



SCIENCE & TECHNOLOGY  
CENTER IN UKRAINE

# ANNUAL REPORT 2007

SCIENCE & TECHNOLOGY CENTER IN UKRAINE

*For a Safer and Better World,  
Supporting the Transition of Weapon  
of Mass Destruction Research into  
Peaceful Civilian Application*





# CONTENTS

	WELCOME FROM THE CHAIRMAN OF THE GOVERNING BOARD .....	2
	WELCOME FROM THE STCU EXECUTIVE DIRECTOR .....	4
	MAJOR EVENTS AND MILESTONES IN 2007 .....	6
	FINANCIAL ACTIVITY IN 2007 .....	12
	PROJECT ACTIVITY SUMMARY .....	14
	WORKSHOPS AND SEMINARS .....	18
	TARGETED INITIATIVES .....	20
	SUSTAINABILITY PROMOTION .....	21
	STCU POINTS OF CONTACT .....	24

This document has been produced with the financial assistance of the governments of  
Canada, the European Union, and the United States of America,  
as Parties to the Agreement Establishing the Science and Technology Center in Ukraine (STCU)



# WELCOME FROM THE CHAIRMAN



**ZORAN STANIĆ**

Chairman of the STCU Governing Board

In 2007, the Centre focused on supporting peaceful scientific research projects carried out by Ukrainian, Azeri, Georgian, Moldovan, and Uzbek former weapon scientists. The projects span a wide range of thematic areas, with a particular emphasis on biotechnologies and health, agricultural sciences, environmental research, energy and industrial technologies. This is a clear sign that the Former Weapon Scientists are mainly targeting topics addressing human issues, market needs and global challenges. In addition, the very active contribution of the international collaborators is leading to fruitful exchanges for a better uptake of results, and at times, to additional investments in scientific services.

Together with its Annual Institute Sustainability Survey, completed for the first time in 2007 for all STCU recipient countries, this annual report demonstrates STCU's significant impact on the former weapon scientists' reconversion. Indeed, the studies carried out illustrate that only about half of the targeted ex-weapons R&D units have reached a sustainable business level, while for the other half, STCU's support still represents a significant share of their overall funding.

In the light of reduced Government funding, the STCU Partner Programme, which has become increasingly successful, plays an important role. The increase in Non-Governmental funding demonstrates that the Centre is a modern and pro-active organisation, capable to create win-win situations by attracting private commercial entities to invest and collaborate with the STCU recipient organisations. This achievement is of major importance, as it helps further integrating ex-WMD scientists into transparent Research and Development activities with international collaborators.

Behind a successful cooperation often lies a principle of equal partnership. The STCU Targeted Research and Development Initiatives program stems from this principle. It is based on real collaboration, whereby the funding decision and the financial support are equally shared. This program was successful to attract additional funding for former weapon scientists reconversion from the National Academies of Sciences of Ukraine and, for the first time in 2007, of Azerbaijan and Georgia. In total, 23 projects were co-funded for a total amount of more than USD 1.6 million. In addition, negotiations are ongoing with Moldova to follow the same path. Extending this principle of equal partnership is not only the expression of a successful cooperation, but also a clear indicator of progress for the STCU recipient countries.





# AIRMAN OF THE BOARD

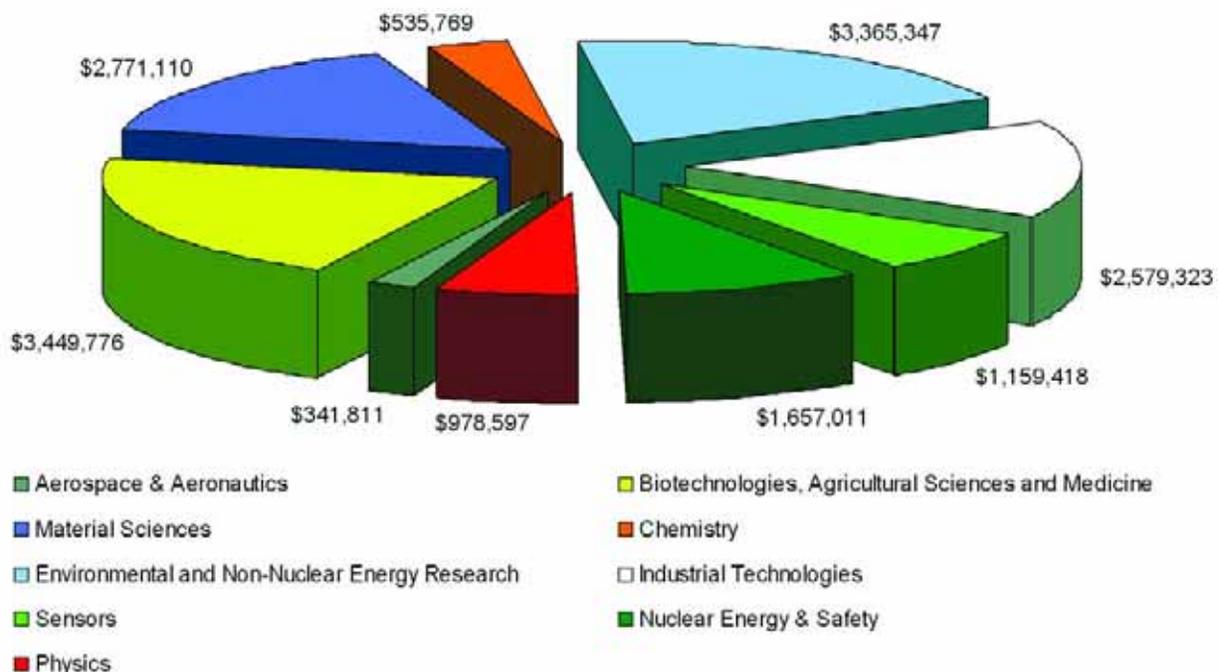
The STCU, constantly adapting to a changing environment, also kept on reflecting on how to better achieve its main objective in the near future. The Chief Technology Commercialization Officer program is one of the tangible results of this reflection. This program, which aims at laying down the basis for the former weapon scientists and their institutes to create links with a market economy, was implemented in Ukraine, Azerbaijan, and Georgia.

This reflection also led to another result: the development of a new program focussing on the sustainability of the institutes. This activity, which will start in 2008, aims at supporting the transition of weapon-based R&D institutes to sustainable and responsible organisations (in terms of non-proliferation and sensitive technology transfer), by improving their organisational capacity in order for them to be competitive in an international civilian research community.

The STCU is a unique organisation, with a very good track record and an important mission. Clearly, behind its successes are individuals who play a key role. That is why, on behalf of all the Governing Board members, I would like to express my wholehearted thanks to the STCU Executive Director and the other members of the STCU Management Committee, the Parties' delegations and our STCU staff in Kiev and the Branch Offices for their dedication and professionalism.

Finally, I would like to express my gratitude and to congratulate the CIS scientists for their positive and constructive attitude in their endeavour to make science progress for the benefit of society.

## New Project Funding in 2007 by PRIMARY TECHNICAL AREA:



# WELCOME FROM EXECUTIVE



**ANDREW A. HOOD**  
STCU Executive Director

*STCU vision:  
For a Safer and Better World, Supporting the Transition of Weapon  
of Mass Destruction Research into Peaceful Civilian Application*

During 2007, the STCU continued effective, efficient, and professional management of its multilateral nonproliferation program, reducing the incentives to spread dangerous weapons-of-mass-destruction (WMD) know-how by redirecting former Soviet WMD experts into peaceful, productive, and sustainable civilian research activities. Program initiatives, started by the 2004 STCU strategic review, are today demonstrating the success and value of STCU as a central organizational point for multilateral cooperative security enhancement.

Let us go back in history and review the record. Building on the WMD nonproliferation progress achieved in its first decade, the STCU adjusted its strategic orientation in 2004 to focus on assisting former weapon scientists and institutions in completing their permanent transition to self-sustaining, responsible non-weapons employment. The resulting STCU Near-Term Strategy (2005-2010) was framed by three general goals:

- ***Improve Self-Reliance of Former WMD Scientists:*** to improve the capability of former weapon scientists and institutes to sustain themselves in peaceful, civilian activities;
- ***Increase External Partner Involvement:*** to increase the contribution of external Partner organizations in creating a platform of public- and private-sector investment in this former WMD scientific expertise;
- ***Expand Recipient Party Cooperation and Equal Partnership:*** to engage STCU Recipient Party governments in becoming more active and equal partners in the STCU mission by investing their own state resources into the peaceful use of their own former weapons scientist community.

