last year, hence raising the bar of expectations in the coming years.

The connect with educational institutions and active involvement of our members is now bearing good fruits!

Here, the role of some senior members is highly appreciated in the entire journey and their contribution will always remain valuable in our progress.

As fraternity from material science stream, we must encourage such activities.

ASM Pune chapter has been a very vibrant organization since long and with the new leadership we can expect the Pune chapter to expand its umbrella even more, which will be acknowledged globally.

During our Annual Function, it was noticed that very few members are from the industry; maybe we are not reaching out to them, or they are keeping themselves isolated. We have sizeable count of seasoned fraternity and students. In the coming years, we must focus on increase in membership of industry entrants or career beginners, to bridge the gap.

Lastly, we must express our sincere thanks to all members, particularly those who are active and have helped ASM Pune chapter to be a vibrant institution not only technically, but financially also.

My best wishes to each one of you.

Regards,
Ajay Tare

From the Chairman's desk



Dear Members,

Wishing you all Happy Diwali!

As you are aware we got a standing ovation during the annual day celebration. Under Udayan Pathak's chairmanship we have set very high standards for ourselves.

We got 2 Chapter awards last year from ASM International. Add to that our MA chapter at Cummins College of engineering Nagpur got another award for highest membership growth.

Getting awards adds greater responsibility to all of us. Hence, we need to sustain the current activities and add a few, our members have been missing.

We have planned many activities for the coming year and request all members to get involved in any activity of their choice.

Some of our major upcoming events are:

- MNMT 2024, a conference focused on heat treatment and surface modification.
- Students Materials Camps at Pune and Nagpur.
- We already conduct online technical programs, however this year we plan to organize a few network meets along with the technical programs which we missed during the past few years.

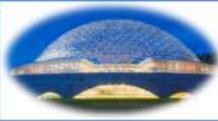
All these programs require the active involvement of all members.

Many members have come forward and already become part of one or more of our chapter activities.

Your involvement will take our chapter to greater heights and will also be an extremely enriching experience for you.

Kindly come forward, your suggestions and active involvement is our chapter's need.

Regards
Rahul



INC Meeting

- Mr. V. Babu Sathian, INC Chair, delivered an informative and inspiring speech. He emphasized the national and international perspectives of materials science, underlining the global relevance of the discipline and the potential for impactful collaborations.
- Dr. Kamachi Mudli, an ASM Trustee, delivered a thought-provoking address on the importance of a strong industry-academia connection. His speech highlighted the potential of collaborative efforts in advancing materials science research and education, reinforcing the critical nature of partnerships in the field.
- Each chapter gave individual presentations to showcase their activities and achievements to all ASM members.

Annual General Meeting (AGM)

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The AGM 2023 was held after the INC meeting and the following activities were conducted:

- 1) Activity report was presented and adopted
- 2) Finance report was presented and adopted
- 3) Shete & Shete were appointed as auditors for the upcoming year
- 4) Election results were declared by Mr R T Kulkarni. The new committee will hold office for a term of 2 years.

Annual Day 2023: Strengthening Industry-Academia Bonds

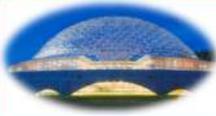
- On October 7, 2023, students from various institutions and ASM chapters had a unique opportunity to participate in the ASM Annual Day Meet in Pune. This annual event served as a significant platform for enhancing the connection between industry and academia in the field of materials science. The day was packed with activities, including presentations, awards, and networking sessions, providing an invaluable experience for the students.
- The evening began with a warm welcome as students from various institutions, along with chapter members, gathered for registration. Over welcome drinks, attendees had the chance to break the ice and connect with one another. This friendly atmosphere set the stage for a day of learning, collaboration, and camaraderie.
- The welcome address, delivered by the event organizers, set the tone for the ASM Annual Day Meet. It emphasized the importance of collaboration and knowledge-sharing among various institutions and professionals in the field of materials science. The event was anchored by Ms. Aradhana Sadarjoshi, Secretary ASM Chapter GIT, and Ms. Swara Tupe, Chairman, ASM Chapter Cummins College for Women, Nagpur.
- Udayan Pathak, Chairman of the ASM Pune Chapter, presented a comprehensive overview of the chapter's achievements and milestones. This segment shed light on the chapter's contributions to



