

STCU PROJECT FUNDING TABLE
10th Governing Board Meeting, June 1, 2000

14.07.03, 11:46

| # | Full Title | Leading Institution | Project Manager | Requested Funds (US \$) | USA Funds (US \$) | Canadian Funds (US \$) | European Funds (EURO) | Other Funds (US \$) | Total Funding | Comments Conditions |
|---------|---|--|--|-------------------------|-------------------|------------------------|-----------------------|---------------------|---------------|---------------------|
| 144* | The development of the Atmospheric Refraction Non Contact Diagnostics Method Employing Satellite Radiation. | Institute of Radio Physics and Electronics National Academy of Sciences of Ukraine Kharkiv | Turgenev I. | 89 700 | 89 700 | | | | \$ 89 700 | USA:6 |
| 604 | Creation of a soft-hardware complex for simulation of attitude-control operation and stabilization system for civil microsattelites and development of control system on-board software | National Technical University of Ukraine "Kyiv Polytechnical Institute" Ministry of Education Kyiv | Popadinetz Vasil I. (044) 241-72-57 fax 241-71-29 ritm-cd2@alex-ua.com | 200 000 | 180 000 | 20 000 | | | \$ 200 000 | USA:6, Canada:6 |
| 655 (R) | Development of Scientific Foundations for Creating Structural Composites by Radiation Methods | Kharkiv Institute of Physics and Technology, National Scientific Center NASU Kharkiv | Nekludov Ivan M. (0572) 35-63-68, fax 35-17-38 | 149 600 | | | 80 000 | | EURO 80 000 | EU:6, 5 |
| 744* | Development of Reclamation Technology for Liquid Rocket Propellant Oxidizer by Its Usage in Intercalated Bubbling Graphite Production | "PIVDENNE" State Design Bureau, Ministry of Machinerybuilding Dnipropetrovsk | Zheleznyak Victor V. | 199 800 | 199 800 | | | | \$ 199 800 | USA:6 |
| 752* | New Methods for Engineer Estimation of Dynamics and Control for Systems with Distributed Parameters | Timoshenko Institute of mechanics | Zakrzhevskiy Alexandr E. | 107 000 | 107 000 | | | | \$ 107 000 | USA:6, EU:2 |
| 756* | Development and Scientific Research of Precision Forming Technology of Details | "Laboratory of Complex Technologies" Ministry of Education Paulograd | Kesariiski Alexander G. | 120 000 | 120 000 | | | | \$ 120 000 | USA:6, EU:2 |
| 778* | Development of Recommendations for Creation of Fast Railway Transport in Ukraine as a Part of International Transport Corridors | Institute of Technical Mechanics National Academy of Sciences of Ukraine Dnipropetrovsk | Ushkalov Victor F. | 216 000 | 216 000 | | | | \$ 216 000 | US:6, EU:2 |
| 959 | Vacuum-Plasma Hardening of Materials for Constructions and Formation of Functional Layers with the Using of Activation of Hydrogen Isotopes by Hydride Forming Compounds | Kharkiv State University Ministry of Education Kharkiv | Borisko Volodymyr M. (0572) 35-1563, (0572) 35-3977 (ф), azarenkov@pem.kharkov.ua | 192 460 | 192 460 | | | | \$ 192 460 | USA:6 |
| 1020 | Vacuum Washing Machine | "KL-89" Co-operative firm of the consumer goods production Lviv | Lyshchyshyn Omelyan I. (0322) 72-3539 | 150 472 | | | 30 000 | | EURO 30 000 | USA:1, EU:6, 5 |