After a reorganization and several annual budget iterations, the STCU can now say with pride, that it has achieved measurable progress toward these three strategic goals. This 2007 Annual Report will highlight some of the STCU activities that are working today in all five STCU Recipient Parties, and that represent





# IVE DIRECTOR

the fulfillment of program plan initiated under the 2004 Near-Term Strategy. Further, in 2008, STCU is expecting to start even broader program initiatives (e.g., the pilot Institute Sustainability Program) that will join the existing family of STCU programs: the Chief Technology Commercialization Officer (CTCO) Program; the Targeted R&D Initiatives Program; STCU-organized workshops and S&T outreach missions; intellectual property and commercial matching programs; and the Partners Program.

The STCU staff also can point to the quality of service it provides to its Members Party and Partner customers, fulfilling its portion of the STCU vision “statment”: to deliver the STCU program “...using the best professional practices.” Since 2004, the STCU successfully meshed the professional skills of its staff with the introduction of modern information technology systems, updated internal operating procedures, and improved process management tools. The resulting productivity improvement speaks for itself. Between 2006 and 2007, STCU staff achieved a 50% reduction in average project processing time, contributing to a 12% increase in the average number of active STCU projects. The total project expenditure for 2007 (over 19.3 million USD equiv.) was the highest ever achieved in STCU history. At the same time, these organizational improvements allowed STCU management to pro-actively adjust the STCU administrative budgetary position—reducing administrative costs approximately 8% over this same 2006-2007 period—in anticipation of future changes in overall project/program activity.

Even as these earlier programmatic and administrative changes were finally bearing results in 2007, the profile of STCU activity continued the transition that first became manifest in 2006: the general decline in traditional Governing Party governmental project, the rising share of Partner-driven activity, and the entry of Recipient Party project financing and input to STCU planning. For example, on one hand, the total amount of new project funding in 2007 fell from the record high achieved in 2006, due to nearly 20% and 35% declines in traditional Regular Project and Government Partner Project funding, respectively. On the other hand, non-government/private-sector Partners funded a record-high level of new projects—approximately 4.67 million USD equiv. — that was nearly 28% of all new STCU project funding in 2007. This may mean more STCU administrative attention toward the needs of the non-governmental Partners, along with increased emphasis on tailored “programmatic initiatives” that are of increasing interest to STCU’s Governing Parties.

Thus, the STCU and its Governing Parties are now challenged to prepare for the future, as the strategic environment obviously has started to change. Now that STCU is nearing the end of the 2004 Near-Term Strategy, where does STCU go from here? For the STCU Secretariat, this means: What program and administrative activities are needed for the future? What processes and procedures need to be created, improved, expanded, reduced, or eliminated? And, in turn, what type of organization and what kinds of personnel will be needed to manage these new and different sets of activities?

The Secretariat is engaged in a dialogue with its Parties to define the next phase of STCU existence; to complete a new strategic plan to guide the “STCU of the next decade”. This is difficult challenge. Not only have the global political and economic environments changed since the creation of STCU, but the impact of widely-accessible knowledge and technology is rapidly changing the landscape of WMD nonproliferation in all fields and around the world.

Therefore, the STCU managers and staff will be balancing its existing programs with new program initiatives, and adjusting to the changing strategic vision of STCU’s future. The STCU Secretariat, for its part, looks to meet these challenges head-on and with success, in pursuit of the ultimate aim expressed in the STCU vision: “For a better and safer world...”.



# MAJOR EVENTS AND MILE



## STCU/ISTC MEETING (MOSCOW, RUSSIAN FEDERATION)

On 29 January, STCU Deputy Executive Director (EU) Michel Zayet, led an STCU staff delegation to hold consultative meetings at the STCU's sister center, the International Science and Technology Center (ISTC) in Moscow. The STCU delegation met with ISTC Executive Director Norbert Jousten and other ISTC executive managers and staff. This continues the series of regular coordination meetings between these two centers.

## KICK-OFF OF BIOSAFETY/BIOSECURITY TRAINING CENTER PROJECT

In 2007, Canada's Department of Foreign Affairs and International Trade started working with the Ukrainian I. I. Mechnikov Anti-Plague Research Institute (Odessa) towards the establishment of a Bio-Safety and Bio-Security training centre at this institute. It is the intent that the Centre will be a core resource for Ukraine and within the region in training scientists and technicians that work with dangerous pathogens.



## VISIT OF STCU EXECUTIVE DIRECTOR TO MOLDOVA

In early March 2007, STCU Executive Director Andrew Hood traveled to Moldova for the first time since this country joined the STCU. Mr. Hood met with Academician G. Duca, President of the Academy of Sciences of Moldova, to discuss future STCU-Moldovan activities such as a jointly financed STCU-Moldovan Targeted Initiatives Program. Mr. Hood also met with officials of the Moldovan Presidential Secretariat, Ministry of Foreign Affairs, with the diplomatic missions of Germany (during the German Presidency of the EU), the United States, and the Delegation of the European Commission.





#### STCU SPONSORS UKRAINIAN DELEGATION TO AMERICANA - 2007 (MONTREAL, CANADA)

On 18–25 March, STCU led a team of 6 scientists from Dnipropetrovsk, Dniprodzerzhynsk and Kyiv to the “AMERICANA-2007”, the 7th International Environmental Technology Trade Show and Conference (Montreal, Canada). This conference aims to promote and exchange knowledge, techniques, and technologies of the international environment industry. Over 400 exhibitors participated in Technology Trade Show, and the program also included environmental business opportunities abroad and in the Canadian market.

#### PRESIDENT OF THE U.S. INDUSTRY COALITION VISITS STCU

On 2-4 April, Mr. Gerson Sher, the President of U.S. Industry Coalition (USIC), visited the STCU and met with STCU DED (USA) Vic Korsun, and STCU Senior Specialist Iryna Tomashevskya. Mr. Sher and STCU reviewed the multiple STCU Partner Projects of the U.S. Department of Energy/Global Initiatives for Proliferation Prevention. Mr. Sher and STCU also held meetings with Academician Borys Paton (President of the National Academy of Sciences of Ukraine) to discuss new partnering opportunities.



#### STCU PARTICIPATES IN THE HANNOVER MESSE 2007 EXHIBITION

On 16-20 April, STCU sponsored a delegation of 46 scientists and institute directors from Ukraine and Georgia to the Hannover Messe 2007 Trade Fair and Exhibition (Hannover, Germany). Hannover Messe is one of the world's largest technology fairs, with 6400 exhibitors from 38 countries and over 230,000 visitors. Mr. Dmytro Kolesnikov (First Deputy Minister of Industrial Policy of Ukraine) was among the senior officials to visit the STCU booth, which featured 8 specially-selected technology exhibits from STCU projects.



# MAJOR EVENTS AND MILE

## STCU PARTICIPATES IN NATIONAL "DAYS OF SCIENCE" FESTIVAL IN UKRAINE

On 16-19 May, STCU took part in a nation-wide science festival arranged by National Academy of Sciences of Ukraine and Ministry of Education and Science of Ukraine. STCU Executive Director Andrew Hood and Senior Deputy Executive Director (Ukraine) Borys Atamanenko took part in opening ceremonies. During the Festival, STCU Deputy of Executive Director (USA) Vic Korsun participated in a round-table on "Science of Ukraine: Problems of Development and Entering to European Scientific Community".



## THE 24TH STCU GOVERNING BOARD MEETING (CHISINAU, MOLDOVA)

The 24th STCU Governing Board meeting convened on 31 May, meeting for the first time in Moldova. The Governing Board approved over USD 7.1 million and EURO 2.5 million in new and extended collaborative research projects. This funding was the second highest total (in US dollar equivalent) ever approved at a single STCU Governing Board meeting, and continued the rising trend of STCU project activity begun last year.

## STCU BIO-TECHNOLOGY WORKSHOP (TBILISI, GEORGIA)

On 2-5 July, STCU sponsored a scientific workshop in Tbilisi, Georgia, along with the Durmishidze Institute of Biochemistry & Biotechnology, titled "Plant & Microbial Enzymes – Isolation, Characterization and Biotechnology Applications". Dr. B. Tshipuria (Deputy Minister of Education and Science for Georgia) joined approximately 100 workshop participants from 9 countries, including keynote speakers from the University of Graz (Austria) and the University of Ljubljana (Slovenia).





