

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3013	New energy-saving methods, devices based on over-voltage pulse corona discharge for water, food	Research and Design Institute "Molniya" of Kharkiv State Polytechnical University	\$145 580							US:2 Canada:2 EU:1
3039	Elaboration of the novel method of early cancer detection and development of the commercially available	Gromashevsky Institute of Epidemiology and Infectious Diseases	\$120 868							US:2 Canada:1 EU:2
3065	Aerospace-borne soil and vegetation remote-sensing data usage planning	O.Ya. Usikov Institute of Radiophysics and Electronics	\$185 000							US:2 Canada:2 EU:3
3074	SQUID-magnetometry system to control magnetic contrast agents and targeted transport of medications with	V.M. Glushkov Institute of Cybernetics	\$219 974			€ 177 197			€ 177197	US:2 Canada:2 EU:5
3097	Insulation continuous monitoring and protection system for distribution networks of 6-35 kV	"YuzhVEC" Firm	\$170 000							US:1 Canada:2 EU:3
3106	Extremely disordered materials for fuel cell and nickel-metal hydride battery applications	I.M. Frantsevich Institute of Problems of Materials Science	\$180 000							US:2 Canada:2 EU:3
3108	Novel Electrode Materials Based on Nanostructural Carbon Phases for Electrochemical	V.I. Vernadsky Institute of General and Inorganic Chemistry	\$198 000							US:2 Canada:2 EU:2
3115	Technology development for production wear-resistant powder tool steels using specific treatment metal melt	I.M. Frantsevich Institute of Problems of Materials Science	\$124 970							US:2 Canada:2 EU:3
3120	Nonlinear waves as a technical tool for studying and rearranging the structured medium	S.I. Subbotin Institute of Geophysics	\$193 762							US:2 Canada:2 EU:3
3130	Increase in fatigue strength of thin-walled aluminium structure joints using high-efficient consumable	E.O. Paton Electric Welding Institute	\$258 000							US:2 Canada:2 EU:1
3131	Nonmetallic composite coatings on lightweight metals resistant to man-made and natural	Ukrainian State Chemical and Technological University	\$165 655							US:2 Canada:1 EU:3
3136	Development of a passive millimeter waves imaging system for detection of the weapon concealed under	State Research Center "Iceberg"	\$186 000							US:2 Canada:2 EU:3

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3160	Design of plane scanning centimeter and millimeter-wave antennas for mobile telecommunication	O.Ya. Usikov Institute of Radiophysics and Electronics	\$185 521							US:2 Canada:2 EU:3
3188	Modern methods of evaluation of the load-carrying capacity of refrigerator ship structures	S.P. Timoshenko Institute of Mechanics	\$104 542							US:2 Canada:2 EU:3
3189	Technology for thermal hardening of steel tools with the goal of increasing their operational stability	National Metallurgical Academy of Ukraine	\$180 000							US:2 Canada:2 EU:8
3195	Development of two-contour heliosystem for hot water delivery based on highly effective solar collectors and	I.M. Frantsevich Institute of Problems of Materials Science	\$185 000							US:2 Canada:2 EU:4
3215	Electro-Vacuum in Ladle Steel Treatment to the Energy Savings, Ecological Improvement and	M. Makarov Yuzhny Machine-Building Plant (Yuzhmash) Production	\$198 384							US:2 Canada:2 EU:3
3221	Development of principles for alloying cold resistant ferritic corrosion-resistant steels	Zaporizhzhie National Technical University	\$109 990							US:2 Canada:2 EU:3
3226	Development of the technology for production of semi-conducting silicon carbide substrates for	Special design and technological bureau of Institute of Physics	\$198 721							US:2 Canada:2 EU:3
3230	Development of biological system for rapid application of pharmacological substances to the cells and	"Lileya" Small Scientific Production Enterprise	\$133 742							US:2 Canada:2 EU:8
3234	Reasonable constructive techniques for suppression of oscillations in transport systems with movable liquid	S.P. Timoshenko Institute of Mechanics	\$125 000							US:2 Canada:2 EU:4
3243	Synthesis of Carbon Nanotubes on the Surface of Polycrystalline Silicon Carbide by Laser Heating	I.M. Frantsevich Institute of Problems of Materials Science	\$88 600							US:2 Canada:1 EU:1
3249	Terahertz Electromagnetic Wave Generation from Quantum Nanostructures	O.Ya. Usikov Institute of Radiophysics and Electronics	\$150 000							US:2 Canada:2 EU:4
3250	Development of Methods of Long-term Damage and Residual Lifetime Analysis of Critical Components of	S.P. Timoshenko Institute of Mechanics	\$63 000							US:2 Canada:2 EU:3

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3276	Catastrophes and macroscopic anomalies in conductive electron systems	State Enterprise "Institute of Machines and Systems"	\$94 004							US:2 Canada:2 EU:1
3282	Methods and Devices Development for Express Diagnosing of Low-Dose Ionizing Radiation Effects	Scientific Research and Engineering Design Institute "ISKRA"	\$115 952							US:2 Canada:2 EU:3
3286	Development of Scientific Approach and Technology for Growing High-Quality Optical-Grade Germanium Crystals	V.E. Lashkaryov Institute of Semiconductor Physics	\$160 000							US:2 Canada:2 EU:3
3288	Next Creep-Resistant Magnesium Alloys with Nanocluster-Forming Structure for Dynamic	I.M. Frantsevich Institute of Problems of Materials Science	\$356 524							US:1 Canada:1 EU:1
3290	Substantiation of the ways to reduce the natural radionuclides transfer to the environment and human	Marzeev Institute of Hygiene and Medical Ecology	\$381 914							US:2 Canada:2 EU:3
3296	Multi-Functional Shape Memory Alloys for Smart System Applications	G.V. Kurdyumov Institute for Metal Physics	\$182 710							US:2 Canada:2 EU:3
3305	PECVD nanocrystalline-amorphous coatings based on nc-TiB ₂ /a-SiC. Micro- and nano-mechanical	I.M. Frantsevich Institute of Problems of Materials Science	\$77 491							US:2 Canada:2 EU:2
3310	Investigation of possibility for realization of the nuclear synthesis reaction, stimulated by thermal	Institute of Physical Optics	\$160 700							US:2 Canada:2 EU:2
3317	Creation of the industrial plant pilot specimen for milling in hydrogen of ferromagnetic alloys from	Karpenko Institute of Physics and Mechanics	\$185 000							US:2 Canada:2 EU:2
3330	Development of multi-dimensional pulsating information arrays for simulation of distributed	Ya.S. Pidstryhach Institute for Applied Problems of Mechanics and Mathematics	\$109 555							US:2 Canada:1 EU:1
3335	Modified carbon adsorbents for ecology and fine chemical technologies	Institute for Sorption and Problems of Endoecology	\$111 757							US:2 Canada:2 EU:2
3339	Development of high-sensitivity integrated converters of mechanical deformations and forces with	"TDM" Scientific & Technical Enterprise	\$188 695							US:2 Canada:2 EU:2

