



## **How to Participate – Guide for Students**

### **1. Obtain information from your teacher about the contest and begin research.**

- Read the Chemagination overview page for deadlines and general information.
- Look at the four categories: Alternative Energy Resources, Environment, Medicine/Health, or New Materials. Brainstorm some topics for each category and select your favorite.
- Visit the *ChemMatters* website to see its current style.

### **2. Select your team and begin work.**

- A team consists of two or three students.
- Conduct preliminary research. Use at least three resources.
- Discuss roles and how you will divide up the work.

### **3. Look for additional sources of information.**

- Are there local chemists you could interview for their view of the future of the field?
- Search the web for any indications about where the field is headed (Start with <https://www.acs.org/content/acs/en/education/resources/highschool/chemmatters.html>).
- Use chemistry you learned in class and let your imagination lead to a new level.
- Support your ideas in factual information and with believable explanations.

### **4. Re-read the Chemagination 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 your document, or share it with someone else for feedback.
- Cite at least three references.
- Include your names, your school and your category on the cover page and the last page.
- Your teacher needs to submit: The \$90 fee/entry postmarked no later than **February 16<sup>th</sup>**.
- Your teacher needs to submit: The article and cover page for each entry to Dr. Carlos Sanhueza ([chavezc@stjohns.edu](mailto:chavezc@stjohns.edu)) by **February 16<sup>th</sup>**. Instructions will be posted/e-mailed.

### **5. Meet the deadlines your teacher sets.**

- Your teacher must meet a deadline to submit your school’s top entries, so that the judges can score the articles.
- Failure to meet deadlines may result in omission of information from the program or ineligibility for the contest.

### **6. For the poster presentation, create a visual display.**

- Purchase a science fair-type presentation board from an office supply store
- Remember that presentation is the key. Pay attention to how your display looks.
- Consider “extra touches” like using one panel to cite important references, enlarging your cover design, printing your article in a larger font, or writing a summary of your article for the display.

### **7. Rehearse answers for questions the judges may ask.**

- Re-read the “Self-Evaluation Questions” and ask yourself how your project addresses each.

### **8. Attend the competition.**

- Information will be sent with 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.
- Must be present to win the competition

Questions? If it’s something your teacher can’t answer, they have the information to contact us!

## **Self-Evaluation Questions**

*The articles and poster displays should show scientific thought, be creative, clear, thorough, and have evidence of teamwork. Ask yourselves the following questions to see how you are doing in each category:*

### **Scientific Thought**

- Is the background for the innovation based on chemistry/chemical principles?
- Is there evidence that you understand the chemistry behind your innovation?
- Does a reasonable amount of explanation accompany the description of the innovation?
- Are the conclusions about the usefulness to teenagers explained?
- Does the article explain what happened in the 25 years prior (from today to the date of publication) that allowed it to be developed?
- Are challenges in implementing the plan included and does the article reflect the team's understanding of those challenges?
- Is scientific literature as well as popular literature referenced?
- Do you understand the extent of the influence and the consequences the innovation may have?

### **Creativity**

- Does the proposed innovation reflect creativity and originality?
- Does the article present the idea in a distinctive manner while incorporating knowledge of chemistry?
- How will the innovation contribute uniquely to the quality of life of a teenager 25 years in the future?
- Are the cover and pages of the article designed to be part of a magazine?
- Is there something clever or unique about the design that makes the display stand out from the others?

### **Clarity**

- Is the innovation described clearly and directly with its focus well defined?
- How clearly does the team explain how the innovation is used?
- Is the role chemistry played in bringing about the innovation stated?
- Is the chemistry behind the idea explained thoroughly and accurately?
- How well does the poster display explain and support the article?

### **Thoroughness**

- Have all of the rules been followed?
- How complete is the description of the breakthrough/innovation?
- How well are the chemistry concepts and content explained?
- Have spelling and grammatical errors been eliminated?
- Does the visual display reflect the article?
- Is the display neat and free of errors?
- Have at least three sources been cited and are they from places other than the Web?
- Do the diagrams and illustrations fit with the article?
- Has enough time been spent in preparation?
- Is the team familiar with sources they listed?

### **Teamwork**

- Does it appear that each team member was fully involved with the project?
- Do the team members presenting the poster understand the intent of the article/innovation?
- Did the team carry out the project themselves, or did someone else help?