



## MARM 2024 CHEMAGINATION DESCRIPTION AND RULES

### CONTEST OVERVIEW

For this event, high school students are asked to imagine that they are living 25 years in the future and have been invited to write an article for ChemMatters, a magazine for high school students that focuses on the role of chemistry in everyday life. In addition to the article, students are asked to design the cover art for the magazine. The subject of the article is: *“Describe a recent breakthrough or innovation in chemistry (and/or its applications) that has improved the quality of people’s lives today.”* To view a sample [ChemMatters](http://www.acs.org/content/acs/en/education/resources/highschool/chemmatters.html) magazine visit [acs.org](http://www.acs.org), and look under Education: <http://www.acs.org/content/acs/en/education/resources/highschool/chemmatters.html>.

The article must be written as if the student is living in the year 2049, looking back at innovations that have occurred since 2024. The innovation must fall into one of the following categories:

- \* Alternative Energy
- \* Environment
- \* Medicine/Health
- \* New Materials

A few examples of areas where development is expected are: nanotechnology, energy efficiency, pollution prevention, green chemistry, sustainability, intelligent devices for sensing, proteomics, climate models, biopharmaceutical therapies, medical devices and/or implants and new energy sources.

Evaluation of the entry is based upon:

- (1) the written article which is submitted in advance,
- (2) the presentation of the innovation on a self-standing display at the MARM 2024 Chemagination competition, and
- (3) knowledge of and soundness of the science as demonstrated in interviews with judges (much like science fair judging).

### RULES

ARTICLES must:

- be written by a team of two or three students; each student may be on only one team.
- be about 1000 words (figure captions are not included in the limit).
- present the chemistry/scientific concepts/ideas/principles behind the innovation.
- describe the innovation and indicate how it has improved people’s lives.
- present a “history” of the changes that had to occur over the prior 25 years to develop this innovation.
- include drawings, diagrams, illustrations and descriptions of the chemistry and any technology involved in all key aspects of the innovation.
- cite a minimum of three technical references.
- include a cover design for the magazine. The cover design can be an original computer graphic or a free-hand drawing.

DISPLAYS must:

- be 24” deep, 40” wide and 48” tall or less, and be able to sit on a table, much like at a science fair display.

- include the cover of the magazine.
- be a visual representation of the article's content with a minimum of text.
- include a list of references cited.

#### ATTENDANCE:

- At least one member of the team must attend the competition to present the display and be interviewed by the judges to be eligible for prizes.

#### SCORING:

- Winners are selected by the judges based on the quality of the article and display, and the quality and understanding of the science of the innovation.
- Criteria for scoring include scientific thought, creativity, clarity, thoroughness and teamwork.

#### ELIGIBILITY/REQUIREMENTS:

- Each local section can submit up to four entries (1 per category).
- All students must be currently enrolled in an accredited high school or home school, and be taking or have recently completed a grades 9-12 science class.
- Students and their parents are responsible for transportation to and from the meeting site.
- All entries become the property of the ACS and will not be acknowledged or returned.
- The ACS, its agents and contractors, are not responsible for lost, late, misdirected, or postage-due entries.
- Acceptance of the prize constitutes consent to use the winners' names, likeness and entries for editorial, advertising, and publicity purposes.
- Prizes are not transferable.
- Taxes, if any, are the sole responsibility of the winner.
- Participants will be asked to provide a Photo Release Form signed by a parent or guardian prior to attending the contest.

#### KEY DEADLINES

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| March 22 | Local sections notify MARM 2024 Chemagination Chair of their preliminary intent to participate in MARM 2024 Chemagination.  |
| April 8  | Local sections confirm their intent to participate in MARM 2024 Chemagination.  |
| May 6    | Local Sections submit their estimate of the number of teams they will be sending to the MARM 2024 Chemagination.  |
| May 18   | Local sections submit the Chemagination entry forms, which include the article titles for each category and the name and contact information for each student.<br>(Submission process will be announced at a later date.) |
| May 31   | Teams submit their articles for pre-judging.  |
| June 8   | The MARM 2024 Chemagination competition takes place at The Pennsylvania State University, University Park, PA.  |