#### STCU PARTICIPATES IN THE 3RD EUROPEAN RESEARCH AND INNOVATION EXHIBITION (PARIS, FRANCE)

On 5-9 June, STCU participated in the 3rd European Research and Innovation Exhibition (Paris, France), in partnership with the Ukrainian Ministry of Education and Science and the Ukrainian Academy of Technological Sciences. The STCU booth was visited by Mr. Janez Potočnik (European Commissioner for Research), Mrs. Valerie Pecresse (French Minister for Higher Education and Sciences), and Mr. Andriy Gurzhy (Ukrainian First Deputy Minister of Education and Science).

#### STCU PROMOTIONAL MISSION TO FINLAND, 3-7 SEPTEMBER

An STCU-led delegation of six Ukrainian and Georgian scientists, and several STCU staff members, traveled to Finland to hold presentations and meetings with officials from the Finnish Scientific and Business Community (OTANIEMI and TURKU Science Parks) as well as from the Innovation Agency of Finland, TEKES. All the participants presented results of research work and capabilities, and established Finnish scientific contacts for possible future collaborations.



#### STCU AND AZERBAIJAN KICK-OFF A JOINT TARGETED INITIATIVES PROGRAM

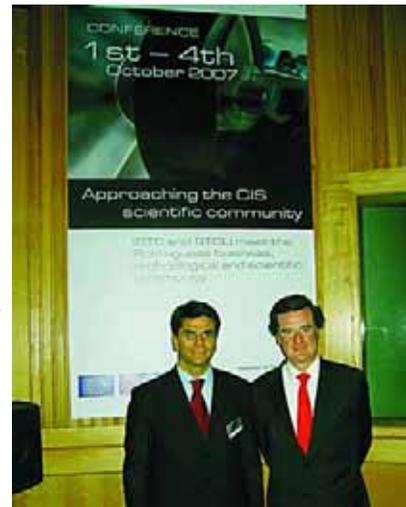
On 7 June, President M. Karimov (Azerbaijan National Academy of Sciences) and STCU Executive Director Andrew Hood signed a Statement of Cooperation initiating a Targeted Initiatives Program between the two organizations. This is the third extension of the successful STCU Targeted R&D Initiatives Program, following those established with Ukraine and Georgia.



# MAJOR EVENTS AND MILE

## STCU S&T PROMOTION EVENT & EXHIBITION (PORTUGAL)

On 1-4 October, STCU held a 4-day event in Lisbon, in concert with the Portuguese Presidency of the European Union. The event showcased Ukrainian and Russian scientific capabilities to commercial technology customers in Taguspark— Portugal's largest science park (with over 100 high-tech companies). Mr. Jean-Pierre Contzen (former Director General of the Joint Research Centers, European Commission) gave an overview on NIS - EU Science & Technology Cooperation, and the Portuguese Ministry of Science and High Education and Ministry of Economy also participated. The Russian participants were sponsored by the International Science and Technology Center (ISTC) in Moscow.



## STCU CONFERENCE ON "COMMERCIALIZING SCIENCE" (BAKU, AZERBAIJAN)

On 15 - 19 October, STCU held a conference on Commercializing Science, in collaboration with the National Academy of Sciences of Azerbaijan and the International Science and Technology Center (ISTC). This conference provided Azeri, Georgian and other regional scientists an opportunity to meet with western experts and discuss various issues in technology transfer and the beneficial commercial exploitation of science research.



## REPUBLIC OF (SOUTH) KOREA DELEGATION VISIT TO STCU

On 18-19 October, officials from the Ministry of Unification of the Republic of Korea visited STCU, meeting with STCU Executive Director Andrew Hood and Senior Deputy Executive Director Borys Atamanenko. The Ministry of Unification participates in the Six-Party Talks on North Korean nuclear disarmament, and this delegation came to learn about real-world experiences in ex-weapons scientist redirection, cooperative threat reduction, and nonproliferation of WMD expertise. The delegation also held meetings with the National Academy of Sciences of Ukraine, the National Space Agency of Ukraine, the Ministry of Foreign Affairs, and visited R&D institutes in Kyiv.





## THE 25TH STCU GOVERNING BOARD MEETING (KYIV, UKRAINE)

The 25th Meeting of the STCU Governing Board convened on 15 November in Kyiv, Ukraine, and approved 21 new collaborative research projects (including project extensions) totaling approximately USD1.08 million and EURO 1.68 million. The Governing Board also inducted 14 new organizations as STCU Partners and approved 20 new Partner-financed research projects and 3 Partner Project extensions, totaling approximately USD 2.56 million and EURO 156,510.



## STCU DELEGATION PARTICIPATES IN TRAINING AT THE WORLD INTELLECTUAL PROPERTY ORGANIZATION (GENEVA, SWITZERLAND)

Under its Chief Technology Commercialization Officer (CTCO) Program, STCU sponsored 3 Ukrainian institute technology transfer officers for intellectual property training at the World Intellectual Property Organization (WIPO) in Geneva. The training was organized by the WIPO, the United Nations Economic Commission for Europe, the European Business Angel Network, and Metagroup.

## STCU SHOWCASES UKRAINIAN START-UPS AT A U.S. TECHNOLOGY INVESTMENT CONFERENCE (PALO ALTO, CALIFORNIA, USA)

On 8-9 November, STCU and 3 STCU-sponsored Ukrainian scientist-entrepreneurs participated in the Silicon Valley Open Doors (SVOD) 2007. SVOD brings together innovators from the former Soviet Union countries with prominent Silicon Valley-based venture capital firms, leading technology and business media, and top U.S. technology companies. The STCU booth offered presentations and the business plans of the 3 sponsored Ukrainian companies.



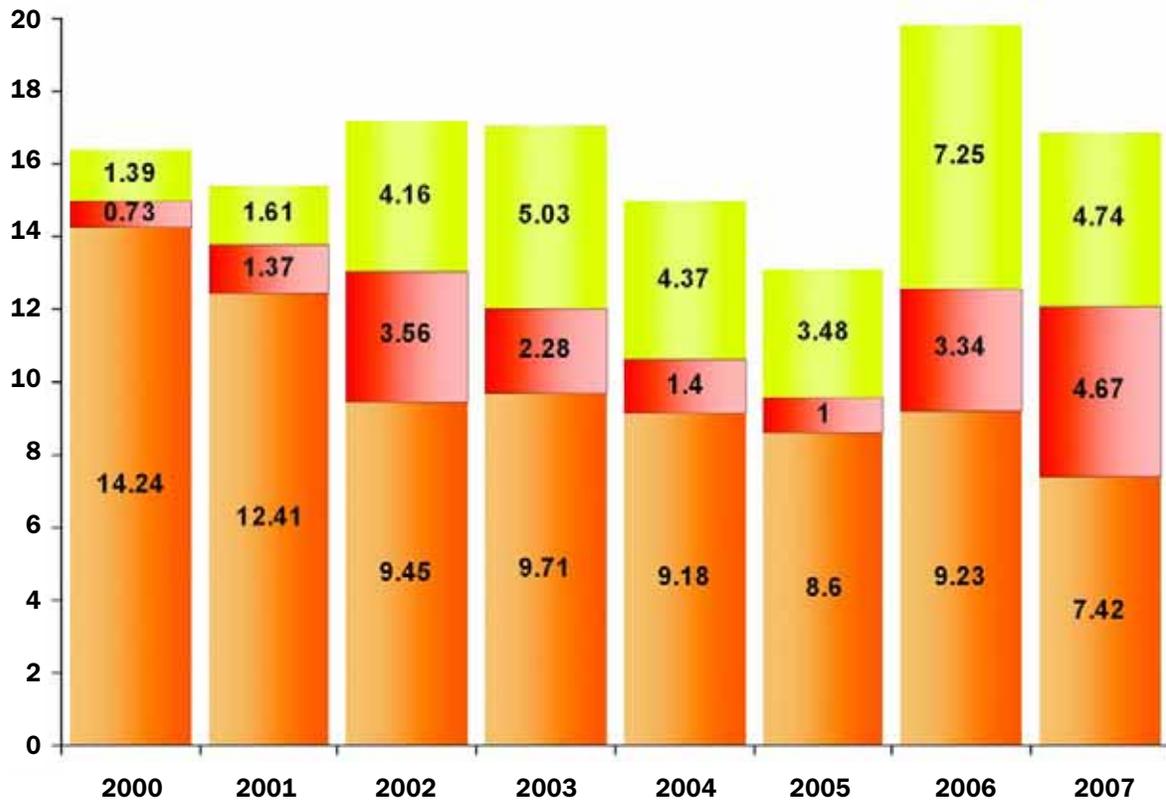
# FINANCIAL ACTIVITY

The year 2007 saw a reduction in the amount of new STCU project funding, compared with the record funding year recorded in 2006. But, the 2007 funding still constitutes the fourth largest funding year in the history of the STCU. In 2007, the STCU Governing Board approved over 16.8 million USD equiv. in new projects, a decrease of approximately 3.0 million USD equiv. in total new project funding from the record year of 2006.

