44th International Chemistry Olympiad comes to University of Maryland in July 2012

For only the second time in its 44-year history, the International Chemistry Olympiad (IChO) will be hosted in the U.S. from July 21-30, 2012 and will take place at the University of Maryland.

IChO provides chemistry students the opportunity to compete at the highest levels and establish networks that go beyond cultures and borders. The American Chemical Society (ACS), a not-for-profit organization chartered by the U.S. Congress and the world's largest scientific society, is the event organizer and the University of Maryland, College Park, is acting as host facility. As part of its ongoing commitment to science, technology, engineering and math (STEM) education, The Dow Chemical Company is sole sponsor of the IChO.

More than 70 nations will send teams of four students for the ten-day event of exams, laboratory work and scientific and cultural excursions. Competition will cover several areas of chemistry, including: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, physical chemistry and spectroscopy. Qualifying student teams are typically chosen through a series of regional and national Olympiads.

IChO Background & History

The IChO is an annual academic competition for students at the secondary school level with the aim of promoting international contacts in chemistry, friendship between young scientists of different nationalities, cooperation among the pupils, and exchange of pedagogical and scientific experience. It is intended to stimulate the activities of students interested in chemistry.

The IChO is a competition of individual students, not a competition of teams. Students must be under the age of 20 and must not be enrolled as regular students in any post-secondary education institution.

The first IChO was held in Prague, Czechoslovakia, in 1968. The event has been held every year since then, with the exception of 1971. The delegations that attended the first events were mostly countries of the former Eastern bloc and it was not until 1980, the 12th annual International Chemistry Olympiad, that the event was held outside of the bloc in Austria. In 1992 ACS sponsored the 24th IChO in Washington, DC and Pittsburgh, PA.

Each delegation consists of up to four students and two mentors (one of them is designated as the head of the delegation or "head mentor"). A delegation may also include a handful of guests and scientific observers.

Countries who wish to participate in the IChO must send observers to two consecutive Olympiads before their students can participate in the event. A total of 74 countries took part in the 43rd IChO in 2011: 70 as participants and 4 as observers.

The competition consists of two examinations, a theoretical examination and a practical examination. Both have durations of up to 5 hours, and are held on separate days with the practical examination usually being before the theoretical examination.

Extensive Preparation for the Competition

The selection process usually involves holding regional and national Olympiad competitions. Many countries hold "training camps" for its top students, where mentors from the country give the students accelerated college-level courses in chemistry with an emphasis on the topics covered in that year's preparatory problems as well as practical training. It is agreed that such training programs must not exceed a total duration of two weeks.

The syllabus of the competition contains subjects from several areas of chemistry, including organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry, biochemistry, and spectroscopy. The host country of each IChO issues a set of preparatory problems well in advance of the competition every year. These preparatory problems cover specific topics in greater depth than typical post-secondary education courses.

Preparation for the International Chemistry Olympiad demands a high level of understanding and interest in chemistry and an outstanding ability to relate chemical subjects with one another as well as with the practical world.

More Information?

www.acs.org/olympiad

www.icho2012.org