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3342	Technology and machine for safety of green forages from destruction by bacteria and microorganisms	Collective scientific and industrial enterprise " Karpaty - Tformobyl "	\$179 066							US:1 Canada:1 EU:2
3345	Structure stability of multilayer nanocrystalline materials Cr-Al-N and Cr-V-N	National Science Center "Kharkiv Institute of Physics and Technology"	\$178 705							US:2 Canada:2 EU:3
3346	Experimental installation for study of thermal hydraulic processes in two-phase mechanically pumped loop	(N.Ye. Zhukovskiy) National Aerospace University "Kharkiv Aviation Institute"	\$150 000							US:2 Canada:1 EU:1
3348	The localization of unknown sites of fibrin polymerization for the creation of the new □ anti-thrombi agents	O.V. Palladin Institute of Biochemistry	\$140 192							US:2 Canada:2 EU:3
3354	Development of new carbon nanocomposites based on exfoliated graphite for the selective adsorption of	Scientific Foundation of Scientists and Specialists of Molecular Cybernetics and Informatics	\$173 692							US:2 Canada:2 EU:3
3360	Creation of high efficiency hybrid energy supply systems for electric vehicles	Institute of Electrodynamics	\$200 000							US:2 Canada:2 EU:2
3372	Development of new methods for active and passive control of vibrations in aerospace and transport	National Technical University "Kharkiv Polytechnical Institute"	\$84 000							US:2 Canada:2 EU:3
3373	Developing of environmentally appropriate and high heat-resistant lubricant modifiers for	Institute for Bioorganic Chemistry and Petrochemistry	\$199 824	\$130 000				\$130 000	\$ 130000	US:5 Canada:1 EU:2
3382	Advanced Eutectic Titanium Alloys Reinforced with High-Dispersed Ternary Silicido- Boride or Germanido-Boride	I.M. Frantsevich Institute of Problems of Materials Science	\$150 000	\$75 000		-€ 61 790		\$75 000	\$ 75000 -61790	US:5 Canada:1 EU:5
3386	Development of Electrophysical Technology of Echologically Friendly and Wasteless Utilization of	Research and Design Institute "Molniya" of Kharkiv State Polytechnical University	\$243 063							US:2 Canada:1 EU:1
3392	Interfacial interaction of transition-metal interconnect materials with Pb-free Sn-Bi- In-Zn-Sb solders	I.M. Frantsevich Institute of Problems of Materials Science	\$125 710							US:2 Canada:1 EU:2
3416	Development and organization of production of detector arrays using scintillator-photodiode	Institute for Single Crystals R&D Corporation	\$160 000							US:2 Canada:2 EU:2

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3427	Detection of Explosive, Fissile and High-Z Materials Using High Energy Bremsstrahlung Rays	V.N. Karazin Kharkiv National University	\$275 750							US:2 Canada:2 EU:4
3430	The investigation of combined magnets inclusive the rare earth magnets	National Science Center "Kharkiv Institute of Physics and Technology"	\$31 120							US:2 Canada:1 EU:1
3447	"Laser excitation of quick-running chemical reactions in a condensed medium"	M.K. Yangel "Pivdenne" State Design Office	\$184 684							US:2 Canada:1 EU:2
3450	System of electronic archiving and maps of documents for Museum of the book & printing of Ukraine	Museum of the Book and Printing of Ukraine	\$95 790							US:2 Canada:1 EU:8
3452	Investigation of New Atmosphere Components and Their Influence on Prediction of Global	Institute of Radio Astronomy	\$112 000							US:2 Canada:2 EU:8
3461	Advanced composite hydrogen storage materials on the basis of nanoscale carbon and metal hydrides	I.M. Frantsevich Institute of Problems of Materials Science	\$175 360							US:8 Canada:1 EU:1
3475	Geoinformation technology for distributed inventory of greenhouse gases and estimation of ecological	State Scientific and Research Institute of Information Infrastructure	\$147 320							US:2 Canada:1 EU:8
3476	Investigation of a Root Gravitropic Reaction in the Weak Combined Magnetic Field	B.I. Verkin Institute for Low Temperature Physics and Engineering	\$187 958							US:2 Canada:1 EU:1
3479	Development of technology for soil regeneration on the basis of recycled resources and natural minerals	M.M. Gryshko National Botanical Garden	\$170 000							US:1 Canada:1 EU:1
3481	Research and development of a new structural material for nuclear waste containers.	Institute of Solid-State Physics, Materials Science and Technologies of the National Science Center "Kharkiv	\$196 463	\$196 463				\$196 463	\$ 196463	US:5 Canada:1 EU:1
3510	Development of biotechnology of the cellular transplants formation for intervertebral disk	M.I. Sitenko Institute of Spine and Joints Pathology	\$129 000							US:1 Canada:1 EU:8
3511	Development of the setting and measurement methods of angular gamma-radiation distributions under hard	Institute of Solid-State Physics, Materials Science and Technologies of the National Science Center "Kharkiv	\$138 190			€ 111 317			€ 111317	US:2 Canada:2 EU:5

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3516	DEVELOPMENT OF PLASMA-DETONATION TECHNOLOGY AND EQUIPMENT FOR LOCAL	E.O. Paton Electric Welding Institute	\$174 051							US:2 Canada:1 EU:2
3521	Wide-band tunable microwave radiation in novel ferromagnetic heterojunctions	O.Ya. Usikov Institute of Radiophysics and Electronics	\$299 984							US:2 Canada:1 EU:1
3522	Novel Nanostructured Powdered Carbide and Silicide Composites for Protective Coatings	I.M. Frantsevich Institute of Problems of Materials Science	\$190 878							US:1 Canada:1 EU:2
3542	Compact instrument for determination of electronic component radiation tolerance measurement of	V.N. Karazin Kharkiv National University	\$114 402			€ 92 156			€ 92156	US:2 Canada:1 EU:5
3546	Elaboration of Passive Systems for Heat Transport and Temperature Control for Use in Energy Saving	Scientific Research Institute of Applied Electronics of the National Technical University of Ukraine "Kiev Polytechnical	\$80 800							US:2 Canada:2 EU:1
3551	New hydrogel implant for plastic surgery	Ovcharenko Institute of Biocolloidal Chemistry	\$180 000							US:8 Canada:1 EU:2
3556	The chemiluminescent gas analyzer of oxides of nitrogen (NO, NO ₂ , NO _x).	Ukrainian Scientific and Research Institute of Analytic Instrument Engineering "Ukranalit" JSC	\$175 870							US:2 Canada:2 EU:8
3557	Effect of microgravity on the regulatory mechanisms of photosynthesis	Institute of Plant Physiology and Genetics	\$100 000							US:2 Canada:1 EU:1
3558	Fluorine-containing derivatives of phosphonic acid: Synthesis and application in bio- and	Institute for Bioorganic Chemistry and Petrochemistry	\$165 406							US:1 Canada:1 EU:2
3564	Etiologic structure, ecologic, epidemiologic features, elaboration of epidemiologic control system of Lyme	Lviv Research Institute of Epidemiology and Hygiene	\$145 172			€ 116 941			€ 116941	US:1 Canada:1 EU:5
3570	Development of technological basis and equipments for air disinfection from pathogens	Ukrainian State Chemical and Technological University	\$149 640							US:2 Canada:1 EU:1
3576	Investigation of defect-free conditions for superalloy ingots manufacturing	E.O. Paton Electric Welding Institute	\$100 360							US:2 Canada:1 EU:1

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3578	Optimization of machine-building HSLA steel alloying system and technology scheme of its production	E.O. Paton Electric Welding Institute	\$99 875							US:2 Canada:1 EU:2
3580	Preparation and publication of the book "Sapphire in science and engineering" based on the results of	Research Department of Optical and Constructional Crystals of the Institute for Single Crystals R&D	\$10 100	\$10 100				\$10 100	\$ 10100	US:5 Canada:1 EU:2
3585	Development of highly wear resistant WC material for high performance sand blast and water jet nozzles	Scientific and manufacturing enterprise	\$150 655							US:2 Canada:1 EU:2
3587	Structure and mechanical properties of titanium alloys with combined boride and silicide strengthening	I.M. Frantsevich Institute of Problems of Materials Science	\$160 000							US:2 Canada:1 EU:2
3588	Development of production technology of fetal liver stem cell-based biological preparation for treatment of	Institute of Experimental and Clinical Veterinary Medicine	\$198 000							US:8 Canada:1 EU:2
3590	Radiobiological effects of 241Am incorporated in cells of organism and methods of prevention of the menace of	Institute of Cell Biology and Genetic Engineering	\$238 002							US:2 Canada:1 EU:2
3593	Development of New Wear-resistant Coatings on the devices of aeronautical engineering manufactured	Karpenko Institute of Physics and Mechanics	\$125 000							US:2 Canada:2 EU:8
3600	Time Reversal Acoustics implementation for the soft tissues viscoelastic properties research	V.N. Karazin Kharkiv National University	\$159 932							US:2 Canada:1 EU:1
3602	Physics and Technology of Space-Purpose Thermoelectric Cooling Devices	Institute of Thermoelectricity under NAS and MES of Ukraine	\$150 000							US:2 Canada:1 EU:3
3605	New light-weight eutectic alloys and coatings based on L12 cubic aluminum intermetallics with enhanced	I.M. Frantsevich Institute of Problems of Materials Science	\$160 000	\$80 000		€ 64 440		\$80 000	\$ 80000 € 64440	US:5 Canada:1 EU:5
3612	Development of the high immunifacient peroral vaccines - from modified antigens and toxins	Mechnikov Institute of Microbiology and Immunology	\$165 548							US:2 Canada:1 EU:2
3620	Computer-Aided System for Remote Detection of Short Circuits in Overhead Electrical Distribution	Kharkiv State Technical University of Radioelectronics	\$159 502							US:2 Canada:1 EU:2