New Partnership Project funding in 2007 also saw a slight decrease in levels as compared to that achieved in 2006 (also a record year for New Partnership Project funding). The 9.4 million USD equiv. in total New Partnership Project funding, approved in 2007 by the STCU Governing Board, was the second largest total in the history of the STCU, continuing the significant role played by Partners as shown by the percentage of project funding coming from STCU Partner organizations. New project funding from all Partner organizations represented 56.1% of the total amount of new STCU project funding approved in 2007. This was the second year in a row that the percentage of Partner Project funding was greater than all the new project funding provided by STCU Governing Parties.

As in previous years, external auditors from both Lubbock Fine and the Defense Contract Audit Agency audited the STCU financial management and accounting systems, as well as the system of internal controls for both the operations of the STCU administration and STCU-funded projects. Lubbock Fine Chartered Accountants audited the December 31, 2007 financial statements, a copy

**NEW REGULAR/PARTNERSHIP PROJECTS APPROVED FOR FUNDING, 2000-2007  
(FUNDING IN MILLIONS USD/YEAR)**

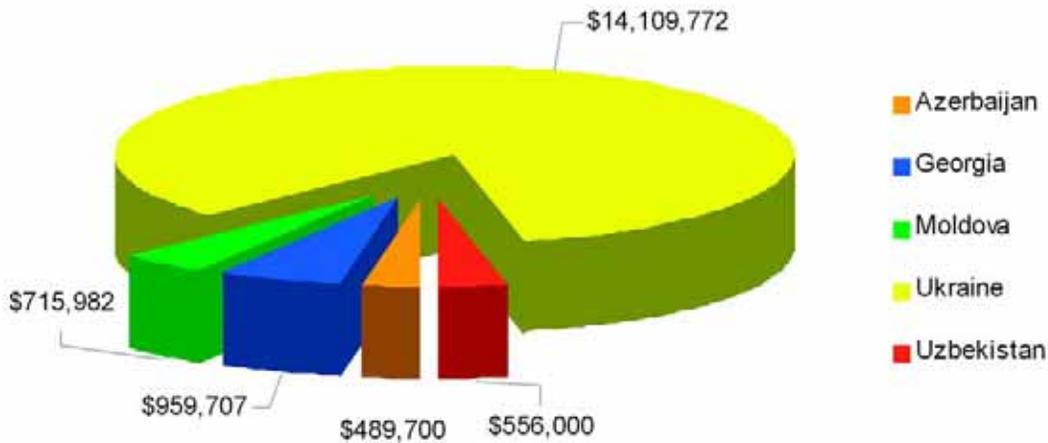




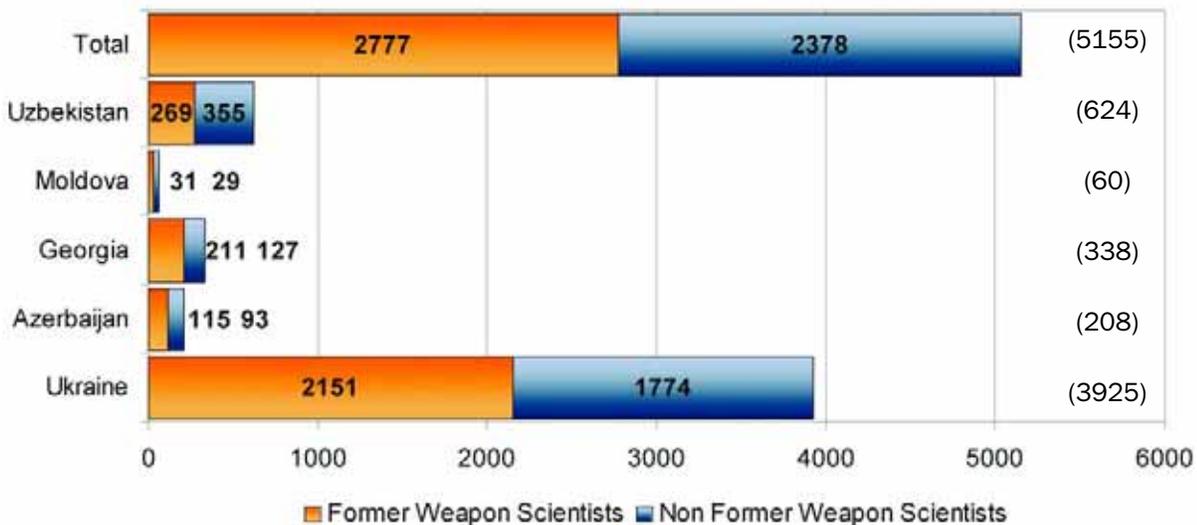
of which may be obtained in the Document Center of the STCU website at: [www.stcu.int/documents/stcu\\_inf/reports/audit/2007/](http://www.stcu.int/documents/stcu_inf/reports/audit/2007/). Some weaknesses were identified in conjunction with the December 31, 2007 financial statement audit and will be corrected during the course of 2008.

The Defense Contract Audit Agency audited five (5) projects during 2007, and worked closely with technical auditors from various organizations (e.g., the U.S. Department of Agriculture, the U.S. Department of Energy) on most of these audits to produce both financial and technical audit findings. The project audits performed by DCAA and the technical auditors identified only minor weaknesses, which also will be corrected during 2008.

**NEW PROJECT FUNDING IN 2007 BY LOCATION OF RECIPIENT ORGANIZATION:**



**PARTICIPANTS REDIRECTED TO STCU PROJECTS IN 2007, BY COUNTRY (FORMER WEAPON SCIENTISTS/NON FORMER WEAPON SCIENTISTS/TOTAL):**



# PROJECT ACTIVITY SUMMARY

## (Contributions from STCU Senior Specialist Staff)

As in the past, collaborative science research projects continued to be the primary STCU programmatic activity for 2007. In fact, STCU project activity rose to a record level of over \$19 million (USD equivalent) in expenditures. STCU Regular and Partner Projects are contributing to the STCU WMD nonproliferation mission by fostering the permanent redirection of Soviet-era weapon scientists from their past isolation and weak, state-reliant employment, into credible, self-sustaining positions of research employment.

## IMPROVING FORMER WMD SCIENTIST SELF-RELIANCE

STCU projects help to bring former Soviet WMD scientists into new scientific collaborations and interactions with Canadian, American, and European scientists. By increasing the level of interaction and finding areas of common research interest, STCU project activity seeks to facilitate the integration of ex-WMD scientists into the international civilian S&T community.

New STCU Regular Projects approved in 2007 covered numerous scientific research areas, with the primary interest reflected in Biotechnologies, Agricultural Sciences and Medicine; Material Sciences; Environmental and Non-Nuclear Energy Research; and Industrial Technologies.

A new STCU project for 2007 involves chemical catalyst research by former missile scientists at the Institute of Organic Chemistry (Ukraine). Calixarenes are promising molecular platforms for designing new families of the efficient and highly specific catalysts. STCU has supported a number of the projects from the Institute of Organic Chemistry to investigate supramolecular chemistry and catalysis based on calixarenes. The project team previously collaborated with European and Russian researchers on an earlier STCU project to investigate calixarene molecular receptors as selective absorbents (STCU Project #RU-09 "Development and Demonstration of High-Level [nuclear] Waste Partitioning Technology with the Use of Phosphorylated Calixarenes"; EURO 65,000 funded by the European Union). In 2007, the Institute of Organic Chemistry continued this line of research under STCU Project #3863 "Phosphorylated Calixarenes for Selective Extraction of Actinides from Radioactive Wastes" (USD 60,000 plus EURO 44,000, co-funded by Canada and the European Union). This current project connects the Ukrainian scientists with collaborators from Canada, the Czech Republic, France, Italy, and the USA.

