



The Science and Technology Center in Ukraine (STCU) is an intergovernmental organization dedicated to the prevention of the proliferation of expertise related to weapons of mass destruction (WMD). STCU assisting Azerbaijan, Georgian, Moldavian, Ukrainian and Uzbek scientists in their integration into the international science community

The STCU vision: for a safer and better world, to assist former WMD experts in the transition to self-supporting, peaceful activities in the international science and business communities...and to do so using the best professional practices.



Welcome to the STCU e-newsletter designed for the science and business community in order to keep you informed with our current events, upcoming news and opportunities in the world of science and technology.

- For STCU **opportunities** in Scientific Research click: <http://www.stcu.int/offer/techmatching/index.php>
- **Find out more** about STCU please visit <http://www.stcu.int>
- To become a **subscriber** to the STCU Newsletter please submit request to subscriber@stcu.int

STCU Governing Board 26 meeting held, June 19th, 2008

The 26th Meeting of the STCU Governing Board convened on 19 June, 2008 in Kyiv, Ukraine, and approved 23 regular projects (including continuations) totaling approximately \$1.4 million and ~1.5 million. Among these are 8 STCU-Georgian National Science Foundation Targeted R&D Initiative projects and 12 STCU-National Academy of Sciences of Ukraine Targeted R&D Initiative projects. The total project funding to date, including all twenty-six (26) STCU Governing Boards, now stands at approximately \$139 million and ~30 million. Members of the STCU Governing Board discussed the impact of the recent suspension of STCU office operations, congratulated the STCU staff for its successful handling of this difficult situation, and welcomed the efforts of the Ukrainian Party to find new, permanent premises that will be suitable for the STCU today and well into the future.



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The Second Annual Forum of Private Investors of Ukraine

On May 21, the Association of Private Investors of Ukraine www.uaban.org conducted The Second Annual Forum of Private Investors of Ukraine. The Association is a member of European Business Angels Network. There were four sections at the Forum:

- Perspectives of investments processes development in Ukraine
- Practice and mechanisms of venture projects financing
- Financing and capitalization of successful Start-up projects
- Presentation of investment projects and innovative technologies

Dr. Serhiy Petrenko and Dr. Alexander Bedyuh, two scientists who work with STCU, each made presentations about their technologies on piezo-electric motors, and on separating steel from tires for environmental gas production, respectively. Other speakers at the Forum were from:

- The Ukrainian Association of Investment Business,
- The State Agency of Ukraine for Investments and Innovations,
- The State Commission of Securities and Stock Market,
- Science and Technology Center in Ukraine,
- Concord Capital Company,
- Environment Finance Corporation (NEFCO),
- Infrastructure Investments,
- Ukrainian Realty Group,
- Techinvest, and others.



Dr. Petrenko speaking at Forum

Vic Korsun, STCU Deputy Executive Director (USA) made a presentation entitled "Taking scientific innovative technologies into global markets".

During the Forum participants had a possibility to ask questions from the investment experts who were present. This event gave representatives of different organizational communities in Ukraine to

Past events

Fifth International Conference in Crimea, 22-26 September, 2008.

[read more](#)

International conference on Materials and Coatings for Extreme Performances: Investigations, Applications, in Big Yalta, Zhukovka, Crimea, Ukraine, September 22-26, 2008

[read more](#)

Useful Links

Google Publication Search

<http://scholar.google.com.ua>

Google Patent Search

<http://www.google.com/patents?hl=en>

Google Book Search

<http://books.google.com/>

Scirus - the most comprehensive scientific research tool on the web. It allows researchers to search for journal content and also scientists' homepages, courseware, pre-print server material, patents and institutional repository and website information.

<http://www.scirus.com/?b>

Ukrainian Association of business-angels

<http://www.uaban.org/businessman.html>

The National Academies Press

<http://orsted.nap.edu/>

INNO Group - innovation strategies for government organizations. Inno group designs and implements innovation strategies for Regions, States and international and government organisations

www.inno-group.com

AEA group for energy policy

AEA is a leading international company specializing in consultancy, policy support and program management for policy implementation. leading authority on the environment. AEA works with governments to help define and develop policy and within the UK alone, AEA have saved industry several billions of dollars.

www.aeat.co.uk

"Innovations" Internet magazine in Russian

<http://mag.innov.ru/>

Nano information in Ukraine

<http://www.nanosvit.com>

combine their efforts and discuss the important area of high-tech investment and technology transfer.