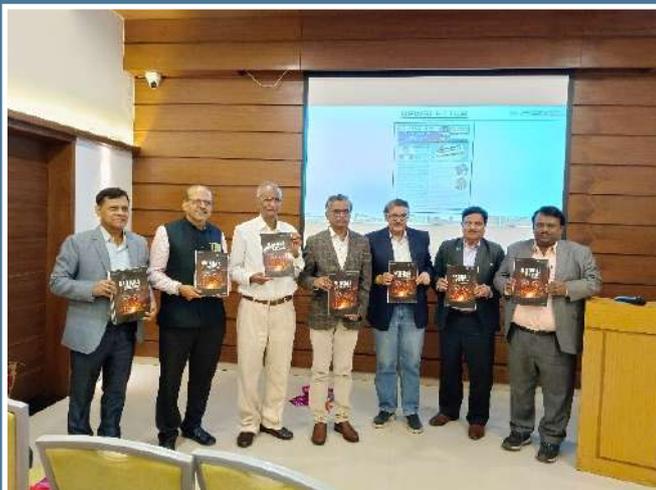
advancing the field and highlighted the significance of collective efforts. The presentation also candidly addressed areas where targets were missed and efforts to improve in those areas. The students had the opportunity to showcase their research, work, and initiatives during this segment. Their presentations demonstrated their dedication to the field of materials science and their commitment to driving progress. Other ASM Chapter presentations were also featured, providing a broad spectrum of insights and innovations.

- The event included an awards segment where outstanding contributions and performances in materials science were recognized and celebrated. The awards celebrated the hard work and innovation within the materials science community, further motivating professionals and students alike.
- Anticipation and excitement filled the room as an upcoming materials science conference was announced. The introduction of the guest speaker was a prelude to the highly anticipated technical talk. The speaker, Dr. R. K. Singh (KTFL), an eminent authority in materials science, promised to deliver an insightful and informative presentation. The technical talk was a highlight of the event, as the expert speaker explored current trends, emerging technologies, and challenges in materials science. Attendees left with a deeper understanding of the subject, inspired to engage in dialogue and critical thinking. Following the technical talk, a Q&A session allowed attendees to interact with the speaker, seeking clarification and insights on various aspects of materials science. This interactive session fostered active learning and knowledge-sharing.
- The contributions of Dr. R. K. Singh (KTFL) and Prof. Sandeep Deshmukh (SCOE) were acknowledged and celebrated during this special segment. Mr. Satyam Sai was also felicitated for his notable achievements. Their invaluable work and expertise in the field of materials science were a source of inspiration for all attendees.
- The Annual day meet marked a pivotal transition in leadership as the new committee was unveiled. This transition symbolized the continuity and growth of the ASM Pune Chapter, ensuring the pursuit of its goals and objectives. Mr. Rahul Gupta made this announcement, underlining the commitment to progress.
- The release of the first INC (Indian National Chapter) and ASM Pune Chapter newsletter provided a valuable platform for sharing knowledge, insights, and updates within the materials science community. This newsletter promises to be a significant resource for professionals in the field.
- The contributions of various ASM members were recognized and celebrated, highlighting the collective achievements in the field. The support and encouragement of spouses were also acknowledged, underscoring the importance of a strong support system behind so much effort. The event concluded with a heartfelt vote of thanks to all participants, speakers, and organizers. It recognized the collaborative effort that went into making the ASM Annual Day Meet a resounding success, and the importance of each individual's contribution. A cocktail and networking dinner provided a relaxed and informal setting for attendees to continue their discussions, make new connections, and strengthen existing ones. This segment encouraged fruitful conversations and collaborations within the materials science community.

Sadhana Sadardoshi
GIT COLLEGE Belgavi



Some glimpses of the INC Meeting, AGM and Annual Day





NEW EXECUTIVE COMMITTEE

Mr. Dhruv Wani Secretary	Mr. U.C. Patil Treasurer	Ms. Rupa Ranve Secretary	Mr. Hemant Zaveri Treasurer

- Anusudhakar (Member)
- D. D. Deshpande (Member)
- Krunal Deshpande (Member)
- Ananturam Deshpande (Member)
- Yash Deshpande (Member)