Controlled thermonuclear fusion research is another area where STCU is integrating ex-Soviet weapon scientists into emerging "big science" programs. Several new STCU projects in nuclear fusion research were approved in 2007. STCU Project #4216 "Radio-frequency plasma production and heating in the URAGAN-2M stellarator" (EURO 225,320 funded by the European Union) is being conducted by ex-nuclear weapon scientists at the National Science Center Kharkiv Institute for Physics and Technology (NSC KIPT) in Ukraine. They will study the

## SUCCESS STORY

### CHEMICAL ELECTRIC NOSE DEVELOPED

The CHEMOSENSOR device is a prototype of an "electronic nose" based on calixarenes. The CHEMOSENSOR can be used for monitoring of hazardous pollutants for environmental monitoring and protection. This "electronic nose" technology, and related research in calixarene compounds, was to be developed further under STCU Project #3643, "Development of Chemosensor Materials and Equipment for Detection of Toxic Substances and Pollutants in the Environment" (USD 162,500 plus EURO 130,900, co-funded by the United States and the European Union). Project #3643 involves ex-weapon scientists from three Ukrainian institutes (the Institute of Macromolecular Chemistry, the Institute of Organic Chemistry, and the V.E. Lashkaryov Institute of Semiconductor Physics) and scientific collaborators from France, the Netherlands, the United Kingdom, and the USA.





theoretical development of plasma production and heating scenarios in the ion cyclotron frequency range of NSC KIPT's URAGAN-2M stellarator (currently the largest such device in Europe). Through STCU Project #4216, the NSC KIPT team is continuing its partnership with German scientists from the Max Planck Institute of Plasmaphysics, Spanish scientists from the Spanish National Fusion Laboratory CIEMAT, and Belgian scientists from the Laboratory of Plasma Physics (Brussels) of the Association EURATOM. The STCU project results will be used to analyze their applicability to the TJ-II (Spain) and Wendelstein-7X (Germany) stellarators.

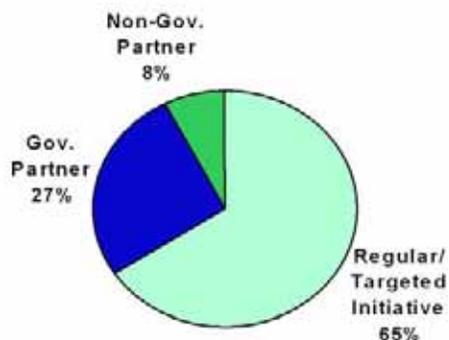
STCU also is assisting ex-Soviet WMD scientists in gaining research opportunities with the international ITER fusion reactor program. One such opportunity is in STCU Project #4436 "Ion Cyclotron Radio Frequency Current Drive for Plasma Stability Control in ITER" (EURO 52,127 funded by the European Union), which involves ex-nuclear weapon scientists from NSC KIPT in collaboration with scientists from the Max Planck Institute of Plasmaphysics, the EFDA Joint European Torus (JET) Facility in the United Kingdom, and the Laboratory of Plasma Physics (Brussels) of the Association EURATOM.

STCU also uses its sponsored research projects to build (or rebuild) partnerships between scientists of former Soviet states as well as with Canadian, European, and American scientists. In 2007, three new STCU projects in nanomaterial technology were approved, bringing together scientific teams from Ukrainian and Georgian physics institutes, to investigate nano-formation in bulk helium and carbon, and employing this knowledge to develop new materials for electronics, power engineering, pharmaceutical industry and others. Overall, the three projects total approximately USD 135,700 plus EURO 210,400. Collaborating on these projects are scientists from Canada, France, Germany, the Netherlands, the UK, and the USA.

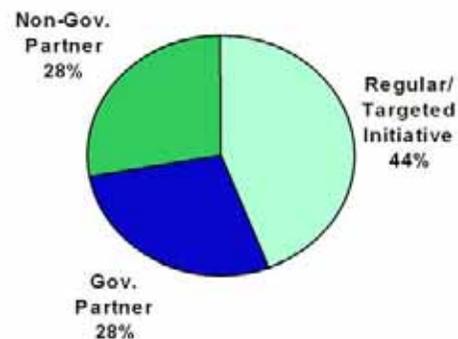
## INCREASING EXTERNAL PARTNER INVOLVEMENT

The interest in STCU shown by external customers (i.e., entities not associated with the core Governing Party programs) continued to be strong, as during the record-setting Partner Project funding year of 2006. Of particular significance for 2007, however, was the increased project funding from Non-Governmental Partner activity. Non-Governmental Partners are independent private sector and commercial customers who are looking for contract R&D opportunities. These Non-Governmental Partners not only leverage the traditional sources of

**2005 New Project Funding**  
(Apprx. Total = US \$13.1 M Equv.)



**2007 New Project Funding**  
(Apprx. Total = US \$16.8 M Equv.)



# PROJECT ACTIVITY SUMMARY

STCU project funding, but they also open opportunities for former weapon scientists to build strategic commercial partnerships and learn how to successfully market their research and technology into private sector investment world.

Among the new Partner Projects for 2007 is STCU #P291, a 2-year, USD 679,000 project involving former missile production technicians now working for the International Center for Electron Beam Welding under the E.O. Paton Institute (Kyiv, Ukraine). This project, (financed under the U.S. Department of Energy's Initiatives for Proliferation Prevention program and involving technical collaboration from the U.S. Pacific Northwest National Laboratory,) will attempt to develop cost-effective fabrication technologies in connection with fuel cell production.

Another 2007 Partner Project is STCU Project #P322, funded by the U.S. Environmental Protection Agency (EPA), a long-time Governmental Partner of STCU. The project involves scientists from Georgia and Ukraine, and was designed under the guidance of technical coordinators from U.S. EPA's Office of Research and Development (Denver, Colorado, USA). During visits to three Ukrainian institutes, as well as to the National Center for Disease Control and Public Health of Georgia, the Ukrainian/Georgian project team worked with the EPA technical collaborators to design the research goals and project workplan. This 3-year, USD 325,000 project will evaluate metals contamination and associated health risks from operational and abandoned mine facilities in Ukraine and Georgia. The project also will evaluate the potential use of innovative remediation technologies, specifically an EPS-developed permeable reactive barrier (PRB) technology for groundwater remediation.

Also in 2007, the Max Plank Institute of Plasmaphysics (Germany) committed EURO 24,000 to fund a follow-on phase of research in STCU Partner Project #P034 with scientists from the Institute of Nuclear Research (Kyiv, Ukraine), who are investigating physical processes in plasma with reference to stellarator and tokamak facilities. With this follow-on research, the Max Plank Institute has invested approximately USD 198,000 and EURO 86,000 over several years of collaborative research between German and Ukrainian nuclear physicists.

Several new Governmental Partners began work with STCU in 2007, as governmental programs continued to recognize the speed and efficiency of using STCU as a cost-effective means for implementing their programs in the STCU Recipient Parties. Among these newly-active Governmental Partners are programs associated with the G8 Global Partnership Against the Spread of Weapon and Materials of Mass Destruction, as well with national cooperative threat reduction initiatives.

- The French Commissariat a l'Energie Atomique (CEA) and Centre National de la Recherche Scientifique (National Center for Scientific Research, CNRS) applied for STCU Partner status, with the intent to conduct STCU Partner Projects and other activities, some of which will fall directly under France's commitment to the G8 Global Partnership Against Weapons and Materials of Mass Destruction.

- The U.S. Department of Health and Human Services' BioTechnology Engagement Program (BTEP) and the U.S. Department of Defense/Defense Threat Reduction Agency (DTRA)'s Biological Threat Reduction Program (BTRP) began active discussions, institute visits, and project proposal development with Ukrainian biological institutes. These engagement activities included several training/orientation trips for these Ukrainian scientists and institute leaders, using DTRA and DHHS/BTEP funds placed with STCU. Among these were the DTRA-sponsored/STCU-organized delegations to the International Influenza Conference in St. Petersburg, Russia and the 50th Annual Biological Safety Conference (Nashville, Tennessee, USA).

- Under the sponsorship of Canada's Global Partnership Program, STCU organized a delegation from the Ukrainian Anti-Plague Institute (Odessa) to visit the Canadian National Centre for Human and Animal Health (Winnipeg) and other laboratories of the Canadian biosafety system in February. This Canadian government program also worked with STCU to organize similar bio-based science delegations from targeted institutes to attend an international workshop on the Transportation of Dangerous Goods (Almaty,





Kazakhstan) in July 2007; and a workshop on Strengthening a Global Biosecurity/Biosafety Framework, (Como, Italy) in October 2007.