Meeting between STCU's Chief Technology Commercialization Officers with the President of Association of Private investors of Ukraine

STCU organized a meeting of 3 Chief Technology Commercialization Officers from Ukrainian scientific institutes with Igor Vlasyuk, President of the Association of Private investors of Ukraine. Chief Technology Commercialization Officers (CTCOs) from Institute of Semiconductor Physics, Kurdyumov Institute of Metal physics and Institute of Physics got acquainted with the Association of Private investors of Ukraine. During this first meeting the CTCOs described some of their institute technologies and products that are available for licensing or business development. Mr. Vlasyuk explained what information is needed for investors to make decisions to invest money in such business ventures. As a result of a discussion it was decided to arrange further meetings at Ukrainian scientific institutes between institute directors and the Association.

Seminar held on "Organization of intellectual property activity in Ukrainian budget organizations (universities and R&D Institutes)"

On June 3rd the Ukrainian institute of Scientific -Technical and Economic Information, Kyiv, conducted a Seminar entitled "Organization of intellectual property activity in Ukrainian budget organizations (universities and R&D Institutes)". The Program of seminar and presentation of Olena Tverezenko- chief of the sector of R&D Institute of intellectual property Academy of law of Ukraine are attached:

[see the Program of seminar](#)

[see the presentation of Olena Tverezenko](#)



STCU scientists, jointly with ISTC, participated at the exhibition on Environment 'Globe 2008' in Vancouver, Canada

On 12-14 March a delegation of 12 scientists from Ukraine and Georgia led by STCU participated in 10th biennial Trade Fair and Conference on Business and Environment 'Globe 2008' held in Vancouver, Canada.

Some of the participants in this event were sponsored by Canada's Global Partnership Program of the Departments of Foreign Affairs and International Trade.

STCU and ISTC organized a booth at the exhibition where scientists could meet with attendees to discuss their technology opportunities and to learn what Canadian companies are doing in this important area related the environment.

[see report](#)

STCU held discussions with NASU-National Academy of Sciences of Ukraine on Technology Transfer and CTCO topics

On 3 July STCU had a meeting with Yuri Kapitza, the director of Center of Intellectual Property and Technology Transfer at NASU. The main subject of the meeting was related to cooperative work of NASU and STCU on the Mr. Kapitza discussed NASU's directive to 90 of their scientific institutes of Ukraine to create Technology Transfer Offices to help institutes commercialize the technologies developed under Ukrainian budget funding. Mr. Kapitza requested STCU's assistance in obtaining necessary technology transfer materials, books, documents, CD's and other resources that a tech-transfer office should have. Within Ukrainian government circles it is desired that the individuals working at these offices should be accredited or certified. There is an opportunity to work with NASU to help train these new tech transfer professionals.

STCU also discussed the concept of starting a Ukrainian Technology Transfer Association which other CIS countries can participate in it as well. In the near future such an organization can join one of the major tech transfer organizations in the west, such as ASTP in the EU, or AUTM and LES in the US. STCU invited Mr. Kapitza to participate in an upcoming meeting of CTCO's to discuss the possibility of creating a new CTCO Association. The main principles and goals of such an Association will be discussed at the meeting of CTCO's.

STCU Hosts Kick-off meeting for Institute Sustainability Program in Ukraine, and a Meeting to organize CTCO's into a Tech Transfer Association



Nanotechnology in Ukraine

<http://www.nano.com.ua/>

"LEX" Research Information - Analytical Center provides information exchange, convenient for developers, vendors and buyers of technical solutions between Ukraine and international states

<http://lexltd.com.ua>

STCU hosted two meetings that advanced two of its flagship sustainability development programs: the Institute Sustainability Program and the Chief Technology Commercialization Officer Program. Both of these programs aim to reduce WMD proliferation incentives by developing the self-reliance of former weapon scientists and institutes on civilian and peaceful R&D activities. On 8 September, at Kyiv Polytechnic Institute, STCU launched the pilot phase of its Institute Sustainability Program, which will assist selected institutes in Ukraine initially and later in other STCU countries to better achieve long-term self-sustainability through strategic planning and organizational improvements. Executives from seven Ukrainian institutes participated in STCU program presentations and discussions provided by STCU staff and expert consultants from the University of Missouri-Columbia and the State University of New York-Binghamton.

