

# Opportunities for Pre-College Educators

Division of Chemical Education  
Pre-College Committee



# Division of Chemical Education Awards



# DivCHED Region Awards for Excellence in High School Teaching

- Celebrates high school chemistry teachers
- Distributed in each of the ten ACS regions at local regional meeting
- Awardees receive \$1,000 cash, plaque, and reimbursed travel expenses to regional meeting
- See your local regional meeting website for details

*DivCHED Region Awards for Excellence in High School Teaching.*

<https://divched.org/awards/divched-region-awards-excellence-high-school-teaching> (accessed 2025-03-22).



# DivCHED Travel Award

- Supports members' travel to one ACS meeting
- 10 members can receive the award per year
- 80% of travel expenses, \$1,000 maximum for national meeting
- Applicants must be Division of Chemical Education members in their third year of membership as a minimum



DivCHED Travel Award. <https://divched.org/awards/divched-travel-award> (accessed 2025-03-22).

# DivCHED International Travel Award



- Supports members' travel to present at an international conference in chemical education
- Members who have not attended an international conference before encouraged to apply
- Available for full-time high school teachers
- After the conference, write experiences for Division of Chemical Education publication
- Applications due November 30



DivCHED International Travel Award. <https://divched.org/award/divched-international-travel-award> (accessed 2025-03-22).

# Division of Chemical Education Resources for Pre-College Educators



# Chem Ed Xchange

- Website to locate resources to use in your classroom and connect with other educators
- Resources submitted by other high school and college educators
- Webinars also available
- Submit your own resources and articles to share with others



Chemical Education Xchange.  
<https://www.chemedx.org/> (accessed  
2025-03-22).

# ACS Exam Institute

- Exams available for a variety of courses, including high school chemistry and dual-enrollment courses
- Opportunity to assess your students' performance with a national test
- Discounts available for new members of the Division of Chemical Education
- Opportunities available to contribute questions and test exams in development



# ACS Opportunities for Pre-College Educators



# ACS-Hach High School Chemistry Classroom Grant



- Funding for improvements to chemistry classrooms, such as equipment and classroom resources
- Limited to high school chemistry educators
- \$1,800 maximum
- Application deadline of June 1, 2025
- Can also be used for professional development funding



ACS-Hach High School Chemistry Classroom Grant - American Chemical Society.

<https://www.acs.org/funding/grants/acs-hach-high-school-chemistry-classroom-grant.html> (accessed 2025-03-22).

# ACS-Hach Professional Development Grant



- Funding for professional development, including conferences, courses, and books
- Limited to high school chemistry educators
- \$2,500 maximum
- Application due in January



ACS-Hach Professional Development Grant - American Chemical Society.

<https://www.acs.org/funding/grants/acs-hach-professional-development-grant.html> (accessed 2025-03-22).

# Free Resources for Elementary School Educators



- Inquiry in Action lesson plans for grades K-5
  - Next Generation Science Standards aligned
- Adventures in Chemistry experiments, articles, vocabulary activities and games for grades K-5
- Celebrating Chemistry activities related to Chemists Celebrate Earth Week & National Chemistry Week topics for grades 4-6
  - This year's topic is glaciers
  - Online copies of back issues also available
  - Recent issues also available in Spanish



*Elementary & Middle School Resources - American Chemical Society.*  
<https://www.acs.org/education/resources/k-8.html> (accessed 2025-03-22).

# Elementary School Educators



- Books available for purchase
  - Science Activity Books for Early Learners
    - Designed for grades preK-2
    - Illustrated books with stories about the science alphabet and science experiments
  - Teacher guides with activities
    - Inquiry in Action, WonderScience



Elementary & Middle School Resources - American Chemical Society.  
<https://www.acs.org/education/resources/k-8.html> (accessed 2025-03-22).

# Middle School Educators



- Middle School Chemistry
  - Free lesson plans for chemistry
  - Next Generation Science Standards aligned
  - Written as 5 E lesson plans
  - Divided into 6 units
  - Interactives and videos for each unit
  - Easy to download - one click includes all files for each unit
  - Includes test bank questions for assessments
- Also available in Spanish



# Middle School Educators



- Storyline Approach
  - Additional units on real world topics
  - Phenomenon-based approach
  - 12 lesson units, including final projects as possible assessment
  - Lava Lamp, Ocean Acidification

*Middle School Chemistry - American Chemical Society.* <https://www.acs.org/middleschoolchemistry.html> (accessed 2025-03-22).



# High School Educators



- Project SEED
  - Summer research for high school students with diverse backgrounds
  - Research available at academic institutions, companies, & government
  - Check map for opportunities in your state
  - College scholarships also available for participants
- College planning resources
  - College programs in chemistry, community college transfer, scholarships, overseas study



*High School Chemistry Student Programs  
and Resources - American Chemical Society.*  
<https://www.acs.org/education/students/highschool.html> (accessed 2025-03-22).

# High School Educators



- U.S. National Chemistry Olympiad
  - Test-based competition for high school students
  - Students selected based on performance on tests implemented by local ACS section in March
  - National test in April, used to select for international test, with studying and training for international test in June
  - International test in July
  - Review student eligibility, such as citizenship



# High School Educators



- Safety resources
- Energy Foundations for High School Chemistry
  - Focused on energy topics
  - Free lesson plans
  - Experiments, activities, and demonstrations
- Chemistry in the Community textbook
- Additional lesson resources on topics such as food, health, and the periodic table
- Scholarships: ACS Scholars program for students from diverse backgrounds



# American Association of Chemistry Teachers (AACT) Opportunities for Pre-College Educators



# ChemClub



- Support for extracurricular clubs for students interested in chemistry
- Themed experiments for student learning
- Network opportunities with chemists and undergraduate students
- Funding opportunities
  - ChemClub Community Activities Grant
    - Funds community-focused activities
    - Applications available in August
  - ChemClub Student Scholarship
    - Funds for exemplary student club leaders who plan to study STEM



# Lesson Planning Resources



- AACT Resource Library
  - Includes labs, demonstrations, simulations, & more
  - Filter by grade level & topic to find relevant activities for your lessons
  - Includes lessons for elementary and middle school
  - AACT membership provides access to resources, including teacher guides and worksheets
  - Opportunities to submit your own original activities and lesson plans



# Publications



- ChemMatters
  - Magazine of themed articles written for high school students
  - Include teacher's guides with activity ideas and reading questions
  - Most recent issue on plants and chemistry of life
- Chemistry Solutions
  - Articles on chemistry teaching and activities to use in the classroom
- Both publications included in AACT



membership

# Professional Development



- Webinars
  - Free webinars on relevant chemistry education topics
- Science Coaches
  - Program that connects teachers and chemistry experts
  - Includes funding opportunities for the classroom
- Collections of other opportunities for teachers, including grants, conferences, and other professional development



# Journal of Chemical Education



- Includes articles relevant for middle and high school teachers
- 50 free articles included each year as part of AACT membership
- Access includes other ACS Publications, such as Chemical and Engineering News

*About Journal of Chemical Education - ACS Publications.* <https://pubs.acs.org/page/jceda8/about.html> (accessed 2025-03-22).

*ACS Publications Access.* <https://teachchemistry.org/about-us/acs-publications-access> (accessed 2025-03-22).