## EXPANDING EQUAL PARTNERSHIP WITH RECIPIENT PARTIES

STCU also pursued opportunities to create common interest and financial support between Recipient Parties and Funding Parties, by calling for project proposals that linked the STCU nonproliferation mission to other national development interests of the Recipient Parties. Through such linkages, STCU seeks to attract joint financing, and expand the involvement of the Recipient governments with the other STCU Funding Parties.

The first important step in this evolution towards equal partnership was the STCU's Targeted R&D Initiatives Program, starting in 2005 with joint projects with the National Academy of Sciences of Ukraine (NASU). This arrangement has experts from Canada, the European Union, and the United States working together with NASU experts to jointly solicit proposals, and then review, consider, and select projects for joint funding (50% funding from NASU and the remainder from the other STCU Parties). A requirement for all submitted proposals is that the Ukrainian project team consists of at least 50% former weapon scientists, so as to meet the STCU nonproliferation mission criteria. The solicited proposals also focus on research areas identified by the Ukrainian government as of priority interest to Ukraine (e.g., nanomaterials/nanotechnology, biotechnology, environmental technology, etc.).

In May 2007, STCU and NASU completed the 3rd round of Targeted Initiative project solicitation, approval, and joint funding. In this 3rd round, 10 projects were selected for a total of approximately USD 1 million, with NASU providing USD 500,000 of the funding and the other three STCU parties providing the remaining 500,000 USD equivalent (approximately USD 245,000 plus EURO 181,400). The projects involve collaboration from Canadian, American, and European scientists, and the Ukrainian project teams consisting of ex-weapon scientists.

Also in 2007, STCU initiated additional Targeted R&D Initiative Programs with the Georgian National Science Foundation and with the Academy of Sciences of Azerbaijan. The inaugural STCU-Georgia Targeted Initiative round resulted in 7 projects being jointly selected and co-funded for a grand total of approximately USD 300,000 (USD 150,000 from the GNSE, and approximately USD 114,913 plus EURO 42,538 from the STCU). The inaugural STCU-Azeri Targeted Initiative round resulted in 6 projects selected, totaling approximately USD 300,000 (approximately USD 150,000 from the Azeri Academy of Sciences and USD 99,832 plus EURO 34,692 from STCU). All together, the STCU Targeted R&D Initiative Program has funded over USD 3.6 million in co-funded projects in Ukraine, Azerbaijan, and Georgia.



**STCU and Azerbaijan National Academy of Sciences sign Statement of Cooperation on STCU-Azeri targeted RID Initiatives Program**



# WORKSHOPS AND SEMINARS

by Michel Zayot, Deputy Executive Director (EU)

The STCU Workshops program for 2007 actively sought to facilitate open cooperation and funding interest from a wide range of institutions—from government agencies to private sector companies and investors—in using the capabilities of former WMD scientists for peaceful, sustainable research & development. STCU organized three of its own workshops, held in three STCU Recipient countries and featuring Canadian, European, and American expert participation. STCU also sponsored Recipient Party scientist delegations to participate in selected events outside their home countries. Through this approach, the 2007 STCU Workshops program strove to encourage former WMD scientists into new, open, substantive collaboration with their foreign peers, and to provide opportunities to deepen the former WMD scientist integration into the international science and commercial technology communities.

## IMPROVING FORMER WMD SCIENTIST SELF-RELIANCE

In 2007, STCU organized three scientific workshops within its Recipient Party membership: one in Moldova, one in Georgia, and one in Azerbaijan.

On 30-31 May 2007, STCU held a Science Promotion Workshop and Exhibition in Chisinau (Moldova), in the main building of the Academy of Sciences of Moldova. This workshop brought together STCU-invited Ukrainian scientists from the western Ukraine regions and Moldovan scientists who were interested in participating in STCU activities. The event objectives were to promote the best scientific realizations, to extend collaborative ties, to explain to Moldovan scientists the procedure for submitting STCU projects, and to initiate new joint research projects, between Moldovan and western Ukrainian scientific communities. The workshop included presentations from Ukrainian scientists on their previous STCU projects. A poster exhibition concentrating on the possibilities for science commercialization and the role of foreign collaborators.

On 2-5 July, STCU organized a scientific workshop on plant and microbial enzyme biotechnology, in partnership with the Durmishidze Institute of Biochemistry & Biotechnology. Dr. B. Tsipuria (Deputy Minister of Education and Science for Georgia) joined approximately 100 workshop participants from 9 countries, including keynote speakers from the University of Graz (Austria) and the University of Ljubljana (Slovenia). Workshop sessions covered such scientific topics as production and use of microbial enzymes; microbial and enzymatic remediation; and enzymes of extreme environments.

This workshop targeted the increasing global interest in microbial and plant enzyme use as suitable alternatives to environmentally harmful industrial chemicals and chemical processes. Several biological research institutes across the Caucasus region have large collections of micro-organisms from diverse environments, and this STCU workshop strove to bring up-to-date information on current worldwideresearch interests directions to STCU's Recipient Party scientists in this field.

On 15-19 October 2007, STCU organized a Science Commercialization Workshop in Baku (Azerbaijan), with the participation of the International Science and Technology Center (ISTC) in Moscow and the National Academy of Science of Azerbaijan. The workshop featured presentations from western experts on technology transfer, IPR protection, mechanisms for commercializing research results, and methods for attracting research investment financing. Among the key speakers was the Deputy to the President of Georgetown University (USA) who directs that university's technology transfer activities. Such presentations, and the discussions spawned from these presentations, provided the invited scientists with applicable information and an appreciation for the tasks ahead of them in successful, self-sustaining commercial research & development work.

## INCREASING EXTERNAL PARTNER INVOLVEMENT

On 1-4 October, STCU brought a delegation of recipient scientists to 4-day S&T promotional workshop and technology exhibition in Lisbon (Portugal), organized to coincide with the Portuguese Presidency of the





European Council. STCU sponsored a delegation of Ukrainian scientists to showcase their capabilities to commercial technology customers in Taguspark— Portugal's largest science park (with over 100 high-tech companies). Also, Dr. Jean-Pierre Contzen (former Director General of the Joint Research Center, European Commission) gave an overview on NIS - EU Science & Technology Cooperation, and the Portuguese Ministry of Science and High Education and Ministry of Economy also participated. Also at this event were Russian scientists sponsored by STCU's sister center, the International Science and Technology Center (ISTC).

STCU assisted in arranging several bilateral meetings with targeted Portuguese companies potentially interested in pre-identified Ukrainian technologies, including advanced metal technologies, advanced non-destructive test and quality control technologies, material coatings, information technologies, and aerospace technologies.

### EXPANDING EQUAL PARTNERSHIP WITH RECIPIENT PARTIES

STCU also sought to engage in workshops and events in cooperative partnership with Recipient Party agencies that were interested in joining forces with STCU. An example of this in 2007 was STCU's participation in the 3<sup>rd</sup> European Research and Innovation Exhibition, held on 5-9 June in Paris (France). STCU's participation was made in partnership with the Ukrainian Ministry of Education and Science and the Ukrainian Academy of Technological Sciences. The STCU booth at this exhibition was visited by a group led by Mr. Janez Potocnik (EU Commissioner for Research), Mrs. Valerie Pecresse (French Minister for Higher Education and Sciences), and Mr. Andriy Gurzhy (First Vice-Minister of Sciences of Ukraine).

Also, STCU Deputy Executive Director Michel Zayet (EU) lead a 2-day Structural Materials and Nanotechnology Workshop, held in the premises of the Ministry of Economy, Finances and Employment with the support from Mr. Etienne Coffin (Director for International Relations). A group of 20 Ukrainian Scientists from National Academy of Sciences, and the Ukrainian Academy of Technological Sciences made contact with French industrialists and scientists, and delivered a series of presentations.

The expected outcome is to create more interest among French participants for future STCU collaboration and new STCU Partner Projects.