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3621	The development of installation for volumetric modelling of endoprosthesis operations on the	National Technical University "Kharkiv Polytechnical Institute"	\$275 000							US:2 Canada:1 EU:1
3623	Development of Nanotechnologies for Highly Efficient Integrated-Optics and Quantum Structures	Institute of Physical Optics	\$201 118							US:2 Canada:1 EU:1
3629	Verification of a Fracture Toughness Prediction Model Based on a Local Approach using Irradiated Reactor	G.S. Pisarenko Institute for Problems of Strength	\$310 918							US:2 Canada:1 EU:1
3637	Multyabsorber optimal design with emphasis on complete rotating machines dynamic modelling	"Lvivska Polytechnica" National University	\$88 994							US:1 Canada:1 EU:1
3643	"Development of chemosensor materials and equipment for detection of toxic substances and	Institute of Macromolecular Chemistry	\$324 967	\$162 484		€ 130 885		\$162 484	\$ 162484 € 130885	US:5 Canada:1 EU:5
3660	Research of anisotropy medium influence on characteristics of small-size magneto-cumulative	V.N. Karazin Kharkiv National University	\$25 262							US:2 Canada:1 EU:2
3661	Extra-High-Frequency Magnetic Characteristics of Microwires with Negative Real Permeability	O.Ya. Usikov Institute of Radiophysics and Electronics	\$210 322							US:2 Canada:1 EU:1
3662	Wear- and heat-resistant thermal spray nano-composite coatings for protection of light metal	E.O. Paton Electric Welding Institute	\$207 534							US:8 Canada:1 EU:8
3663	: Evaluation of the performance of ferritic-martensitic steels under gas conditions relevant to	National Science Center "Kharkiv Institute of Physics and Technology"	\$291 082	\$145 541		€ 117 238		\$145 541	\$ 145541 € 117238	US:5 Canada:1 EU:5
3665	Promising nanostructural materials for cryogenic electrical machines.	V. N. Bakul Institute for Superhard Materials	\$136 062							US:1 Canada:1 EU:1
3666	Development of a Holographic interference microscope for ecological, medical and biological	Institute for Scintillation Materials of the Institute for Single Crystals R&D Corporation	\$150 291							US:2 Canada:1 EU:2
3668	Investigation of optical properties of beryllium mirrors and mirrors fabricated from beryllium-	National Science Center "Kharkiv Institute of Physics and Technology"	\$80 002							US:8 Canada:1 EU:2

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3674	Effects of the pine forest irradiation at the long-term root intake of the Chernobyl radionuclides	Ukrainian Institute of Agricultural Radiology	\$154 800			€ 124 053			€ 124053	US:2 Canada:1 EU:5
3684	Radioactive aerosol airborne concentration and dispersal composition during the building disassembly works	Ukrainian Institute of Agricultural Radiology	\$58 730							US:2 Canada:1 EU:1
3690	High-strength alloy with high resistance to sulfide corrosion and sulfide stress cracking in natural gas	Physical and Technological Institute of Metals and Alloys	\$119 831							US:1 Canada:1 EU:1
3696	Thermodynamical and structural fluid properties in the confined micro- and nanosystems	Kyiv Taras Shevchenko University	\$152 288							US:2 Canada:1 EU:2
3701	CVD diamond detectors of ionizing radiations	National Science Center "Kharkiv Institute of Physics and Technology"	\$170 805							US:8 Canada:1 EU:2
3704	Integral optical films based on Chromonic Lyotropic Liquid Crystals for Liquid Crystal Displays	Institute of Physical Optics	\$147 604							US:2 Canada:1 EU:2
3706	Elaboration of refrigerating equipment and methods for hematopoietic progenitors storage for treatment of	Science and Engineering Company "Dnipro-MTO"	\$181 680							US:2 Canada:1 EU:2
3718	Neutral and charged nanostructures in liquid and solid helium	B.I. Verkin Institute for Low Temperature Physics and Engineering	\$217 456							US:2 Canada:1 EU:1
3719	Researches of the diagnostic capacities of multi images head tomograph	Scientific Research Institute of Radioengineering Measurements" Open Joint Stock Company	\$160 000							US:2 Canada:1 EU:2
3721	Improving of corrosion resistance of aluminum alloyworkpieces by vacuum thermal treatment	Karpenko Institute of Physics and Mechanics	\$140 002							US:2 Canada:1 EU:2
3723	Bioanalytical technologies for monitoring of oncological patients' condition and prediction of its dynamics	State Scientific and Research Institute of Information Infrastructure	\$250 123							US:2 Canada:1 EU:2
3727	Magnetic Field Controlled Extra-High-Frequency and Optical Devices	O.Ya. Usikov Institute of Radiophysics and Electronics	\$242 670							US:1 Canada:1 EU:1

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3729	Automatic complex for the restoration of protective coatings for oil and gas pipelines	Interbranch Research Institute of Mechanics Problems "RITM" of the National Technical University of Ukraine "Kiev"	\$230 009							US:8 Canada:1 EU:1
3733	The optimization of nuclear and radiation safety of SNF centralized storage at ChNPP exclusion zone	National Science Center "Kharkiv Institute of Physics and Technology"	\$169 626							US:2 Canada:1 EU:1
3746	Hybrid organic-inorganic heterostructures for photovoltaic devices	V.E. Lashkaryov Institute of Semiconductor Physics	\$195 228	\$97 614		€ 78 632		\$97 614	\$ 97614 € 78632	US:5 Canada:1 EU:5
3751	Effective noncovalent functionalization of carbon nanotubes for biosensing.	B.I. Verkin Institute for Low Temperature Physics and Engineering	\$172 300							US:8 Canada:1 EU:2
3753	Quasicrystals on the basis of transition metals: synthesis, structure, physical properties, accumulation of hydrogen	National Science Center "Kharkiv Institute of Physics and Technology"	\$150 000							US:2 Canada:1 EU:2
3755	Development and Study of Hydrodynamical Drilling Assemblies for Deep Large-Diameter Hole Drills in	"Plant of the New Technologies"	\$249 289							US:1 Canada:1 EU:1
3756	Detectors, aimed at diminution of consequences of terrorist acts on civilians with radioactive substance	Institute for Scintillation Materials of the Institute for Single Crystals R&D Corporation	\$145 000							US:2 Canada:1 EU:2
3761	Development of a Technique of Application of the Cavitation Hydrovibrator Offering Higher Rotary	Institute of Technical Mechanics under NAS and NSA of Ukraine	\$275 210							US:1 Canada:1 EU:1
3765	The development of new conception of a hypersonic airbreathing propulsion engine	(N.Ye. Zhukovskiy) National Aerospace University "Kharkiv Aviation Institute"	\$125 180							US:2 Canada:1 EU:2
3772	Laser Technology Development for Special Materials Processing	International Center "Institute of Applied Optics"	\$296 000							US:1 Canada:1 EU:2
3773	ENHANCEMENT OF THE EFFICIENCY OF RECIPROCATING INTERNAL COMBUSTION	Institute of Engineering Thermophysics	\$172 033							US:1 Canada:1 EU:2
3774	Novel Biocompatible Coating on Medical Titanium Implants with Functions of Drug Delivery Systems	Institute for Single Crystals R&D Corporation	\$207 758							US:1 Canada:1 EU:2

