ACS Chemistry for Life™

MARYLAND SECTION

Chemagination

Student Guide

1. **Obtain information from your teacher about the contest, select your team, and category.**
   - ✓ Read the "Contest Overview".
   - ✓ Look at the categories; brainstorm some topics for each category and select your favorite.
   - ✓ Visit the *ChemMatters* website to see its current style at: www.acs.org, keyword search: ChemMatters.
   - ✓ Visit the ACS Princeton Section website to see Chemagination entries from past years.
2. **Begin work.**
   - ✓ Conduct preliminary research. Use at least three technical, professional resources.
   - ✓ Discuss roles of each team member and how you will divide up the work.
3. **Look for additional sources of information.**
   - ✓ Are there local chemists, engineers, physicians, environmentalists, or other scientists you could interview about their view of the future of the field? Don't forget to include them in your references.
   - ✓ Search the Web for any indications about where the field is headed (Start with www.acs.org).
   - ✓ Use chemistry you learned in class and let your imagination lead to a new level.
   - ✓ Support your innovation with **factual** information from your resources and with **logical** explanations.
4. **Re-read the "Rules" on the "Contest Overview" page, and create your article and cover design.**
   - ✓ Remember, this is a feature article in an issue of *ChemMatters* 25 years from now.
   - ✓ Read the "Self-Evaluation Questions" (Student Guide p. 2) to be sure key elements have been included.
   - ✓ Spell check and proofread your document; share it with someone else for feedback.
   - ✓ Cite at least three technical references.
   - ✓ Include your names, your school and your category on the last page of your entry.
5. **Meet the deadlines your teacher sets.**
   - ✓ Your teacher has to meet a deadline (March 22, 2013) to submit your school's top entries so that the judges can score the articles before the day of the local competition.
   - ✓ Failure to meet deadlines may result in ineligibility for the contest or in omission of information printed in the program.

If you are representing your school in the Chemagination competition:

6. **Create the visual display.**
   - ✓ It should be 24" deep, 40" wide and 48" tall or less, and be able to sit on a table, much like at a science fair. Remember that presentation is key in drawing interest to your article. Pay attention to how your display looks. Make sure it is neat and presentable.
   - ✓ You must include the *ChemMatters* cover design, the title of your article, and your list of references.
   - ✓ This should be a visual representation of the article's content with a minimum of text.
   - ✓ Consider "extra touches" like enlarging your cover design, highlighting developments that led to the innovation, graphs, illustrations, or writing a summary of your article for the display.
7. **Rehearse answers for questions the judges may ask during the interview.**
   - ✓ Use the "Sample Interview Questions" that will be sent to you.
   - ✓ Re-read the "Self Evaluation Questions" (Student Guide p. 2) and ask yourself how your project addresses each of the questions.
8. **Attend the competition.**
   - ✓ Dress for success.
   - ✓ At least one member of the team must attend.
   - ✓ Information will be sent with directions to the competition site, details about the arrival time and parking for the competition.
   - ✓ Upon check in, you will be directed to the contest area.
   - ✓ Set up your display.
   - ✓ You will receive additional information regarding the flow of events prior to and during the contest.

Self-Evaluation Questions

The articles and poster displays should show scientific thought, be creative, clear, thorough, and have evidence of teamwork.

Scientific Thought

- ☐ The background for the innovation includes information based on chemical principles.
- ☐ There is evidence that the team understands the chemistry behind the innovation.
- ☐ There is a reasonable amount of explanation and description of the innovation in the written article.
- ☐ The conclusion explains how this innovation will help improve the quality of people's lives 25 years from today.
- ☐ The article includes the challenges in implementing the plan and reflects the team's understanding of these challenges.
- ☐ More than three sources from scientific literature as well as popular literature are referenced in the reference/resource section of the article.
- ☐ The article demonstrates an understanding to the extent of the influence on the quality of people's lives and the consequences of the innovation to this quality.

Creativity

- ☐ The article presents the idea/innovation in a distinctive manner while incorporating knowledge of chemistry.
- ☐ The innovation contributes uniquely to the quality of people's lives 25 years into the future.
- ☐ The cover design for the magazine and the pages of the article are designed to fit the style of ChemMatters.
- ☐ The display is clever or unique in such a way so that it stands out from the others in the competition.

Clarity

- ☐ The innovation is described clearly in the article.
- ☐ The focus of the innovation is well defined in the article.
- ☐ The chemistry behind the innovation is stated clearly in the article.
- ☐ The chemistry behind the innovation is explained thoroughly and accurately.
- ☐ The poster display explains and supports the article.

Thoroughness

- ☐ Each of the rules listed in the "Contest Overview" have been followed.
- ☐ The description of the breakthrough/innovation is complete.
- ☐ The chemistry concepts and content have been explained in the article.
- ☐ Spelling and grammatical errors have been checked and corrected in both the article and the display.
- ☐ The visual display reflects the theme of the article.
- ☐ The display is neat and free of errors.
- ☐ At least 3 technical resources have been cited in the reference/resource section of the article.
- ☐ The diagrams and illustrations in the article are appropriate to develop the theme of the innovation.
- ☐ Time has been spent in preparation for the contest. The team is prepared for the competition.
- ☐ The team is familiar with the resources used to develop the article.

Teamwork

- ☐ Each team member was fully involved with the project.
- ☐ The team member(s) presenting the poster understand the intent of the article/innovation and is (are) ready to present in front of the judges.
- ☐ Team members did the work as a team. If other people helped in the development of this innovation, they are clearly referenced in the resource/reference section of the article.