STCU Deputy Executive Director Michel Zayet, Valerie Pecresse (French Minister for Higher Education and Sciences), Andriy Gurzhy (First Vice-Minister of Sciences of Ukraine) and Janez Potocnik (EU Commissioner for Research) at the 3<sup>rd</sup> European Research and Innovation Exhibition (Paris)



# TARGETED INITIATIVES

by Dr. Landis Henry, Deputy Executive Director (Canada)

## IMPROVING FORMER WMD SCIENTIST SELF-RELIANCE

The need for former WMD scientist (and their institutes) sustainability, which calls for building capability in areas of distinct competence has been a goal of STCU's strategic plan since 2004. Towards this, STCU's Targeted Research and Development Initiatives (TRDI), which is based on partnering with governmental organizations in the Recipient States, has been particularly successful. The program has integrated STCU's non-proliferation objectives with the S&T priorities of the Recipient States.

The program has also been used to:

- raise awareness of the depth & breadth of research within the Recipient States
- facilitate exchange of scientific and technical information locally and globally
- facilitate scientific and commercial linkages
- identify regional priorities and develop research initiatives around these priorities
- identify gaps where expertise is lacking and to remedy the deficiency

## INCREASING EXTERNAL PARTNER INVOLVEMENT

Practically every element in the TRDI program depends on extensive "customer involvement." Customer (Recipient and Donor government organizations) input is utilized at the front end of every process improvement initiative and program delivery. Indeed, integral to the program delivery, is the process of consulting our customers on what they expect of us. For example, whereas the initial focus of the program was to link funding to the S&T priorities of the Recipient States, we are now working at linking TRDI to the research priorities of all the Funding Parties. The outcome might involve one or more of the Western Funding Parties entering into a specific agreement with a governmental organization within one of the Recipient States.

## EXPANDING EQUAL PARTNERSHIP WITH RECIPIENT PARTIES

TRDI has been shown to be an effective mechanism for partnering and for redirecting former weapon scientists. In 2007 the program was successful in attracting political and financial support from the Azeri Academy of Sciences. This has added to TRDI successes achieved since 2005 with our partnering with the Ukrainian Academy of Sciences and the Georgian National Sciences Foundation. In all three countries, the program has had a positive impact on integrating CIS scientists into the research initiatives of the Western Funding Parties. The program is unique for STCU in that the governmental organizations within the Recipient States are engaged as active and meaningful partners that equally co-finance research projects. STCU is working to establish a similar TRDI program with the Moldovan Academy of Sciences.

SUMMARY OF TARGETED INITIATIVE PROGRAM ACTIVITY (2005-2007)					
	NASU	Georgian (GNSF)	Azeri AS	STCU	Grand Total
# of Targeted Initiative Rounds	3	1	1	N/A	5
# of Targeted Initiative Projects Selected	27	7	6	N/A	40
Total # of Participating Scientists (# of FWS)	408 (249 FWS)	61 (42 FWS)	48 (28 FWS)	N/A	517 (319 FWS)
Total Targeted Initiative Project Funds Contributed	USD 1,483,086	USD 172,948	USD 150,000	USD 1,263,533 Plus EURO 381,500	USD 3,612,068





# SUSTAINABILITY PROMOTION

by Victor Korsun, Deputy Executive Director (USA)

In 2007, STCU programs and activities continued to focus on building the self-sustainability of former WMD scientists in peaceful, civilian R&D employment by encouraging interaction with international science and commercial technology representatives, building competitive positions within the international S&T community, and securing beneficial contract R&D work and technology transfer to the marketplace.

## IMPROVING FORMER WMD SCIENTIST SELF-RELIANCE

As an adjunct to the Chief Technology Commercialization Officer Program, in 2007 STCU expanded its expert consultant evaluation of eighteen selected institutes in Ukraine, to provide a qualitative assessment of the commercialization potential of each institute. The consultants' review process also analyzed the organizational environment of these institutes, i.e., both external and internal factors affecting the institute's ability to engage in successful technology commercialization efforts. The study also identified and analyzed Strengths and Weaknesses for each institute, outlined opportunity areas and qualitatively assessed each institute's potential for successful commercialization and self-reliance.

A descriptive overview of each institute resulted in 3 areas of consideration:

- Core competencies, and major product and technology offerings,
- International scientific cooperation and technology transfer,
- Intellectual property management

From this study, STCU is preparing Institute Profile Forms (IPF) to quickly show each institute's capabilities on one page. At present, STCU's staff is continuing to work with the institutes to develop Institute Profile Forms (IPF) for promoting the work of each institute. On a one page IPF, an institute's main scientific capabilities and areas of interest will be described along with their scientific direction and accomplishments. The IPFs will be compiled in a booklet together with an institute's scientist Technology Profile Forms (TPF), also in one-page format. The booklet will serve to promote those institute-developed technologies which are available for licensing or product development. With such a booklet in English, with succinct and focused information, the institutes can better reach out to Western government organizations, universities, commercial companies, and potential investors for possible partnering and collaborative opportunities. This same material can also be used by the institutes to promote themselves via CD's

## SUCCESS STORY

### SPIN-OFF ENTERPRISE "BERYLLIUM" – THE FIRST STEP OF NSC KIPT'S EXPERTS TOWARDS INTEGRATION INTO THE GLOBAL ECONOMIC AND BUSINESS COMMUNITIES.

STCU Partner Project #P257 "Development of thin vacuum-tight Be foils production" is a part of Closed Nuclear Centres Programme (CNCP) implemented in Ukraine by the United Kingdom's Department for Business, Enterprise and Regulatory Reform (BERR) together with STCU. CNCP represents the UK's contribution to limiting the proliferation of WMD expertise by creating of new civilian jobs for experts having skills in nuclear weapons production. This project was designed by the team of Dr. K.V. Kovtun from NSC KIPT in collaboration with experts from consulting company HTSPE Ltd. After successful implementation of project tasks, a decree from the National Academy of Sciences of Ukraine established the public enterprise "Scientific & Technological Center "Berillium" under NASU. This enterprise employs 11 experts and produces the thin vacuum-tight beryllium foils of 99.95-99.99% purity (the highest purity available on today's market). S&T Center's "Berillium" stock of orders currently includes three delivery contracts totaling about USD 200,000.



# SUSTAINABILITY PROMOT

and on their own websites. Already, STCU has placed many of these TPF's and IPF's on its own website. The IPFs will allow the institutes to showcase their inherent organizational scientific strengths, and thus better promote themselves in the international S&T communities.

In 2007, the STCU Patent Support Program sought to identify patent applications from STCU recipient scientists that met a set of review guidelines for international patenting support, so that STCU could better target its assistance and patent support funding toward commercially-viable, STCU project-related technologies. Through this review process, STCU intends to improve the skills of these recipient scientists in patent application preparation, and to ensure that the reviewed technologies are strong enough to be protected through international patenting. With STCU's advice and grant assistance, those scientists that prepare competitive international patents can use their patents to obtain commercial licenses, and to bring new, external income streams to the former weapon scientists and to their institutes, thus improving their overall ability to become self-sustaining.

For 2007, the Patent Support Program review process resulted in three patents – two international and one national. Since STCU began its Patent Support Program, STCU has now awarded 240 grants: 225 grants for patents in Ukraine, 3 grants for patents in Uzbekistan, and 12 grants for patents in STCU Funding Party countries.

To help scientists assess market potential and competition for their technologies, STCU began performing general market analysis for selected technologies, using an STCU subscription to the Nerac database search firm. In 2007, these services provided 12 useful market reports to recipient scientists. In one Nerac search, STCU provided a scientist with a report describing 147 patents similar to the scientist's own technology. This kind of information gives CIS scientists insights into how best to position their own inventions relative to existing ones. In other searches, Nerac provided scientists with lists of companies and industry reports pertaining to their specific field or market. Scientists then used this information to promote their technologies for possible licensing and partner development opportunities.

## INCREASING EXTERNAL PARTNER INVOLVEMENT

In 2007, STCU saw a continued high level of Partner Project financing, including a record-high in project funding from Non-Governmental/Private Sector Partners (\$4.7 million USD equiv.).

To promote the STCU Partner Program and encourage more external partnerships for former weapon scientists, STCU relies on several approaches that showcase the scientific and technical offerings of former weapon scientists:

- Road shows to technology exhibitions in western countries,
- STCU workshops,
- Focused meetings with potential project customers, both government and commercial,
- Promotional literature in the form of Technology Profile Forms (TPFs), published in booklets and catalogues, in CD format, and posted on a dedicated section of the STCU Website.

These approaches also serve to build the skills and experience of these scientists and their institutes in contract R&D issues, and to improve the chances of government and commercial partner funding for both scientists and their institutes.