- 1 Review Incomplete
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| 1064 | Development Of The Methods For Calculating And Research And The Systems Of The Complex Objects' Behaviour Researching On The Base Of The Finite Elements Method And Holographic Interferometry | Kharkiv State Polytechnical University Ministry of Education Kharkiv | Tkachuk Mykola A. | 81 000 | 81 000 | | | | \$ 81 000 | USA:6, EU:2 |
| 1132* | Development of Hydrovibrator for Vibrational-Rotary Well Drilling | Institute of Technical Mechanics Ministry of Education Dnipropetrovsk | Man'ko Ivan Karpovych (0562) 45-1238, (0562) 47-3413 (ф), itm@online.alkar.dp.ua | 180 000 | 180 000 | | | | \$ 180 000 | USA:6 |
| 1133 | Development of Cavitation-Pulsation Plant for Suspension Dispersion | Institute of Technical Mechanics Ministry of Education Dnipropetrovsk | Pilipenko Victor (0562) 45-1238, (0562) 47-3413 (ф), itm@online.alkar.dp.ua | 180 000 | 180 000 | | | | \$ 180 000 | USA:6 |
| 1143* | Working Out a Programs Complex for Computer Simulation and Optimal Control of Horizontal Axis Wind Turbines (HAWTs) Considering Real Operation and Site Conditions | Institute of Technical Mechanics National Academy of Sciences of Ukraine Dnipropetrovsk | Kovalenko Mykola D. | 52 000 | 52 000 | | | | \$ 52 000 | USA:6, EU:2 |
| 1183 | Electromembrane Technological Process Investigation and Autonomous Pilot-Plant Device of Water Desalination Design for Civil Needs | Institute of General & Inorganic Chemistry Ministry of Education Kyiv | Belyakov Volodymyr M. (044) 444-0462, (044) 444-3070 (ф), v-bel@olinet.isf.kiev.ua | 158 865 | 158 865 | | | | \$ 158 865 | USA:6 |
| 1379 | Development and Research of Supersonic Combined Fuel-Arc and thermoabrasive Installation for high Efficient Cutting of Metal Structures of High Thickness. | Institute for Problems of Materials Science Kyiv | Uryukov Boris (044) 4441191 (044) 4442078 uryukov@ipms.kiev.ua | 200 000 | 200 000 | | | | \$ 200 000 | USA:6 |
| 1446* | Development and investigation of multiples fibber optic rotary joints for non-contract transmission of information to and from rotating equipment | Institute of Physics of Semiconductors Ministry of Education Kyiv | Shapar Volodymyr M. | 162 255 | 162 255 | | | | \$ 162 255 | USA:6, EU:2 |
| 1465 | Development of Lithium Power Sources Neutralization and Recovery Technology | "PIVDENNE" State Design Bureau Ministry of Machinerybuilding Dnipropetrovsk | Frolov Victor P. (0562) 99-3149, (0562) 70-0125 (ф), kbu@public.ua.net | 190 480 | 190 480 | | | | \$ 190 480 | USA:6, EU:2. |

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| 1474 | Development of Apparature-Methodic Complex for Dynamic Magnetosurveying for Oil and Gas Deposits Searching | Institute of Geology and Geochemistry of Combustible Minerals Ministry of Education Lviv | Lizoon Stefan-Orest A. (0322) 63-9216, (0322) 63-2209 (ф) | 137 000 | 137 000 | | | | \$ 137 000 | USA:6, EU:2 |
| 1480* | Study of Superfluidity of Nuclear Matter, Instability Arising at Nuclear Collisions and Slow Nuclear Burning | Kharkiv Institute of Physics and Technology, National Scientific Center National Academy of Sciences of Ukraine Kharkiv | Akhiezer Alexander I. | 106 100 | 106 100 | | | | \$ 106 100 | USA:6, EU:2 |
| 1498 | Problems of Macroscopical Analysis, Reconstruction, and Synthesis of Media with Complex Microstructure | Institute for Low Temperature Physics and Engineering, Special Research and Development Bureau for Cryogenic Technologies of Pilot Plant of B.Verkin NASU Kharkiv | Khruslov Eugene J. (0572) 30-0334 | 48 400 | 48 400 | | | | \$ 48 400 | USA:6 |
| 1538* | Research and Elaboration Cryogenic Equipment for Prophylaxy and Cure of the Oncological Illnesses in the Post-Chernobyl Period | "Dnipro-MTO" Science and Engineering Company Kyiv | Mostitsky Andriy | 280 562 | 280 562 | | | | \$ 280 562 | USA:6, EU:2 |
| 1565* | Definition of Regularities of Plastic Straining and Phase Transformations in Materials at Ultrahigh Pressures and High Temperatures | Institute for Superhard Materials National Academy of Sciences of Ukraine Kyiv | Novikov Mykola V. | 159 000 | 159 000 | | | | \$ 159 000 | USA:6 |
| 1569 (j) | Development of the Collective Ion Accelerator, Based on Plasma Vircator and Periodic Magnetic Field | "Kharkiv Institute of Physics and Technology" National Scientific Center NASU Kharkiv | Onishchenko Ivan M. (0572) 35-6611, (0572) 35-3564 (f), onish@kipt.kharkov.ua | 100 000 | 100 000 | | | | \$ 100 000 | USA:6 |
| 1583 | New Crystal Active Media for Miniature Solid-State Lasers | O. Galkin Physics & Technology Institute, NASU Donetsk | Tsymbal Lyudmyla (0622) 553585, 550127 tsymbal@host.dipt.donetsk.ua | 108 900 | 108 900 | | | | \$ 108 900 | USA:6 |
| 1586 | Development of materials and designs of ceramic filters and catalytic after-burners for combustion engines | Frantsevich Institute for Problems of Materials Science, NASU Kyiv | Pavlikov Victor (044) 4442001, 4442131 harmash@ipms.kiev.ua | 142 032 | 142 032 | | | | \$ 142 032 | USA:6, EU:1. |

