

2021 VIRTUAL NY ACS 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. 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 magazine visit [acs.org](http://www.acs.org), and look under Education: <http://www.acs.org/content/acs/en/education/resources/highschool/chemmatters.html>.

In addition to the article, students are asked to design a cover for the magazine. The article must be written as if the student is living in the year 2046, looking back at innovations that have occurred since 2021. 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.

In place of a poster which is part of the entry for an onsite competition, teams are asked to supply answers in writing (200 words or less) to the following questions about the discovery/innovation:

1. How did this research begin? What prompted or catalyzed the idea?
2. How did this research evolve from the initial research idea to the final innovation 25 years later? What were some of the key breakthroughs?
3. How did your research team work together and collaborate over the years?

Evaluation of the entry is based upon:

- (1) the written article which is submitted in advance,
- (2) the knowledge of and soundness of the science as demonstrated in the article and in the answers to the required questions above.

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 the “past” 25 years (starting from 2046) 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.

SCORING:

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

ELIGIBILITY/REQUIREMENTS:

- 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.
- 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.

KEY DEADLINES:

- | | |
|-------------|--|
| February 8 | High school teams confirm their intent to participate in Virtual 2021 NY ACS Chemagination and submit the number of teams that will be participating. |
| February 22 | Teams submit their entries (article, cover art and answer to questions) for evaluation by the judges. Please upload on the NY ACS Chemagination website (link at the bottom) |
| February 22 | Submission fee of \$40 for each project is due. Please make the check to NYACS. |
| March 5 | Winners are selected and all participants notified. Prizes are then mailed to the winners. |

Aaron Muth and Carlos Chavez,
2021 NY ACS Chemagination Co-Chairs