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3780	Complex Analysis of Off-Nominal and Emergency Situations of Space Launch Vehicles Designed by	M.K. Yangel "Pivdenne" State Design Office	\$201 977							US:2 Canada:1 EU:2
3786	Nonlinear Dynamics of Intense Charged-Particle Beams in Transport Systems of RHIC and PL	V.M. Glushkov Institute of Cybernetics	\$246 290							US:2 Canada:1 EU:2
3788	"Technology for growing homogeneous GaIn1-xSb single crystals"	East Ukrainian State University	\$150 000							US:2 Canada:1 EU:2
3792	Raising Sensitivity of XRF Analyzer to Determine Sulfur and Chlorine Contaminants in Liquids and Gases	Scientific and Technical Center "Plus Radio"	\$281 012							US:1 Canada:1 EU:1
3804	Fluorescence Lifetime-based Probes and Labels for Biomedical Assays and Bacterial Pollution Monitoring	Institute for Single Crystals R&D Corporation	\$120 000							US:1 Canada:1 EU:2
3826	Evaluation of the state of plant species populations of international Red List in Ukrainian Carpathians	Institute of Ecology of the Carpathians	\$95 840			€ 77 203			€ 77203	US:2 Canada:1 EU:5
3833	The electromagnetic phenomena in new semiconductor micro/nanostructures for	O.Ya. Usikov Institute of Radiophysics and Electronics	\$160 770							US:1 Canada:1 EU:3
3841	Development of the Reactor for Synthetic Fuel Obtaining Process over Composite Proton Conducting	Institute for Bioorganic Chemistry and Petrochemistry	\$150 000			€ 120 830			€ 120830	US:1 Canada:1 EU:5
3844	Modification of the properties of germanate family crystals by doping with transition metals ions	Dnipropetrovsk National University	\$120 368							US:2 Canada:1 EU:2
3845	The universal nature of physical properties near ferroelectric phase transitions	Dnipropetrovsk National University	\$53 048							US:2 Canada:1 EU:2
3847	A Concept of Large-scale Superconducting Magnetic Energy Storage for Use in Electric Power Industry	Institute of Electrodynamics	\$144 310							US:1 Canada:1 EU:1
3852	The ecological role of the bryophyte layer in restoration of technogenic landscapes of sulphur deposits	Institute of Ecology of the Carpathians	\$100 000							US:1 Canada:1 EU:1

1. Review Incomplete
2. Review Complete - No willingness to fund
3. Rewrite / resubmit - see comments
4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3854	Novel production technology of superhard nanocomposites from detonation-synthesized	V. N. Bakul Institute for Superhard Materials	\$183 000							US:1 Canada:1 EU:2
3858	The device based on nanostructured semiconductor sensor for toxics measurement in the	I.M. Frantsevich Institute of Problems of Materials Science	\$198 288							US:2 Canada:1 EU:2
3864	Multifunctional magnetic nanomaterials for electrotechnics and medicine	I.M. Frantsevich Institute of Problems of Materials Science	\$128 000							US:1 Canada:1 EU:1
3870	Innovative millimeter wavelength dielectrometers for the determination of wines and fruit juices	O.Ya. Usikov Institute of Radiophysics and Electronics	\$155 784							US:1 Canada:1 EU:1
3874	Maldi mass-spectrometry of biomarkers for processes of differentiation of stromal stem cells	National Academy of Sciences of Ukraine	\$189 372							US:1 Canada:1 EU:8
3877	Femtosecond studies of nanomaterials in Ukraine	Institute of Physics	\$100 494							US:2 Canada:1 EU:1
3882	Development of ultrasonic computerized tomograph for material characterization in product volume and residual	Karpenko Institute of Physics and Mechanics	\$120 000							US:2 Canada:1 EU:1
3884	Spectral study of nano-electron systems with random imperfections: theory and modeling at millimeter	O.Ya. Usikov Institute of Radiophysics and Electronics	\$61 258							US:1 Canada:1 EU:2
3892	Metabolic engineering of alcoholic fermentation of plant residues in non-conventional yeasts	Institute of biology of cell	\$128 500							US:1 Canada:1 EU:8
3895	Creation of new class of electrodes for fuel cells on basis of catalyst-containing carbon nanostructures	G.V. Kurdyumov Institute for Metal Physics	\$266 400							US:2 Canada:1 EU:2
3909	Information technology for solution of problems of trans-computational complexity	V.M. Glushkov Institute of Cybernetics	\$170 000							US:2 Canada:1 EU:1
3912	"Development of biotechnical method for ammunition utilization and fabrication of powders on their base "	I.M. Frantsevich Institute of Problems of Materials Science	\$249 999							US:2 Canada:1 EU:2

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4. Resubmit - see comments

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STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3919	"Side population" cells in endocrine glands and transplantation them to animals with hormonal	Institute for Problems of Cryobiology and Cryomedicine	\$199 874			€ 161 005			€ 161005	US:1 Canada:1 EU:5
3931	Phase equilibria and properties of materials in the systems with CeO ₂ , ZrO ₂ (HfO ₂) and REO for	I.M. Frantsevich Institute of Problems of Materials Science	\$230 915							US:1 Canada:1 EU:1
3956	Development of Electron Beam PVD processes for Quasicrystal Formation in Amorphous Zr-based Alloys	E.O. Paton Electric Welding Institute	\$172 480							US:1 Canada:1 EU:1
3977	Comprehensive Experimental Study of Changes in the Properties of Blood under Exterior Factors	Institute of Surface Chemistry	\$210 657							US:1 Canada:1 EU:1
3978	Processing of ammunition, equipped with the nitroamines based compositions into boosters	Research and Design Center "Proton"	\$140 140							US:2 Canada:1 EU:1
3979	Studies of electromagnetic radiation mechanism in Roentgen and submillimeter region from electric	O.Ya. Usikov Institute of Radiophysics and Electronics	\$120 404							US:1 Canada:1 EU:2
3988	Radiation hard Hall Probes and devices for JET	"Lvivska Polytechnica" National University	\$210 000							US:1 Canada:1 EU:1
Subtotal Regular Ukrainian Projects Approved:			\$25 220 029	\$897 202	\$0	€ 1 310 107	\$0	\$897 202	\$ 897202 €1310107	
3109	Solar Distilling Plant with Active Thermodynamic Contour	Scientific Association "Physics-Sun" Physical-Technical Institute	\$194 048							US:2 Canada:2 EU:3
3114	Development of semiconductor detectors of ionizing radiation on the basis of new physical and technological approaches	"Lvivska Polytechnica" National University	\$267 995							US:2 Canada:2 EU:2
3162	Development of electroconductive textile materials and electrically heated systems based on conductive metallized and	I.M. Frantsevich Institute of Problems of Materials Science	\$148 469							US:2 Canada:2 EU:3