On 9 September (also at Kyiv Polytechnic Institute), a meeting of STCU-trained Chief Technology Commercialization Officers (CTCOs) initiated the creation of a new Ukrainian CTCO Association, similar to the Association of University Technology Managers (AUTM) in the US and the Association of European Science and Technology Transfer Professionals (ASTP). Other meeting participants included officials from the

- Ukrainian Ministry of Economics,
- Ministry Education & Science,
- The State Agency of Investments and Innovations, and
- The National Academy of Sciences of Ukraine.

An organizing committee was formed to start the creation of such an association in Ukraine.

CRDF Workshops "From Idea to Market" held in Kyiv and Kharkiv, Ukraine

The US Civilian Research and Development Foundation (CRDF) conducted two 2-day workshops entitled: "From Idea to Market" for technology entrepreneurs in Kyiv (September 25-26) and Kharkiv (September 29-30). The workshops were aimed at increasing local scientists' understanding of technology entrepreneurship, building strategic partnerships with the business sector, marketing, licensing, intellectual property rights, and start-up financing. Business professionals from the US served as the trainers for these events.

During these workshops, CRDF announced a Call for Proposals from Ukrainian scientists for the "STEP Business Partnership Grant (BPG) Competition 2008". The STEP BPG Program promotes R&D partnerships between US companies and scientists to develop new commercial opportunities of economic benefit to both parties. With the support of the Ministry of Ukraine for Education and Science, CRDF is pleased to offer up to \$24,000 USD in grant funding to the winning teams. Deadline for submitting proposals is December 15, 2008. More information about this Competition along with application forms is at CRDF's website: [click here for downloading](#).

Several STCU staff took part in workshop in Kyiv. In addition, travel grants were awarded by STCU to 11 Azeri Chief Technology Commercialization Officers for participation in the Kharkiv workshop. You can view the "From Idea to Market" workshop presentations concerning IP protection, business plans writing, venture capital financing, start-up creation, etc. at CRDF's website: [click here for downloading](#).

STCU scientists Participate in "Pitch" training seminar in Kyiv



Five STCU scientists who have start-up companies in Ukraine took part with their product and company "pitch" presentations in a two-day Pitch Training seminar in Kyiv on October 10-11. The Pitch Training Seminar was organized by the Seed Forum International Foundation (www.seedforum.com).

[org](#)), which is a London-based foundation.

The Seed Forum process has the objective of providing to new start-up companies competence with investor readiness and investor matchmaking opportunities. The Seed Forum gives start-up companies seeking capital an opportunity to present their business concepts to investors at investor matchmaking forums. The companies are nominated, selected and trained by the Seed Forum process to help the companies improve their presentations to investors. The mission of Seed Forum is to create a global investor matchmaking market place for seed and venture capital without national or regional borders. Seed Forum International Foundation is currently conducting investor matchmaking forums in 17 countries in Europe, North America and Asia.

Useful Publications

Submitting technical articles to STCU Newsletter

The following web links show you recent scientific publications and articles of western organizations. This is being sent to acquaint you with the State-of-the-Art in these fields of research. If you have recently published a technical or scientific article based on your own research we invite you to submit this article to the STCU–Newsletter and provide us a copy and the link to the web-article. In this way we will be able to highlight recent technological developments at Institutes in Ukraine, Georgia, Azerbaijan, Uzbekistan and Moldova.

Please submit articles to olga.semchuk@stcu.int.

Some of the following articles may require your registration which is usually free.

Audio Slideshow: Storm on Saturn

In the remote Australian Outback, a retired miner has found himself the toast of the astronomical world by capturing rare pictures of an electrical storm on Saturn. Mr. Trevor Barry's images have attracted interest from NASA's Cassini mission to the planet. Here the amateur astronomer, from Broken Hill, New South Wales, Australia explains the significance of his Saturn pictures, and why he is so passionate about the night sky.

[See images in Space](#)

Most Doctors Aren't Using Electronic Health Records

Here's a business and technology opportunity for someone in Ukraine, Georgia, Azerbaijan, Georgia, Moldova, Uzbekistan, in the US, in EU and Canada and the rest of the world. Intrigued?? Interested?? Electronic Medical Records. That's right, Electronic Medical Records for patients are still not used very much around the world, but they could help improve medical treatment of patients in all countries. If you are interested,

[read more](#)

Read more about how Nokia, the global mobile phone producer, changed itself.

Article: "Nokia morphs itself from within", by By Darren Waters, Published in BBC News

[read more](#)

Tim Russert's fatal heart attack in the US revealed what many cardiologists already knew: Heart disease cannot always be detected.

