Material Advantage Poster Judging Guidelines

Summary:
All student posters shall be reviewed by at least two (2), post-graduate, non-student, volunteer judges. Judges should represent all the Material Advantage participating professional organizations. Judges may preview the posters only for esthetic purposes prior to students staffing the posters. Student presenters shall give a high level overview of their project, approximately 5 minutes. The judges may then ask questions to clarify anything with respect to the scoring guidelines. After the questions, the judge shall score the presenter based on the following categories: hypothesis or objective; research approach; results; conclusions; poster appearance and presentation. A total number of points available to earn is 25.

Student Presentation Guidelines:
• Student should introduce him/herself, the university, any collaborators and his/her year in degree program.
• Student’s presentation should include the hypothesis of the work and any relevant background. The student should describe the scientific approach and results.
• The student should describe his/her conclusions and whether the hypothesis was answered. If the hypothesis is not answered, what is being done to get an answer?

Guidelines for judges:
• Judges should introduce themselves, where they work and the fact that they are one of the judges.
• Judges should use the question/answer period to clarify anything that was discussed in the presentation.
• Judges should also ask questions to verify certain scoring elements can be cleared. For example, if the student didn’t state the hypothesis in his/her presentation, the judge should ask for the hypothesis.
• Judges should ask questions which give information on the level of understanding of the student. Is the level of understanding appropriate for the student’s stage in school?

Scoring guidelines and point value:
• Hypothesis or objective statement (5)
  o Excellent, 4-5 points: Student has clearly identified the hypothesis and objective of the research in the presentation and on the poster.
  o Fair, 2-3 points: Objective of the work was clear, but no stated hypothesis in the presentation. In questioning, student was able to articulate the hypothesis.
  o Poor, 0-1 point: No hypothesis was stated, objective was unclear. No clear explanation of why the research is important.
• Approach to answering the hypothesis (5)
  o Excellent, 4-5 points: Student presents a clear and concise explanation of the research approach. The research approach is appropriate for the level of the student. Student has anticipated some technical questions.
• Fair, 2-3 points: Student’s presentation is somewhat unclear or minor elements are missing.
• Poor, 0-1 point: Research approach is not described or is unclear and critical elements are missing.
• Judges should give some wiggle room here if the capability required is not available at the student’s university.

• Results (5)
  • Excellent, 4-5 points: Student can clearly articulate the data obtained from the research approach and clearly understands the work as appropriate for the student’s level. All figures contain captions describing the figure. He/She can describe the limits of the data as appropriate for the student’s level.
  • Fair, 2-3 points: Student presents the data, but detailed level of understanding for the student’s level is not quite there yet. A reasonable understanding of the limits or error sources is discussed.
  • Poor, 0-1 point: Student presents the data, but is unable to describe the meaning of the data. No errors or limits in the data is discussed. Figures do not have captions and/or do not have adequate information.

• Conclusions and impact (5)
  • Excellent, 4-5 points: Student has drawn reasonable conclusions from the data presented and clearly describes the impact of the work. Student indicates that the hypothesis has or has not been answered. Student has a reasonable description of future work which is acceptable to his/her level in school.
  • Fair, 2-3 points: The interpretation of the data is too broad or too narrow. The description of future work is too simplistic or too idealistic.
  • Poor, 0-1 point: The conclusions are not reasonable with respect to the data presented. No discussion of the hypothesis.

• Poster appearance and presentation (5)
  • Excellent, 4-5 points: The poster is clearly legible from standing distance, no spelling errors and plots are labelled appropriately. The student’s presentation was clear and concise. The poster is well organized.
  • Fair, 2-3 points: The poster could be improved in terms of font sizes and size of plots/scale bars. The presentation was clear, but perhaps too long. The poster is not simple to follow or is crowded.
  • Poor, 0-1 point: The poster is illegible and the student did not speak clearly. There is a lack of organization.
  • Points are not to be taken away based on printing quality or if the poster is on multiple sheets of paper.

Providing feedback to students:

Feedback shall be provided to students if a student wishes to receive it. The organizer of the competition can give the scoring sheets to the students interested in viewing them once all award decisions have been made. The individual judges may also give appropriate feedback if the student asks for it.

Soliciting Judges:
• Judges for the poster competition will be solicited from EPDC and YPN members. Additionally, judges shall be nominated from the session organizers of the MS&T conference so that a diverse group of judges is obtained.

**Scoring Rubric Sheet:**

The scoring rubric sheet includes a description of a “perfect score” for each scoring element. It is up to the judge to determine if the perfect score is achieved. If it is not, the judge must include a sentence on how the presenter could improve in the space provided. The judge shall add up the total number of points and place it in the total box, at the bottom right.