Young Ambassadors for Chemistry

Krasnoyarsk, Russia, 14–18 November 2005

Following events in Taiwan and Argentina, the third leg of the Young Ambassadors for Chemistry (YAC) project was in Krasnoyarsk, Russia, where activities took place from 14–18 November 2005. The main aim of the YAC project is to popularize and raise public awareness of chemistry by encouraging young students to act as ambassadors for chemistry. The YAC project is carried out in partnership with Science Across the World, and cosponsored by GlaxoSmithKline.

Lida Schoen (center in a light color shirt) with a group of YACs

After a 24-hour journey into central Siberia, YAC representatives Lida Schoen and Keith Kelly arrived in the snow-covered city of Krasnoyarsk where they were hosted by Natalya Gapanovich and her colleagues at the Pedagogical University of Krasnoyarsk. Gapanovich is the director of the Krasnoyarsk Branch of the D. Mendeleyev University of Chemical Technology of Russia, based in Moscow. Professor Natalya P. Tarasova, titular member of IUPAC's Committee on Chemistry Education—a member of the Russian Academy of Sciences and director of the Institute of Chemistry and Problems of Sustainable Development at D. Mendeleyev University—also played an important role in the coordination of this event and arranged formal invitations and visas for all participants.

Opening

Dean Vladimir Fadeev from the Pedagogical University kicked off the event by welcoming the YAC project to the city and encouraging interschool investigative research projects. Gapanovich also gave opening remarks and read a special letter to the participants, stressing the importance of communicating science to young people and encouraging them to become competent science spokespersons. The letter was signed by academician O.M. Nefedov, chair of the National Committee of Russian Chemists, member of the IUPAC Bureau, and head of the Higher Chemistry College of the Russian Academy of Sciences at D. Mendeleyev University; academician N.P. Laverov, vice president of the Russian Academy of Sciences and head of the Higher College of Rational Use of Natural Resources at D. Mendeleyev University; and Natalya P. Tarasova.

YAC Krasnoyarsk

Forty-three teachers, including 10 English teachers, traveled from all parts of the Krasnoyarsk region for the five-day YAC activity. Ultimately, students and participating teachers serve as mediators between the public and the activities, as they explain what is going on and answer questions. This enables them to gain valuable feedback from the public.

in workshop with a group of teachers

Workshops for Teachers

From 14–17 November, participants engaged in the four-day preparation for the ultimate YAC day event. After introducing themselves, their regions, and their

practice before the YAG day

schools, the participants were introduced to the Science Across the World program. Currently, this program has a membership of more than 3 600 teachers in 114 countries. The program aims to unite students from all over the world in the discussion of scientific topics, all of which have a cultural component. English teachers play a pivotal role in the program's development because English is the main exchange language used.

The workshops focused on the Science Across the World publications "Chemistry in Our Lives" and "Talking about Genetics around the World," which have been translated into Russian by Katya Gapanovitch, a former student of School No.11 in Krasnoyarsk who is now studying high school economics in Moscow. The translated material is available at the Science Across the World web site <www.scienceacross.org>. (Chinese and Spanish translations from earlier YAC events are also available.)

A debate was organized to give participants an opportunity to explore new ways of teaching. Teachers worked essentially to get the workshops ready for the YAC day. Over the four days of workshops, which followed the "train the trainer" model, participants practiced the "experiments" the students would perform during the YAC day event. These included constructing a large DNA molecule from sweets and designing and producing a new line of cosmetics, followed by the marketing of the products in a TV commercial.

A welcome by YAG Korostashev

Attendees worked diligently during the week and were eager to learn more to improve their teaching skills. Their suggestions regarding the educational situation in Russia were valuable, and their knowledge of chemistry was superb. English teacher Svetlana Salkova provided flawless interpreting throughout the week.

Friday—YAC Day

More than 100 children, teachers, parents, university students, and colleagues from the Pedagogical University joined forces to participate in the two workshops or to watch the students in action. One of the YACs, Korostashev Roman, welcomed all YACs, teachers, and the general public, while explaining in English what YAC project is all about.

A whole new meaning to 'Life is Sweet'

During the workshops, several students acted as "roving reporters" and questioned the public about the event. All visitors recognized that studying science was useful, and the majority said that their attitude toward science was changing for the better.

The YACs worked diligently, and everything went smoothly. At the end of the workshops, all pieces of the DNA model were joined to form one long string and all groups prepared a TV commercial for their new line of cosmetics. A welcome initiative

was the use of theatrical skills and music. New chemistry songs were composed, replete with scientific jargon used in actual commercials.

After the performance, the judges rated the quality, appearance, and coherence of the products, along with the originality. The winners, students of School No. 11 and Gymnasium No. 2 in Krasnoyarsk, received a bag full of scientific "goodies" donated by Science Across the World cosponsor GlaxoSmithKline. The event ended with science theater, featuring a play about a witch who misused chemistry, written by Ivanchenko Sasha, a student from Krasnoyarsk School No. 11.

The students did a wonderful job, and with the organizational talents of their teachers and clear instructions, they were able to work independently. This extremely successful day ended with official speeches, presents, kisses, good-byes, and song and dance.

Outcomes

Scientists in this region have agreed to help with the future development of the YAC project in Russia, as so many teachers are trained to share what they have learned with colleagues in neighboring schools. Now they can introduce the Science Across the World program and run a YAC event on their own.

Enhancing the public image and the popularization of chemistry by using the materials and infrastructure of an existing global science program is a positive step. Fortunately, the program also meets demands in Russia for interschool collaboration and for the development of communicative competencies in scientific education. A significant characteristic of this event is the collaboration among English and science teachers, during the event and back in their schools.

For an earlier report on YAC Taiwan, see Mar-Apr 2005 CI, p. 20. For more information about the YAC's project, contact Lida Schoen at <amschoen@xs4all.nl>.

www.iupac.org/projects/2003/2003-055-1-050.html

Can you hear the bravos? YACs were not afraid to put chemistry in songs and plays, and for everyone's entertainment.