One of STCU's Partner Promotion events in 2007 was the Hannover Messe 2007 Technology Exhibition in Germany, a new venue for STCU. The Hannover exhibition is one of the world's largest technology fairs, with some 6400 exhibitors from 38 countries and over 230,000 visitors, and STCU wanted to make its 2007 participation a benchmark event. Planning for this event was led by STCU's Partnership Promotion





Managers and extended over an 8-month period. As a result, STCU organized its largest-ever delegation of recipient scientists, institute directors and institute technology transfer officers, who were sponsored with financial support from STCU promotional funds, EU Party funds, and from the travel funds designated within some active STCU projects. Eight scientific exhibitors promoted their technologies at a dedicated STCU booth located in the “Research and Technology” section of the exhibition hall, thus providing STCU scientists with a better chance of presenting their capabilities to those interested in prototype technology development opportunities. STCU also prepared about 180 Technology Profile Forms for distribution in an STCU-produced booklet and CDs of this material.

All told, this large STCU effort at Hannover led to hundreds of meetings between STCU scientists and interested companies. One STCU recipient institute negotiated a 1 million EURO contract for production of specialized metal parts; another STCU recipient sent his prototype piezo-electric motor samples to a German company for evaluation; prototype bio-degradable surfactants developed by an institute in Lviv were sent to a French company for testing; and many other collaborative activities were initiated.

### EXPANDING EQUAL PARTNERSHIP WITH RECIPIENT PARTIES

In 2007, STCU continued its Chief Technology Commercialization Officer (CTCO) Program, expanding from Ukraine into Azerbaijan and Georgia. In Kyiv, Baku and Tbilisi, STCU organized an intensive three-week training program entitled “Technological Management: Commercialization of R&D results in R&D institutes” for the CTCO candidates. The course was developed by STCU in conjunction with the Institute of Intellectual Property and Rights (Kyiv) and “Kharkiv Technologies” organization. In addition, STCU has sent groups of CTCOs to other training venues in Geneva, Moscow and Kyiv.

An essential component of the CTCO program is the “buy-in” from each participating institute. Under a memorandum of understanding between STCU and each invited institute, STCU provides the training and additional support to develop each institute’s CTCO candidate, and the institute itself provides the organizational, administrative, and financial support to establish and support these technology transfer officers within their institutes. STCU has signed such CTCO Memorandums of Understanding with 10 Ukrainian, 12 Georgian, and 13 Azerbaijan institutes.

In this way, the CTCO program features an equal commitment—an equal partnership—between STCU and the individual institutes to develop technology transfer expertise within each participating institute. By creating a vested interest on the part of the institute, and by establishing a focal point dedicated to expanding the institute’s technology transfer function, the CTCO program seeks to involve the institute in becoming more self-reliant in the long term. The institute’s CTCO can work pro-actively to identify a) the needs of potential customers and b) the possible means by which those customer needs can be met through technological solutions and improvements, which in turn release the institute’s innovative products and technologies into the market.

The 35 CTCO offices in Ukraine, Georgia and Azerbaijan are the first technology transfer offices to be created by the scientific institutes of their Academies of Science and Science Foundations. These 35 technology transfer offices can become models for other institutes in these countries. We plan to expand the CTCO training program into Moldova and Uzbekistan as well.



# CONTACTS

## CANADA

### Ann Pollack

Board Member  
Department of Foreign Affairs and  
International Trade  
125 Sussex Dr.,  
Ottawa, ON, Canada, K1A 0G2  
E-Mail: [ann.pollack@international.gc.ca](mailto:ann.pollack@international.gc.ca)

### Contact person at the Canadian Government

#### Sabine Hey,

Senior Program Manager  
Redirection of Former Weapons  
Scientists  
Global Partnership Program  
Foreign Affairs Canada  
125 Sussex Dr.,  
Ottawa, ON, Canada, K1A 0G2  
Tel: +1-613-944-2429,  
Fax: +1-613-944-1130  
E-Mail: [sabine.hey@international.gc.ca](mailto:sabine.hey@international.gc.ca)

## EUROPEAN UNION

### Zoran Stančić

Chairman of the Board  
Deputy Director-General, Directorate-  
General for Research  
European Commission / DG Research  
B-1049 Brussels, Belgium

### Contact person at the European Commission

#### Robert Burmanjer

Head of Unit RTD D3 International  
Scientific Cooperation Policy  
Directorate General for Research  
European Commission  
Brussels, Belgium  
Tel.: +32-2-296-8944 ,  
Fax: +32-2-296-6252  
E-mail: [robert.burmanjer@ec.europa.eu](mailto:robert.burmanjer@ec.europa.eu)

#### Tarik Meziani

Research Programme Officer  
European Commission, Directorate  
General for Research  
Directorate D: International Scientific  
Cooperation Policy  
Unit D3: Multilateral Cooperation activities  
Square de Meeus 8, B-1050 Brussels,  
Belgium  
Tel.: +32-2-299-6497,  
Fax: +32-2-296-6252  
E-Mail: [tarik.meziani@ec.europa.eu](mailto:tarik.meziani@ec.europa.eu)

## UKRAINE

### Yaroslav Yatskiv

Board Member, Academician  
National Academy of Sciences of  
Ukraine  
54 Volodymyrska Street  
Kyiv, 01030, Ukraine  
Tel.: +38-044-239-6567,  
Fax: +38-044-234-6387

## USA

### Victor E. Alessi

Board Member  
President and CEO  
United States Industry Coalition Inc.  
1525 Wilson Boulevard, Suite 150  
Arlington, VA 22209 USA

### Contact person at the US Government

#### Charles Jacobini

ISN/CTR - Room 3327  
United States Department of State  
2201 C Street, N.W.  
Washington, DC 20520  
Tel: +1-202-736-7137  
Fax: +1-202-736-7698  
E-Mail: [JacobiniCB@state.gov](mailto:JacobiniCB@state.gov)

## STCU SECRETARIAT

### Science & Technology Center in Ukraine Headquarters

21 Kamenyariv St., Kyiv 03138, Ukraine  
Tel.: +380-44-490-7150  
Fax: +380-44-490-7145  
E-mail: [stcu@stcu.int](mailto:stcu@stcu.int)  
Website: [www.stcu.int](http://www.stcu.int)

#### Andrew A. Hood

Executive Director (USA)  
E-mail: [andrew.hood@stcu.int](mailto:andrew.hood@stcu.int)

#### Landis Henry

Deputy Executive Director  
(Canada)  
E-mail: [landis.henry@stcu.int](mailto:landis.henry@stcu.int)

#### Michel Zayet

Deputy Executive Director  
(European Union)  
E-mail: [michel.zayet@stcu.int](mailto:michel.zayet@stcu.int)

### Victor Korsun

Deputy Executive Director  
(USA)  
E-mail: [vic.korsun@stcu.int](mailto:vic.korsun@stcu.int)

### Curtis "B.J." Bjelajac

Chief Financial Officer (USA)  
E-mail: [curtis.bjelajac@stcu.int](mailto:curtis.bjelajac@stcu.int)

### David Cleave

Chief Administrative Officer  
(European Union)  
E-mail: [david.cleave@stcu.int](mailto:david.cleave@stcu.int)

## Information Office in Azerbaijan

### Adalat Hasanov

institute of Physics  
33-A H,Javid Ave.,  
Baku 1143, Azerbaijan  
Tel./Fax: +994-12-438-2074  
E-mail: [adalat.hasanov@stcu.int](mailto:adalat.hasanov@stcu.int)

## Information Office in Georgia

### Akaki Peikrishvili

7 E. Mindeli St.,  
Tbilisi 0186, Georgia  
Tel./Fax: +995-32-326-891,  
+995-32-321-657.  
E-mail: [akaki.peikrishvili@stcu.int](mailto:akaki.peikrishvili@stcu.int)

## Information Office In Moldova

### Alfreda Rosca

1 Chelmare Ave.,  
Cishnau 2002, Moldova  
Tel./Fax: +373-69-172-668  
E-mail: [alfreda.rosca@stcu.int](mailto:alfreda.rosca@stcu.int)

## Information Office in Uzbekistan

### Regina Sattarova

70 Y. Gulomov St.,  
Tashkent 700047, Uzbekistan  
Tel.: +998-71-120-6028  
Fax: +998-71-132-0966  
E-mail: [regina.sattarova@stcu.int](mailto:regina.sattarova@stcu.int)