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3. Rewrite / resubmit - see comments
4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3186	Development of high-strength corrosion-resistant composite materials with a hybrid polymeric matrix and technologies of their	"Tehprom" Society with the limited liability the Scientific production enterprise	\$324 994							US:2 Canada:2 EU:3
3204	Magnetically and thermally modulated microwave absorption in YBCO films and irradiated twinned and detwinned single crystals	Institute of Applied Physics within Tashkent State University	\$119 850							US:2 Canada:2 EU:4
3209	Investigation of Nonlinear-Optical Processes and Development of a Compact, Intense, Multiwavelength Femtosecond Laser System	Scientific and Technology Association "Akademprigor"	\$207 281							US:2 Canada:2 EU:2
3258	Portable Optoelectronic Devices for Rapid - Diagnostics of Microcirculation and Other Important Blood Parameters	V.M. Glushkov Institute of Cybernetics	\$290 000							US:2 Canada:2 EU:2
3323	Study of genesis of diamond occurrences in Ukraine and Uzbekistan and prognosis of commercial diamond deposits	Institute of Applied Physics	\$202 804							US:2 Canada:1 EU:2
3341	Macroscopic modelling of solute transport in porous media	Complex Research Institute of Regional Problems (CRIRP)	\$165 000							US:2 Canada:1 EU:1
3343	The digital photoconverter	Ya.S. Pidstryhach Institute for Applied Problems of Mechanics and Mathematics	\$172 500							US:2 Canada:1 EU:2
3369	Uncooled Infrared Radiation Detectors, Thermoelectric Converters and Pressure Sensors Based on the Higher Manganese Silicide Films	Tashkent State Air Institute	\$170 000							US:2 Canada:2 EU:1
3377	A new laser system for absolute distance measurement	O.Ya. Usikov Institute of Radiophysics and Electronics	\$195 863			€ 157 775			€ 157775	US:1 Canada:1 EU:5

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4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3379	Development of Neutron Sources for Neutron Capture Therapy in Human Cancer Tissue	Institute for Nuclear Research	\$194 524							US:2 Canada:2 EU:4
3381	Technological approaches elaboration for functional nanomaterials production based on hollow, threadlike boron and silicon carbide	I.M. Frantsevich Institute of Problems of Materials Science	\$199 184							US:8 Canada:1 EU:2
3413	Increasing efficiency of high definition videoinformation systems functioning in long distance and in difficult conditions	"Cybernetics" Institute of Cybernetics SPU	\$75 940							US:2 Canada:1 EU:1
3429	Home solar desalter increased productivity	Institute of Power Engineering and Automation	\$149 116							US:2 Canada:1 EU:1
3506	Extending capabilities and carrying out extensive experimental testing of NAAPRO code	Institute for Nuclear Research	\$254 349							US:2 Canada:1 EU:2
3523	Dynamics and Phase Transition in Abrikosov Vortex Lattice of High Temperature Superconductors	Institute of Material Sciences of Scientific-Production Association "Physics-Sun"	\$244 046							US:2 Canada:1 EU:1
3532	Advancement of metal and alloy cathodes and their introduction into microwave devices	Institute of Radio Astronomy	\$156 502							US:2 Canada:1 EU:1
3541	Magneto-optical and Infrared Investigations of Nanostructured Magnetic Materials	Institute of Applied Physics within Tashkent State University	\$210 141							US:1 Canada:1 EU:1
3633	Developing of methods of rabies cultivation virus in cell culture	Uzbekistan Veterinary Research Institute	\$243 528							US:1 Canada:1 EU:1

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4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3695	"Development and mastering in manufacture of devices protective against overvoltages in electronic and electrotechnical	"KVARK" Scientific-Production Complex	\$107 112							US:2 Canada:1 EU:2
3708	New class of heterogeneous titanium alloys	E.O. Paton Electric Welding Institute	\$390 478							US:8 Canada:1 EU:1
3752	Creation of the model of water balance & water quality in basin of Syrdarya River. NAVRUZ_3	Institute of Nuclear Physics	\$309 752	\$309 752				\$309 752	\$ 309752	US:5 Canada:1 EU:2
3764	Development of New Biologically-Active Polymer Materials of Multivectorial Effect for Human and Environmental Protection	Institute of Macromolecular Chemistry	\$212 230							US:1 Canada:1 EU:1
3824	Simulation of the nonlinear deformation process of structures from composite materials	Ulugbek National University of Uzbekistan	\$102 433							US:2 Canada:1 EU:2
UZ-75(C)	Development of Biosensors for Pesticides Determination in the Environment of Cotton Cultivating Countries	A.S.Sadikov Institute of Bioorganic Chemistry	\$199 999							US:2 Canada:2 EU:2
Subtotal Regular Uzbek Projects Approved:			\$5 508 138	\$309 752	\$0	€ 157 775	\$0	\$309 752	\$ 309752 €157775	
3163	Special purpose polymer composites from petroleum products, mineral raw materials, industrial or post-	Institute of Macromolecular Chemistry	\$260 000							US:2 Canada:2 EU:3
3263	Individual Protective Sheets of Basalt-Titanium-Aluminum Ceramics by Hot Vacuum Compaction	Institute of Mining	\$187 950							US:2 Canada:2 EU:3
3285	A new experimental approach to the problem of insomnia.	Georgian Sleep Research Institute	\$299 250							US:2 Canada:2 EU:3

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5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3331	DEVELOPMENT OF NEW METHODS AND ALGORITHMS OF IDENTIFICATION OF	A. Eliashvili Institute of Control Systems	\$140 702							US:1 Canada:1 EU:2
3349	Multicomponent system of the speaker's identification by his speech phonogram, based on probabilistic	A. Eliashvili Institute of Control Systems	\$150 000							US:2 Canada:1 EU:2
3364	Research of transformation of pollution and management of water resources quality of South Caucasus Rivers	Institute of Radiation Problems	\$286 890							US:2 Canada:1 EU:1
3502	Oligodendrocytes' Differentiation during normal Development and in animal models of Multiple Sclerosis	Tbilisi State Medical University	\$93 541							US:1 Canada:1 EU:1
3509	New Effective Antisublimation Coats of Inorganic Vitreous Enamel Type for GeTe- and PbTe-	I. Vekua Sukhumi Institute of Physics and Technology	\$159 666							US:2 Canada:1 EU:1
3524	Development of Plasma Technology for Restoring Worn Surfaces of hydraulic transport system	Institute of Mining Mechanics	\$140 830							US:2 Canada:2 EU:2
3525	The issues concerning a computer-based simulation of both earth-fall - landslide over the slopes of mountain	G.Chogovadze Georgian Research Institute of Power Engineering and Power Structures	\$187 590							US:2 Canada:1 EU:1
3537	Georgia - Complete Information and Useful Recommendations for Business Circles	Tbilisi I. Javakhishvili State University	\$195 636							US:2 Canada:1 EU:2
3571	Usage Grape seed Extract "Antiox G" during treatment of radiation disease and other chronic diseases	Tbilisi State Medical University	\$130 788							US:2 Canada:1 EU:2
3584	Development of modern mathematical models, methods, and computer technologies for risk	V.M. Glushkov Institute of Cybernetics	\$179 984							US:1 Canada:1 EU:1
3601	Investigation and Development of the Device For Remote Destruction of Antipersonnel Mines and	Georgian Technical University	\$298 533							US:2 Canada:1 EU:1
3604	Biological active substances for body premorbide states prevention caused by influence of UHF EMR in	Karsanov Republican Research Center of Medical Biophysics and Introduction of New Biomedical Technologies.	\$268 196							US:2 Canada:1 EU:1