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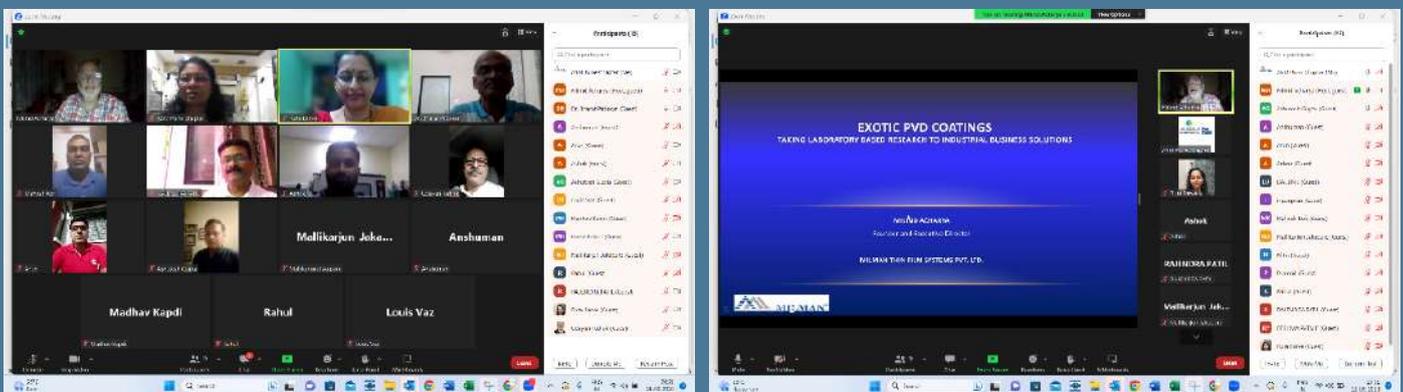

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Technical talks

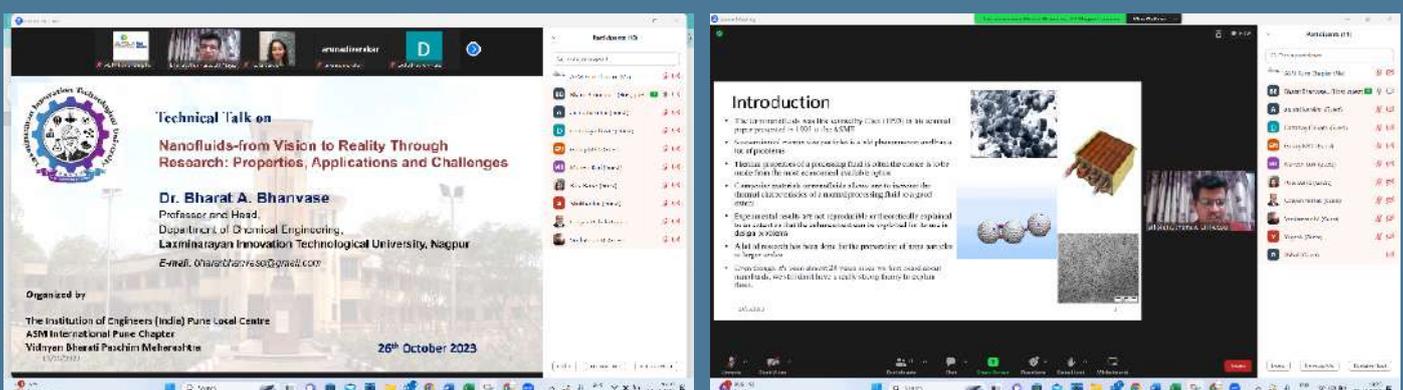
Dr Acharya's lecture on 'Exotic PVD coatings: Taking Lab level research to Industrial business solutions' was conducted online on the 21st of September. Dr Acharya has completed his PhD from IIT Delhi on TFT LCD displays and has several patents to his name. He works in his company MILMAN which manufactures advanced plasma-based equipment for coatings.

Dr. Acharya explained his inspiration Dr. KL Chopra, the timeline and problems faced in new technology development, hot filament CVD used for diamond film growth, measurement of time and pressure during cavity preparation, performance comparison of micro-crystalline and nano-crystalline recipes, nano crystalline diamonds for dental bur, the advantages of plasma nitriding to reduce wear and process details, bipolar plates and its applications, microwave CVD for large area diamond deposition, and the way ahead with NEP.



Another online lecture, 'Nanofluids-from Vision to Reality Through Research: Properties, Applications' by Dr Bharat A. Bhanvase was also held on the 26th of October. Dr. Bharat Bhanvase has a PhD in Chemical Engineering. He has over 20 years of teaching experience and specializes in ultrasound assisted processes, microfluids, nanomaterials and polymer nanocomposites, process intensification and many more. He also has several patents to his name.

Dr. Bhanvase gave an introduction and explained the properties of nanofluids as well as its applications, advantages and disadvantages. In the introduction he explained the heat transfer mechanisms between solids, liquids and solid-liquid interfaces. He then proceeded to heat transfer mechanisms and models in nanofluids as well as an application case study of nanofluids used in the automobile industry. He also covered the challenges and the future of nanofluids.