Article: "Readers' Questions: Heart Disease Without the Symptoms", By Peter Libby, Published: June 23, 2008 Consults Blog, NYTimes.com

[read more](#)

Airbus advertising the Airbus 380's green credentials at the Farnborough Airshow. The plane is currently the largest airliner in operation.

Article: "New buzzword at this year's Farnborough air show is 'sustainability'", by By Micheline Maynard, Published: July 16, 2008 Herald Tribune

[read more](#)

Presidium of National Academy of Science of Ukraine issued **Directive # 15 dated January 16, 2008 about the creation of new institute departments responsible for technology transfer, innovational activity and intellectual property**. From now on every Institute of NASU has to create such a department. As for today there are about 90 Institutes of NASU which are creating new Technology Transfer Offices.

[read more](#)

Monkeys were able to use their brain activity to control a robot arm to feed themselves

The animals were able to feed themselves using prosthetic arms, which were controlled by brain activity. Small probes, the width of a human hair, were inserted into the monkeys' primary motor cortex - the region of the brain that controls movement. Writing in Nature journal, the authors said their work could eventually help amputees and people who are paralysed

Article: "Monkey's brain controls robot arm", Published: May 28, 2008 BBC News

[read more](#)

This is an article from Zerkalo Nedeli about Ukrainian science (Ukrainian version)

Article: Ukrainian Ministry of Education and Science will help scientists to access international scientific literature online, through WEB of Science, Published: June 7-13, 2008 Zerkalo Nedeli

[read more](#)

Read about the Cern Lab's NEW Large Hadron Collider which is becoming colder than space.

Article: "Cern lab goes 'colder than space'", by Paul Rincon, Published: July 18, 2008 BBC News

[read more](#)

Find out out how a scientist and an institute came together through InnoCentive, a company that links organizations (seekers) with problems (challenges) to people all over the world (solvers) who win cash prizes for resolving them. InnoCentive began in 2000 as e.Lilly, an in-house innovation "incubator" at the pharmaceutical giant Eli Lilly, with the company posting problems that its employees had been unable to solve.

Article: "If You Have a Problem, Ask Everyone", by CORNELIA DEAN, Published: July 22, 2008

NYTimes

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See videos of NASA's 50 years in space.

[Click here](#)

The theory of glass for some is anything but clear. Philip W. Anderson, a Nobel Prize-winning physicist at Princeton University, wrote in 1995: "The deepest and most interesting unsolved problem in solid state theory is probably the theory of the nature of glass and the glass transition." He added, "This could be the next breakthrough in the coming decade."

[Read more about glass theory](#)

Retail Stores Look to Sun for New Energy and Energy Savings. To see what some major retail stores are doing with their rooftops to create solar electricity

Article: "Giant Retailers Look to Sun for Energy Savings", By STEPHANIE ROSENBLOOM,

Published: August 10, 2008 NYTimes

[read more](#)

The State of California in the US is planning to build 2 large photo-voltaic solar electric utility plants totaling about 800 Mega-Watts together and covering approximately an area of 9 square miles. See what other countries are also building.

Article: "Two Large Solar Plants Planned in California", By MATTHEW L. WALD, Published:

August 14, 2008 NYTimes

[read more](#)

Read how Denmark responded to the 1973 Arab oil embargo in such a way that today it is energy independent. Can other countries follow Denmark's lead in shaping their energy future?

Article: "Flush With Energy", By THOMAS L. FRIEDMAN, Published: August 9, 2008 NYTimes

[read more](#)

Fusion power seeks super steels. Improved steels are now being sought. The principal scientist at the United Kingdom Atomic Energy Authority (UKAEA) said one of the first applications for these better performing metals would be in the wall linings of fusion reactors where temperatures are extremely high.

[read more](#)

CERN fires up new atom smasher to get closer to the Big Bang. CERN, the most powerful atom-smasher ever built comes online, eagerly anticipated by scientists worldwide who have awaited this moment for two decades. The machine at CERN, the European Organization for Nuclear Research, promises scientists a closer look at the makeup of matter, filling in gaps in knowledge or possibly reshaping theories. The multibillion-dollar Large Hadron Collider will explore the tiniest particles of matter.

[read more](#)

The big CERN collider was turned on 9/10/08.

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The 28th sea launch of Ukraine's Zenit-3SL rocket with the EchoStar XI broadcast satellite on board is successfully launched from the floating platform at the equator in the Pacific Ocean.

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Read This Month's Published Papers for free for 30 days from IOP Publishing electronic journals.

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