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5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3641	The creation of the dielectric state in the narrow band gap IV-VI semiconductors	Institute of Physics	\$386 543	\$386 543				\$386 543	\$ 386543	US:5 Canada:1 EU:2
3648	Portable monitoring system for operative diagnostics and efficient treatment of epiphitoty processes of	Georgian Technical University	\$159 500							US:2 Canada:1 EU:2
3651	Investigation of statistical characteristics of scattered HF radiation and ULF electromagnetic wavy	Georgian Technical University	\$295 319							US:2 Canada:1 EU:2
3657	"Connection to the international system of remote cooperation and training Ukraine -Caucasus.	Georgian Space Agency	\$99 907							US:2 Canada:1 EU:2
3678	Microflora of the slowly healable wounds and effective study of the alternative treatment	G. Eliava Institute of Bacteriophage, microbiology and virology	\$308 996							US:2 Canada:1 EU:2
3691	New environmentally friendly technologies for production of manganese, siliceous and chromium based alloys and	F. Tavadze Institute of Metallurgy and Material Sciences	\$199 792							US:2 Canada:1 EU:1
3698	Electro-Plasmic External Combustion Engine.	Institute of Mining	\$205 000							US:2 Canada:1 EU:1
3714	Measures against mudflows and slides based on geotechnical study in mountain regions of Eastern	Center of Engineering investigations specialists collaborations, projects examination & organization	\$197 790							US:2 Canada:1 EU:1
3748	Research and Development of the Schemes and Technologies for the Enhancement of the	G. Tsulukidze Mining Institute	\$220 001							US:2 Canada:1 EU:2
3758	The development of effective Technologies of Diamond Crystals Synthesis with preset dimensions and	Georgian Technical University	\$187 650							US:2 Canada:1 EU:1
3768	Elaboration of a New Therapeutic-Preventive Composite For Use in Dental Diseases	G. Eliava institute of Bacteriophage, microbiology and virology	\$309 784							US:8 Canada:1 EU:2
3784	New Metal-Ceramic Composite Materials with Nanocrystalline Components for Manufacturing of Hard.	F. Tavadze Institute of Metallurgy and Material Sciences	\$270 000							US:2 Canada:1 EU:2

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3. Rewrite / resubmit - see comments
4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3802	Novel approach for the improvement of ecological guarantee of oil pipelines	Durmishidze Institute of Biochemistry and Biotechnology	\$250 000			€ 201 384			€ 201384	US:8 Canada:1 EU:5
3859	Development of Biogas Technology for Family Farms in Temperate Climate Zones	F. Tavadze Institute of Metallurgy and Material Sciences	\$177 328							US:2 Canada:1 EU:1
3866	Development of Technology for production Detonation Diamonds and Super-hard powders by Utilized	Research and Development Center "Delta"	\$115 950							US:1 Canada:1 EU:2
3867	CREATION OF MULTIFUNCTIONAL MODERN HYDROGEN SENSORS	E. Andronikashvili Institute of Physics	\$195 746			€ 157 680			€ 157680	US:2 Canada:1 EU:5
3903	Development and investigation of the new hydraulic multistage rotary downhole engine for deep-	Georgian Technical University	\$100 000							US:1 Canada:1 EU:1
3921	Development of Innovative SHS-Thermal Explosion Technology for Production of Ti-Al Single-Phase	F. Tavadze Institute of Metallurgy and Material Sciences	\$178 886			€ 144 100			€ 144100	US:1 Canada:1 EU:5
3963	Utilization of Polymer Bodies of Solid-Propellant Rockets Using Ecologically Friendly Technology	M.K. Yangel "Pivdenne" State Design Office	\$203 599							US:1 Canada:1 EU:1
3987	The Novel Bioconversion System for Energy and Single-Cell Protein Combined Production from Organic	National High Technology Centre of Georgia	\$290 000							US:1 Canada:1 EU:1
GE-126	Explosive fabrication of novel materials from nanocrystalline powders	Institute of Mining Mechanics	\$123 350							US:2 Canada:2 EU:2
GE-132	Research of disturbance of the radioecological balance on the present and former military sites in Georgia as well as determining the degree of pollution of water reservoirs and soils of the Black Sea coast of Georgia with radionuclides as a	Tbilisi Ivane Javakishvili State University	\$189 900							US:2 Canada:2 EU:2

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3. Rewrite / resubmit - see comments
4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
Subtotal Regular Georgian Projects Approved:			\$7 644 597	\$386 543	\$0	€ 503 164	\$0	\$386 543	\$ 386543 €503164	
3397	Elaboration of magnetic devices with increased lifting capacity for accident elimination in oil and gas wells	State Oil Academy of Azerbaijan	\$139 992							US:2 Canada:1 EU:1
3469	Elaboration of monocrystalline and films technology, doped of solid solution AlVbVI and tensosensors on their bases	Baku State University	\$150 000							US:1 Canada:2 EU:2
3561	Development of Marine Thermal Probe	Institute of Physics	\$93 518							US:2 Canada:2 EU:1
3569	Micro- and macro-reinforcement of asphalt concrete pavement with fibrous materials made in Ukraine and their waste	Institute of Macromolecular Chemistry	\$360 000	\$360 000				\$360 000	\$ 360000	US:5 Canada:1 EU:1
3647	Research of physicommechanical properties of sedimentary rocks and dynamics of their changes in various termo baric conditions	Institute of Geology	\$242 679							US:2 Canada:1 EU:1
3681	Research of Windpotential of Azerbaijan	Institute of Radiation Problems	\$175 973							US:2 Canada:1 EU:2
3797	Suppression of mutagenic and oncogenic changes in animals through specific antibody-mediated inactivation of serotonin-modulating protein	A.I.Karaev Institute of Physiology	\$159 996							US:2 Canada:1 EU:2

1. Review Incomplete
2. Review Complete - No willingness to fund
3. Rewrite / resubmit - see comments
4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

8. Review complete - to be considered at next GBM

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3805	Creation of radiation and hydrochemical monitoring system of Kura, Araks, Samur rivers basin in Azerbaijan	Institute of Geology	\$300 000							US:2 Canada:1 EU:2
3809	Elaboration of methods of drug addiction correction.	Republican Anti-Plague Station	\$94 101							US:2 Canada:1 EU:2
3821	Epidemiological, microbiological and clinical study of Yersiniosis in Azerbaijan	Republican Anti-Plague Station	\$149 947							US:8 Canada:1 EU:8
3838	Development of high-performance varistors operating in the wide range of rated voltages	Institute of Physics	\$199 275							US:2 Canada:1 EU:2
3840	The utilization of wastes of production PTFE wares as mean of fight against international terrorism.	Small Private Enterprise "Clean - Service"	\$190 896			€ 153 774			€ 153774	US:2 Canada:1 EU:5
3925	Development of conception of geodynamical model of the earth crust evolution	Institute of Geology	\$187 420							US:1 Canada:1 EU:1
3930	Potentiometric biosensors on the base of modified peroxidises with various natural characteristics.	Institute of Botany	\$157 000							US:2 Canada:1 EU:2
3943	Synthesis and investigation of physiological activity of arylsubstitutive 1,2-amino alcohols and their derivatives	Baku State University	\$110 834							US:1 Canada:1 EU:1

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3. Rewrite / resubmit - see comments
4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
3981	Research of semiconductors structures for development of detectors and dosimeters of gamma and neutron radiation	Institute of Physics of the National Academy of Sciences of Azerbaijan	\$239 280							US:1 Canada:1 EU:2
4000	Development of high-accuracy ozonometer for measurement of total content of ozone in atmosphere	Scientific Industrial Center "Ozone"	\$150 000							US:1 Canada:1 EU:1
4015	Exploration and application of the high - speed ionization waves in modern technologies	Institute of Physics of the National Academy of Sciences of Azerbaijan	\$254 954							US:1 Canada:1 EU:2
4044	Basic and applied aspects of the Mud Volcanoes Recent Dynamics, on example South Caspian Basin	Institute of Geology of National Academy of Sciences of Azerbaijan Republic	\$149 522							US:2 Canada:1 EU:1
AZ-03	New corrosion-resistant and wear-resistant coating for oil and gas industry equipment	Radiational Investigation Institute	\$200 000							US:2 Canada:1 EU:1
Subtotal Regular Azerbaijan Projects Approved:			\$3 705 387	\$360 000	\$0	€ 153 774	\$0	\$360 000	\$ 360000 153774	
3745	Post-technological structural modification of chalcogenide vitreous semiconductors for multifunctional device application	Scientific Research Center "Carat"	\$199 867							US:1 Canada:1 EU:1
3793	Computer and experimental simulation of dynamics of large scale constructions of npp under extreme loads	Institute of Mathematics and Computer Science	\$145 000							US:1 Canada:1 EU:1

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4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A
8. Review complete - to be considered at next GBM