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Students Outreach

Material Advantage Students Chapter Under American Society for Metals

Dr Vasant Khisty gave a lecture in Government Polytechnic Pune on the 13th of October on Metal Working processes under advanced Forging Technology.

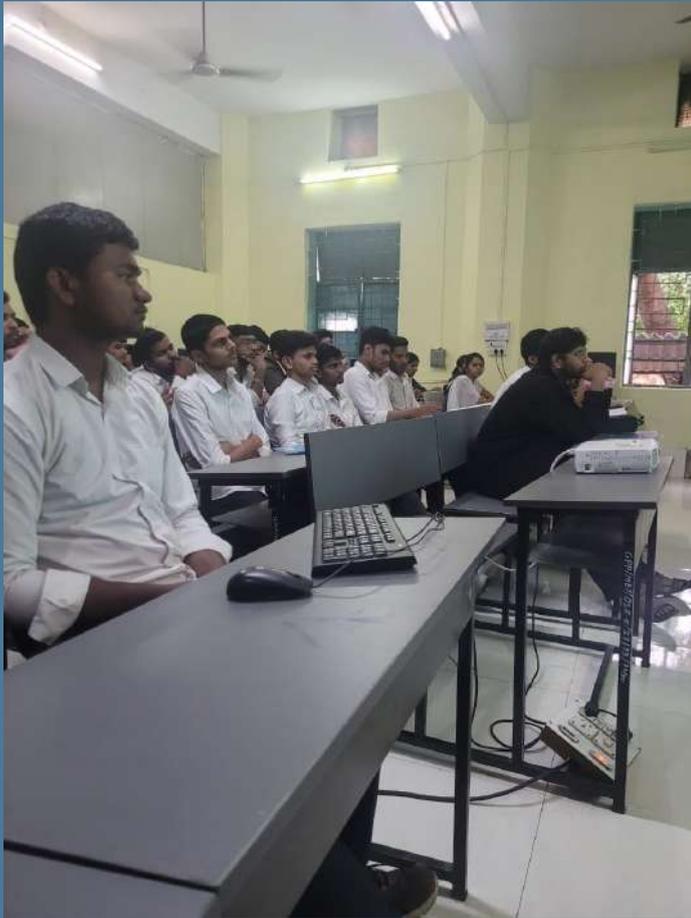
Another lecture on Vacuum hardening was also given by Pune Bhat Metals. A Materials Camp was also held in the Metallurgy department on the 17th and 18th of October.



Nagpur MA Chapter Proceedings

Material Advantage Student Chapter of Cummins College of Engineering for Women Nagpur affiliated to ASM International Pune Chapter secured 1st rank against chapters all over the world in Fall Recruitment Challenge. They also received a handsome amount of \$1000 as a reward for this.

The executive committee of MA Student Chapter Nagpur has worked diligently to achieve this. The outreach committee worked to connect to the maximum possible number of students. The program committee conducted over 20 programs in 20 days to provide an essence of Material Advantage benefits to the member 'to-be'. This was made possible by valuable guidance from ASM International Pune Chapter and with endless support from faculty advisor Prof Dandekar.



Upcoming Events

A Materials Camp will be held next month

(December 2023)

in GPP Pune and in April

in Cummins college, Nagpur.



ASM International Pune Chapter

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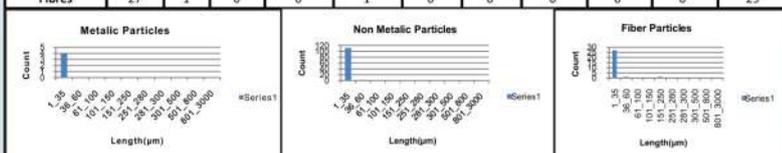
PARTICLE TEST REPORT.

Customer	ABC		
Part No:	A124N	Recd Date:	04-Jun-18
Report No.:	1672	Department :	QA Lab
Sample ID:	ABC	Test Date:	05-Jun-18
Analysis:	Particle	Standard Specification:	As per ISO 16232
Magnification	100X	Filter paper Size:	47 mm
No. of Fields :	5	Scanning Area	30 mm



Particle Size Analysis

Size ranges(µm)	1_35	36_60	61_100	101_150	151_250	251_280	281_300	301_500	501_800	801_3000	Total Count
Metallic	4	0	0	0	0	0	0	0	0	0	4
Non Metallic	111	3	0	0	1	0	0	0	0	0	115
Fibres	27	1	0	0	1	0	0	0	0	0	29



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