

METALLOMANIA

Overview

ELIGIBILITY CRITERIA	Open to all students pursuing Bachelors/Masters/PHD in any science and engineering college
TEAM SIZE	1 (Individual Participation event)
SUBMISSION DEADLINE	20th March 2023
FINAL EVENT DATE	2nd April 2023
PRIZE WORTH	18k

Description

“One atom in my hand can be one universe”.

Our curiosity to explore this universe within every thing that we touch and see is the foundation of this event.

This two round event focuses on the aspect of materials characterisation. Participants are invited to display interesting and unique microstructures they have observed using specimens found from everyday objects. The final round of the event challenges the participants to analyse and characterise a given material based on experimental reports. Metallomania aims to bring out the analytical skills of a material scientist and show their technical prowess.

Rules

General Rules:-

- This is an individual participation event.
- All the members must compulsorily be registered on the website before registering for the event.
- This event will have two rounds: Online round + Final offline round
- Round 1 results will be mailed to the participants selected for the final round
- The event is open themed. Participants can procure and present any specimen available to them for the online round. Final round will also be based on general material characterisation principles.

Rules for round 1:-

- Participants are expected to procure samples from around them which when observed under the microscope offer interesting features and microstructures. The micrograph of the specimen observed under suitable microscope (OM/SEM/TEM) has to be recorded and submitted for this online round.
- Along with the micrograph, participants have to submit two captions for the same- one explaining the scientific and technical aspect of the microstructure and other highlighting the creative and unique aspect. The submission should also include the motivation of the participant and the procedure followed by the participant.
- Submissions will be taken through forms. The micrograph has to be submitted in JPG format. The caption and procedure documents are to be submitted in pdf format.
- Submissions will be evaluated on the basis of sample preparation, caption and creativity.
- Submissions found to be plagiarized during any stage of review shall be rejected.

Rules for round 2:-

- In this round, the participants will be provided with experimental results of material characterisation of certain samples. The results include OM/SEM/TEM microstructures, XRD analysis, EDS, WDS results etc.
- A questionnaire will be released during this round. Participants will be given time to analyse the given results and prepare their report based on the questionnaire.
- Reports will have to be presented in front of a panel of judges.
- Each participant will be given 10 minutes to present their analysis
- The submissions will be evaluated on the basis of depth and accuracy of results and approach of the participant.

Judging Criteria

- Round 1 will be evaluated based on the four components of the submission with weightage as follows
 - Micrograph and Specimen Preparation: 35
 - Technical Caption: 15
 - Creative Caption: 20
 - Motivation and Approach: 30
- Round 2 will be evaluated on the basis of accuracy of analysis, approach taken by participants and the presentation skills. Decision of the judges shall be final and conclusive

Frequently Asked Questions

Q: What technical knowledge do I need to have to participate in this event?

A: Knowledge of Basics of Material Characterisation techniques and Sample Preparation methods will be necessary for this event.

Q: Which software will have to be used for this event? Will the software be provided to us by COMPOSIT?

A: Image Analysis and Plotting softwares like ImageJ and Origin will be required for the final round. The software installation and usage instructions will be informed to the participants with Round 1 results.

Q: Are personal laptops required in the final round?

A: Yes

Q: What is the word limit for the captions and motivation description?

A: Word limit for Caption: 100 words

Word limit for Motivation description: 300 words

Q: What do I need to explain in the motivation of the online round submission?

A: Participants have to describe the procedure they followed for sample preparation and observation in the first round. They are required to present their motivation behind choice of sample and choice of observation method chosen.

Q: Will the first round results have weightage in the final results?

A: Yes

Q: Are more than one submissions allowed for the first round?

A: No

Contact

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