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
Subtotal Regular Moldova Projects Approved:			\$344 867	\$0	\$0	€ 0	\$0		€0	
Subtotal Regular Projects Approved:			\$42 423 018	\$1 953 497	\$0	€ 2 124 820	\$0	\$1 953 497	\$ 1953497 €2124820	
3871	Development of Perchlorate Monitoring Method in Water and Soil and of Decontamination	A.V. Dumansky Institute of Colloid Chemistry and Water Chemistry	-\$16 549	-\$11 191	-\$1 323	-€ 3 228		-\$12 514	-12514 -3228	US:5 Canada:5 EU:5
3872	GRID technologies for environmental monitoring using satellite data	Space Research Institute under NAS and National Space Agency	-\$6 036	-\$4 081	-\$483	-€ 1 178		-\$4 564	-4564 -1178	US:5 Canada:5 EU:5
3894	Monitoring and modeling of surface ozone pollution of the atmosphere	Mikolayiv Astronomical Observatory	\$3 986	\$2 695	\$318	€ 778		\$3 013	\$ 3013 € 778	US:5 Canada:5 EU:5
3897	Processing fine Ni, Cr - containing wastes with liquid crude ferronickel for abandonment of	Gas Institute	\$2 213	\$1 496	\$177	€ 431		\$1 673	\$ 1673 € 431	US:5 Canada:5 EU:5
3898	Textured ceramics based on nanostructured relaxor ferroelectrics	I.M. Frantsevich Institute of Problems of Materials Science	\$4 984	\$3 370	\$399	€ 972		\$3 769	\$ 3769 € 972	US:5 Canada:5 EU:5
3905	Monitoring, technical diagnostics and remaining life prediction for the oil transit systems	Ya.S. Pidstryhach Institute for Applied Problems of Mechanics and Mathematics	\$3 989	\$2 698	\$319	€ 779		\$3 017	\$ 3017 € 779	US:5 Canada:5 EU:5
3922	New technologies of THz and sub-THz generation with nanosize semiconductor heterostructures	V.E. Lashkaryov Institute of Semiconductor Physics	\$5 058	\$3 421	\$405	€ 987		\$3 826	\$ 3826 € 987	US:5 Canada:5 EU:5
Subtotal Targeted R&D Init. Projects Approved:			-\$2 355	-\$1 592	-\$188	-€ 459	\$0	-\$1 780	\$ -1780 €-459	
P003fb	Scientific Protocol of the Study of Leukemia and Other Hematologic Disorders Among Clean-up Workers of Ukraine Following the Chernobyl Accident	Research Center for Radiation Medicine (RCRM)	\$17 919	\$17 919				\$17 919	\$ 17919	

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4. Resubmit - see comments

5. Approved with funding
6. Proj. Dev Grant awarded
7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
P004h	Scientific Protocol for the study of thyroid cancer and other thyroid disorders in Ukraine following the Chernobyl accident	Institute of Endocrinology and Metabolism	\$414 347	\$414 347				\$414 347	\$ 414347	
P0089a4	Advanced Welding and Fabrication Techniques for Al-Li Alloys	Paton Welding Institute of NASU	\$84 000	\$84 000				\$84 000	\$ 84000	
P115b	Characterization of Phytoalexins from the Malvaceae In Uzbekistan	A.S.Sadikov Institute of Bioorganic Chemistry (IBOC)	\$67 946	\$67 946				\$67 946	\$ 67946	
P120a	Molecular Mapping of Fiber Yield and Quality Genes using Uzbek Cotton Germplasm Resources	Institute of Genetics and Plant Experimental Biology (IG&PEB)	\$300 000	\$300 000				\$300 000	\$ 300000	
P121b	Characterization and Molecular Mapping of Phytochromes and Flowering Genes in Cotton	Institute of Genetics and Plant Experimental Biology (IG&PEB)	\$308 837	\$308 837				\$308 837	\$ 308837	
P130d	Design, construction and onsite testing of a new n-gamma - logging device for environmental and geological applications	Institute for Scintillation Materials of the Institute for Single Crystals R&D Corporation	€ 11 243			€ 11 243			€ 11243	
P142a	Application of Molecular Fingerprinting to Geographical Characterization and Epidemiological Surveillance of Natural foci of Yersinia enterocolitica	National Center for Disease Control of Georgia	\$207 000	\$207 000				\$207 000	\$ 207000	
P153	Development of New Geophysical Techniques for the World Market	The Pridniprovskya Geophysical Exploration Expedition of the State Geophysical Enterprise "Ukrgeophyzyka" (PGEE)	\$45 045		\$45 045			\$45 045	\$ 45045	

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3. Rewrite / resubmit - see comments
4. Resubmit - see comments

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7. N/A

STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
P155	Development of New Geophysical Techniques for the World Market	Dnipropetrovsk Geophysikal Expedition "Dniprogeophysikal" (DGE)	\$45 045		\$45 045			\$45 045	\$ 45045	
P174	Examination the effect of damage rate, oxygen content on radiation damage evolution in Zr-Nb alloys	National Science Center "Kharkiv Institute of Physics and Technology" (NSC KIPT)	\$50 007		\$50 007			\$50 007	\$ 50007	
P199a	Synthesis of fluorinated nitrogen-containing heterocyclic compounds	Institute for Bioorganic Chemistry and Petrochemistry	\$50 000	\$50 000				\$50 000	\$ 50000	
P200b	Synthesis of novel heterocyclic and fluoroorganic compounds	Institute of Organic Chemistry	\$50 000	\$50 000				\$50 000	\$ 50000	
P201a	Optimized Deposition Processes for Protective Layers on Polyacrylic Fresnel Concentrator Photovoltaic	"Kharkiv Institute of Physics and Technology" National Scientific Center	\$100 000	\$100 000				\$100 000	\$ 100000	
P207a	Development of advanced high-resolution piezoelectric translation stage for optical and life science applications	"Lileya" Small Scientific Production Enterprise	\$174 300	\$174 300				\$174 300	\$ 174300	
P208	Medical Isotope Development at the Institute of Nuclear Physics, Tashkent	Scientific-Technological Enterprise "Tezlatgich" (Tezlatgich)	\$620 000	\$620 000				\$620 000	\$ 620000	
P222a	Tashkent INP Technologies Application Market Research	Institute of Nuclear Physics (INP)	\$81 050				\$81 050	\$81 050	\$ 81050	
P232	Study of photorefractive beam coupling in Sn ₂ P ₂ S ₆ in reflection grating geometry	Institute of Physics	\$25 000	\$25 000				\$25 000	\$ 25000	
P233	Conceptual Design Development of the Ukraine Accelerator Sub-Critical Assembly System with Reduced Enrichment Fuel	National Science Center "Kharkiv Institute of Physics and Technology"	\$750 000	\$750 000				\$750 000	\$ 750000	
P235	On Application of Percentile Optimization Approaches in Resource Allocation Problems	Kyiv Taras Shevchenko University	\$11 200	\$11 200				\$11 200	\$ 11200	

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STCU Funding Table 22nd Governing Board Meeting 18 May 2006

