

News Release

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FOR IMMEDIATE RELEASE

17th annual contest challenges students to build hydrogen-fueled model cars

ARGONNE, Ill. (April 10, 2007) – Chicago-area middle school students will race to see who has built the best hydrogen-fueled model car at the 17th annual model car competition Saturday, April 28, at the Museum of Science and Industry, 57th Street and Lake Shore Drive, Chicago. Registration begins at 9:30 a.m., and racing begins at 11:15 a.m. in the museum's West Pavilion. The competition is part of the Chicago Regional Science Bowl sponsored by the U.S. Department of Energy and Argonne National Laboratory.

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The objective of the competition is to design and build a vehicle that will complete a race in the shortest possible time. The cars will race on a 10-meter course. Each car will race three times to achieve its fastest time. The cars with the four best times will race head-to-head in the final race to determine 1st-, 2nd-, and 3rd-place winners, and ultimately the regional champion.

Each team starts with a standardized kit that includes an electrical motor powered by a fuel cell. The team is required to use the unaltered fuel cell, motor and battery pack. The rest of the car design and components are limited only by the students' imaginations. They will need to design the chassis, gears, wheels, axles and gas collection/storage tank.

"The car competition requires students to use applied science and engineering skills to meet technical challenges comparable to those that scientists and engineers face to provide a lightweight, functional vehicle with an efficient powertrain, optimal gearing, minimal friction and excellent performance," said Lou Harnisch of Argonne's Division of Educational Programs. "Developing a successful design requires experimentation, teamwork and organization."

In addition to prizes for the top-performing teams, prizes will be awarded for the team with the best design and best working knowledge of the principles and considerations for using fuel cells to power model vehicles. Judging will be done by professional engineers.

The results of the fuel cell car competition will help determine the Chicago region's representative to the National Middle School Science Bowl to be held June 21-24 in Denver. The team with the best overall performance in an academic science bowl event — held earlier this year — and the fuel cell car competition will advance to the national level. This year's participants in the Fuel Cell Car Competition include:

Model Cars – add two

- Alternative Transitional Academy, Skokie
- Banneker Elementary School, Chicago
- Byrne Elementary School, Chicago
- Cass Jr. High, Darien
- Crone Middle School, Naperville
- Elm Place School, Highland Park
- Jerling Jr. High, Orland Park
- Lakeview Jr. High, Downers Grove
- Northridge Prep School, Niles
- Rock Home School Group, Downers Grove
- Roosevelt Middle School, River Forest
- St. John's Lutheran School, LaGrange
- Wright Jr. High School, Lincolnshire
- Yorkville Middle School, Yorkville

The competition, for students in grades six, seven and eight, is sponsored by Argonne, the U.S. Department of Energy's Office of Science, General Motors, CNH Case New Holland, the Society of Automotive Engineers and the Museum of Science and Industry.

The company CNH Case New Holland is the power behind leading agricultural and construction equipment brands of the Case and New Holland brand families. Its Burr Ridge Operations is located at the northwest corner of the Stevenson Expressway (I-55) and County Line Road in Burr Ridge. More information about CNH Case New Holland and its products can be found online at www.cnh.com .

Model Cars – add three

The Society of Automotive Engineers provides a forum for engineers involved in the design and production of all kinds of vehicles and their components. It also provides several student participation programs such as the Fuel Cell/Solar Car Competition and A World in Motion to cultivate engineering interest in younger members.

The nation's first national laboratory, Argonne National Laboratory conducts basic and applied scientific research across a wide spectrum of disciplines, ranging from high-energy physics to climatology and biotechnology. Since 1990, Argonne has worked with more than 600 companies and numerous federal agencies and other organizations to help advance America's scientific leadership and prepare the nation for the future. Argonne is managed by the University of Chicago for the U.S. Department of Energy's Office of Science.