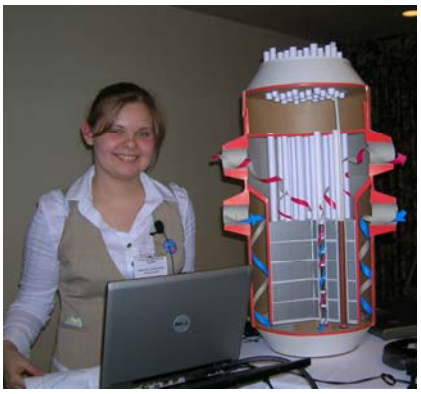
CNS Hosts Spring 2008 Critical Issues Forum

U.S. & Russian High School Students Study Pros and Cons of Nuclear Energy

On April 17 and 18, 2008, the James Martin Center for Nonproliferation Studies (CNS) conducted the Spring 2008 Critical Issues Forum (CIF) Student-Teacher Conference in Monterey, California. More than 70 students, teachers and parents from 11 U.S. high schools and 9 schools from Russia's closed nuclear cities presented their research on the topic "Nuclear Renaissance: Benefits versus Risks." The conference culminated a year-long program designed to increase student awareness of nonproliferation issues and enhance critical thinking skills. Each academic year, CIF selects a topic taking into consideration current global nonproliferation-related events. This year's topic has been especially timely given the increased international interest in nuclear energy due to growing concerns about global warming, climate change, and environmental degradation as a result of greenhouse gas emissions. This topic focuses on the peaceful use of nuclear energy and its implications for nuclear safety, security and nonproliferation. The topic encompasses the CIF content domains: scientific/environmental, social/cultural, economic, and political/geopolitical.

Franklin High School presentation: A simulated public hearing on a proposed nuclear plant provokes strong opposition from environmental groups.



Student from School of Cosmonautics Safely brought a nuclear reactor model from Zheleznogorsk.

Students from Novouralsk based their presentation on quotes by famous nuclear scientists.

California Schools	New York School	Texas Schools	Russian Closed City Schools
Charles Weber Institute for Applied Science Orinda Academy Redwood Christian High School Highland High School Franklin High School Ontario High School Genesha High School Cathedral High School	High School of Art and Design	Eden Senior High School Rochelle High School	Lesnoy Novouralsk Ozersk Sarov Seversk Snezhinsk Zarechniy Zelenogorsk Zheleznogorsk

Following welcoming remarks by Dr. Clara Yu, President of the Monterey Institute, CNS director, Dr. William Potter, shared his thoughts on nuclear energy and nonproliferation. Both President Yu and Dr. Potter warmly welcomed all the participants and congratulated each high school's remarkable achievement for this year's program.

Franklin High School from Elk Grove, California, opened student presentations with a mock public hearing on a proposed nuclear power plant near Sacramento, California. In the role play, experts and ordinary citizens addressed the pros and cons of nuclear energy and the impact of the plant on the community. Students from each school presented their research findings in a variety of innovative ways using multimedia tools, interactive games, simulations, role plays, and a documentary film on the Chernobyl accident. Several Russian high schools involved their classmates and former CIF participants, who could not physically come to Monterey, through videos of role plays and simulations prepared in the closed cities. Many American and Russian high schools also showed original video scripts featuring interviews with experts, such as nuclear physicists and engineers at a nuclear power plant.

Student presentations also highlighted past nuclear power plant accidents, including Chernobyl, Three Mile Island, and the recent incident at Kashiwazaki Kariwa in Japan. Students analyzed the causes of these accidents and presented possible solutions for preventing them in the future. A high school from Novouralsk, Russia, took a very creative and philosophical approach to this year's topic, citing Marie Currie's quotations about science and scientists' responsibilities for their discoveries and inventions. A high school from Ozersk presented a scenario of nuclear energy in 2050.

Efforts to reach out to new high schools also came to fruition. This year, CIF welcomed six new high schools to the program: High School of Art and Design from New York, three high schools from Southern California (Cathedral High School, Ganesha High School, and Ontario High School), and two schools from Texas (Eden Senior High School and Rochelle High School).

Student presentations and other materials produced by CIF students are available on the CIF program web site at www.criticalissuesforum.org.

In addition to students' creative presentations, the conference featured a keynote address by Dr. Craig Smith from Lawrence Livermore National Laboratory/Naval Post Graduate School. Dr. Smith's insightful speech featuring "Nuclear Energy at a Crossroads: the Past, Present and Future" was well received by all participants in the conference and generated many questions from students.

Dr. Craig Smith from LLNL giving
his keynote address

Interactive session: Creating a poster
on nuclear energy

Participants from Novouralsk and Ms. Elena Sokova,
CNS assistant director at awards ceremony

CNS assistant director Elena Sokova
congratulates participants from Sarov

Charles Weber Institute proudly receives
its award of excellence

Southern California Team celebrates
their achievement at awards ceremony

CIF students, who have a wide variety of backgrounds also took advantage of opportunities for engaging in cultural exchange, making contacts, and building friendships. This year, blessed with beautiful but slightly chilly typical Monterey weather, conference participants enjoyed a beach picnic outside of the conference venue. The ethnic, economic, and cultural diversity of CIF schools is a major strength of the program. As part of the conference's cultural activities, Russian participants visited the Monterey Bay Aquarium and enjoyed a one-day San Francisco tour.

CIF spring conference participants on Del Monte Beach

Beach picnic

Russian students enjoy San Francisco tour

For the high school students from Russia's closed nuclear cities, many of whom go on to work in Russia's nuclear industry, participation in CIF projects provides important exposure to nonproliferation issues. Educating the young generation in these cities about nonproliferation issues is directly relevant to the future of nuclear security, and international peace and security. A CIF partner in Russia, the Nuclear Cities Educational Information Center in Novouralsk, sponsors nonproliferation education programs for high school, college and university students in Russia.

The CIF program has a long term impact on both Russian and American high school students. For the past 10 years, CIF has established a solid bridge between Russian and American high schools in sharing the common purpose of a safer and better world through nonproliferation and disarmament education. In that time, hundreds of high school students from both countries, and dedicated teachers and staff members, have passed on their awareness of nonproliferation and international security issues to younger generations.

CNS began its high school educational outreach effort in 1997 in order to meet the needs of nonproliferation education among high school students, which was practically non-existent at the time. CNS initiated CIF in 1998 in partnership with the Lawrence Livermore National Laboratory's Science and Technology Education Program and became the project leader of CIF in 1999. CIF aims to empower students to develop informed opinions and think critically about the proliferation of weapons of mass destruction, terrorism, and other crucial international issues of the 21st century.

Nonproliferation and disarmament education at the high school level is essential in making progress in the field of international security. Educational activities in the field of nonproliferation of WMD, one of the most pressing issues in international security, is essential, not optional, in order to make progress toward a safer world. This year's CIF conference clearly demonstrated the importance of such an educational program.

Funding for this year's Critical Issues Forum is provided by the Ford Foundation and U.S. Department of Energy.

For more information about the CIF programs and activities, visit us at http://www.criticalissuesforum.org.