#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
P238	Development of Protective Coating Technologies for Gas Turbine Engine Airfoils	Pratt & Whitney - Paton	\$700 000	\$700 000				\$700 000	\$ 700000	
P240	Tornado combustor for bio-fuels	PE "Plasma-Technika-Consult"	\$326 000	\$326 000				\$326 000	\$ 326000	
P243	Development of a distributed profilometer of temperature and flow speed on the basis of special thermosensing cable	Marine Hydrophysical Institute	\$70 841		\$70 841			\$70 841	\$ 70841	
P244	Nuclear Resonance Fluorescence for Detection of Special Materials	National Science Center "Kharkiv Institute of Physics and Technology"	\$17 000	\$17 000				\$17 000	\$ 17000	
P245	Composite Laminates Titanium Riveting Technology Development with Process Parameters Optimization	(N.Ye. Zhukovskiy) National Aerospace University "Kharkiv Aviation Institute" (KhAI)	\$100 000	\$100 000				\$100 000	\$ 100000	
P247	Development and Validation of Plasma Fuel Nozzles for Gas Turbine and Boiler Applications	PE "Plasma-Technika-Consult"	\$501 000	\$501 000				\$501 000	\$ 501000	
P248	Development and delivery the electron beam welding machine for drill bits manufacture	E.O. Paton Electric Welding Institute	\$1 260 000	\$1 260 000				\$1 260 000	\$ 1260000	
P254	Black sea scientific network	Marine Hydrophysical Institute (MHI)	€ 49 260			€ 49 260			€ 49260	
P255	Manufacturing of experimental batches of samples from Zerodur, bonded using the unglue technology	V.E. Lashkaryov Institute of Semiconductor Physics	€ 10 000			€ 10 000			€ 10000	
P256	Black Sea Scientific Network, IBSS	O.O. Kovalevsky Institute of Biology of Southern Seas (IBSS)	€ 49 260			€ 49 260			€ 49260	
P257	Development of thin vacuum tight Be foils production	National Science Center "Kharkiv Institute of Physics and Technology"	\$291 279				\$291 279	\$291 279	\$ 291279	

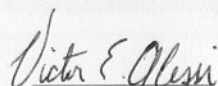
1. Review Incomplete
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4. Resubmit - see comments

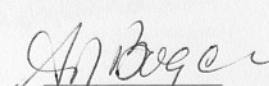
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7. N/A




STCU Funding Table 22nd Governing Board Meeting 18 May 2006

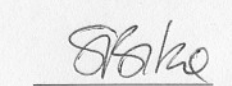
#	Full Title	Leading Institution	Requested Funds	USA (US \$)	Canada (US \$)	European Union (EURO)	Other (US \$)	Total Funding (US \$)	Total Funding (US \$ + EURO)	Comments Conditions
P258	Creation Of a R&D Design Bureau For Development, Design And Implementation Of Ozone-based Scrap Tyres Recycling	National Science Center "Kharkiv Institute of Physics and Technology"	\$183,775				\$183,775	\$183,775	\$ 183775	
P259	Continuous single crystal growth and halide scintillator performance improvement	Amcryst Ltd.	\$523,505				\$523,505	\$523,505	\$ 523505	
P264	Gem Colouration Through Neutron and Gamma Irradiations.	Institute of Nuclear Physics	\$105,495				\$105,495	\$105,495	\$ 105495	
P265	Establishment of a serial production and marketing of water purification devices in Uzbekistan	Institute of Nuclear Physics	\$179,550				\$179,550	\$179,550	\$ 179550	
Subtotal Partner Projects Approved:			\$ 7,660,141 € 119,763	\$6,084,549	\$210,938	€ 119,763	\$1,364,654	\$7,660,141	\$ 7660141 € 119763	
TOTAL:			\$ 50,080,804 € 119,763	\$8,036,454	\$210,750	€ 2,244,124	\$1,364,654	\$9,611,858	\$ 9611858 € 2244124	


Mr. V. Alessi
USA
Board Member


Mrs. A. Bogdan
Canadian
Board Member


Mr. Y. Yatskiv
Ukrainian
Board Member


Mr. Z. Stančić
EU Board Member
(for the European Commission)


Mrs. S. Berka
EU Board Member
(for the EU Presidency)

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5. Approved with funding
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7. N/A
8. Review complete - to be considered at next GBM

Pj Nb	Comments for STCU and Institutes
3074	Suggested contacts:Dr Hugh Seton in Medical Physics, Aberdeen university email:h.seton@biomed.abdn.ac.uk, 0044 1224 553193 The excluding of natural,man-made and biogenic magnetic moise from the measured data is not explicitly presented.The sensitivity 10(-13)T/Hz(1/2) is typical for this kind of equipement:therefore,its characterization as Supersensitive SQUID magnetometer seems as overestimation
3373	Project budget be reduced to 130K and duration to two years. Also, get a US commercial collaborator.
3377	More European companies might be interested to collaborate like Renishaw, NPL, zygo, or Lasertex. Comments from evaluators that may serve for improving the proposal: 1. Reflector placement (or not) on the object has to be more clearly described as it is an important operation for the long distance measurements. It would be appropriate to present an analysis of influence of ambient atmospheric parameters on operability of the instrument. 2. Fibre optics mostly indicates sensitivity to thermal influence. It would be reasonable to comment how it will result on the accuracy of the instrument. 3. There are some minor ambiguous items left, as 6 and 7 in Fig. 4 - which one is semitransparent and which is reflecting mirror; in the formula for error determination L seems to be in m, it should be mentioned in the text. In summary: The suggested laser interferometer for absolute distance measurement of simple construction and exploitation is expected to be a competitive measuring device in the modern market. Its range of precision measurement from few meters up to hundreds meters is the most important and challenging parameter of the instrument.
3481	Must find US collaborator
3511	The project should be scheduled for up to three years with the same budget. The external evaluators do not believe that 2 years are sufficient, especially if contacts are made for possible commercialisation. The travel budget may need to be increased.
3564	it should be recommended to improve the proposal by making a correlation between Borellia taxonomy and clinical symptoms + antibiotic sensitivity. This implies collaboration with clinicians.Furthermore, results should be of importance for the clinicians and the populations at risk. Thus publication of the results and communications to general public should be included in the proposal. A vaccination trial could be proposed to groups and industrials working with Lyme disease such as Pasteur Mérieux Connaught for ImmuLyme and SmithKline Beechman Pharmaceuticals for the Lymerix (controversal in USA).Suggested contacts:Pasteur Mérieux Connaught which work on the vaccine based on the protein OspA, the ImmuLyme.
3569	Must find US collaborator
3588	Needs equipment list in English
3663	
3674	the project offers an good opportunity to detect possible unknown effects of radiation especially in apical meristems and seeds but in the contrary offers low opportunity to validate previous knowledge concerning plant metabolism and to validate existing Monte -carlo codes for estimating external doses in a sample large scale geometry.
3802	Oil companies should be contacted even before starting the project
3826	This proposal is quite ambitious and very important for endamaged plant preservation and for mathematical models for plant populations dynamics which could be extended to other vegetal populations such as crops.However, despite the use of GPS as a new technology for geographical distribution of plants, new technology for seed preservation and in vitro plant cultures are not mentioned in this proposal which would imply collaborations with relevant scientists and institutes.
3840	Avoid using at large the political reason (ie terrorism). The recycling of PTFE is an important matter per se, and a big challenge
3841	Evaluator comments: The proposal cites some polymers also commercial for preparation of proton membranes. However, no information is given about the base component of the catalysts. In addition, commercial catalysts (if available) are suitable option for a better impact of the demonstration unit, target of the project. Evaluator comment : The potential DME application as a clean alternative diesel fuel is depending on the ability of the (new) process to producing large quantities of DME. Therefore, a scenario of low to medium DME production capability of the Composite Proton Conducting (CPC) Membrane Reactor should be considered as well. This means to tackling other potential markets for DME, in parallel with the alternative diesel fuel option. With this respect, DME could be used as an aerosol propellant to replace chlorofluorocarbons (CFC) that have been proven to destroy the ozone layer of the atmosphere. Otherwise, DME could be a valuable building block for making of various chemicals, e.g. methyl acetate, dimethyl sulphate and light olefins.
3867	Most of the efforts concentrates on rare earth metal alloys.A special attention must be given to preparation of hydrogen sensors, ie temperature effects, time response, degradation of sensor...For thatthe activities of stage 6 should be envisaged at the start of the project by defining the technological constraints.
3919	Since that classical technic was described no report have shown its efficiency in adrenal and thyroid glands. Thus the authors should propose some explanations for the lack of such reports. This is quite important because the second part (cell transplantation) is linked to the obtention of successful results from the first one (cell identification). As and even so the authors do not explain the fact that none report exist about SP cells in the relevant glands, they should better explain the way they plan to adapt the Hoechst and facscan technologies for their first part.