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| 1588 | Explosive Methods for Intensification of Geotechnological Processes Based on Rock Dilatancy | Subbotin Institute of Geophysics, Division of Geodinamics of Explosion Kyiv | Mykhalyuk Alfred (044) 2248309, 5539574 | 108 862 | 108 862 | | | | \$ 108 862 | USA:6 |
| 1589 | Gas Analysis Device for Malfunction Diagnosis of High Voltage Transformers | Institute for Applied Problems in Physics and Biophysics, NASU Kyiv | Maksymovych Nelli (044) 4448537, 4468152 peter@webber.net.ua | 159 828 | 143 845 | 15 983 | | | \$ 159 828 | USA:6 |
| 1603 | Device for partial oxygen pressure measurement in biological objects | Institute for Applied Problems in Physics and Biophysics, NASU Kyiv | Afanasyeva Valentina (044) 5558202, 4468826 | 166 715 | 166 715 | | | | \$ 166 715 | USA:6, EU:2. |
| 1608 | High-Strength Shock-Resistant Boron Carbide Ceramics | Frantsevich Institute for Problems of Materials Science, NASU Kyiv | Tkachenko Yuriy (044) 4442271, 4442078 dep21@ipms.kiev.ua | 148 830 | 148 830 | | | | \$ 148 830 | USA:6 |
| 1615 | Integrated complex of monitoring and training for welding process | Department of Hybrid Modeling and Control Systems in Power Engineering, NASU Kyiv | Vasylyev Vsevolod (044) 2907073, 2280439 vzv@prime.net.ua | 148 060 | 148 060 | | | | \$ 148 060 | USA:6 |
| 1617 (R) | Hydrogen Generator | Open Joint-Stock Company "Ukrainian Scientific and Research Institute for Analytical Instrumentation" of the Ukrainian Ministry of Industrial Policy Kyiv | Primisky Vladislav (044) 2699913, 2699913 ukr@analit.relc.com | 134 640 | 121 176 | 13 464 | | | \$ 134 640 | USA:6, Canada:6, EU:2. |
| 1622 | Diamond single crystals (5 ÷10) mm, diamond films, the goal-directed changes of their properties | V.N. Bakul Institute for Superhard Materials, NASU Kyiv | Nachalnaya Tamara (044) 4688641, 4688625 frd.@ismanu.kiev.ua | 155 000 | | | 170 000 | | EURO 170 000 | USA:1, EU:6. |
| 1636 | New WEB-based CAD framework for design of complex technical systems | "Kyiv Polytechnic Institute", Informational Resources Research Institute at National Technical University of Ukraine | Petrenko Anatoly (044) 2446478, 2446478 petrenko@cad.ntu-kpi.kiev.ua | 185 000 | 185 000 | | | | \$ 185 000 | USA:6, EU:2 |

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| 1641 | Cast Alloys for Oil-Producing Equipment, which is Corrosion-resistant for Use in Highly Mineralized Liquids, Containing Hydrogen Sulfide | Physico-Technological Institute for Metals and Alloys, NASU Kyiv | Sheiko Anatoly (044) 4440050, 4441210 metal@ptima.kiev.ua | 99 836 | 99 836 | | | | \$ 99 836 | USA:6, EU:2. |
| 1733 | Universal portable device for ultraviolet radiation monitoring | Institute for Single Crystals of National academy of science of Ukraine (ISC) Kharkiv | Galunov Nikolai (0572) 30-70-52, 32-02-07 galunov@isc.kharkov.com | 159 800 | | | 170 000 | | EURO 170 000 | USA:1, EU:6. |
| 1747 | Dynamics of Earth Materials Treated as Structured Media with Non-Local Features | Subbotin Institute of Geophysics, Division of Geodinamics of Explosion Kyiv | Vakhnenko Vyacheslav (044) 2241460, 2250252 vakhnenko@bitp.kiev.ua | 160 615 | 160 615 | | | | \$ 160 615 | USA:6 |
| 1810 | Polymeric Lithium Rechargeable Batteries based on a Nanostructure Pyrite Cathode | Ukrainian State Chemical Technology University Dnipropetrovsk | Shembel Olena (0562) 470391, 473316 sembel@onil.dp.ua | 150 000 | 135 000 | 15 000 | | | \$ 150 000 | USA:6, Canada:6, EU:1. |
| 1982 | Highly Sensitive Beta-spectrometer Based on Scintillation Detectors for Monitoring of Radionuclids | Taras Shevchenko National University Kyiv | Primenko Georgiy (044) 2668457, 2664557 zvv@boy.rpd.univ.kiev.ua | 109 475 | | | 120 000 | | EURO 120 000 | USA:1, EU:6. |
| 2004 | New high-sensitive photo-refractive semiconductor materials | Institute of Physics, NASU Kyiv | Gnatenko Yurij (044) 2654717, 2653022 gnatenko@iop.kiev.ua | 194 018 | 194 018 | | | | \$ 194 018 | USA:6, EU:2. |
| 2185 | Technology for Technetium-99 Radiopharmaceutical Production for Nuclear Medicine | "Accelerator" Kharkiv | Tur Yuriy (0572) 356533, 353731 dovbnya@nik.kharkov.ua | 250 000 | 237 500 | 12 500 | | | \$ 250 000 | USA:6, Canada:6, EU:2. |
| 2193 | Nanoanalysis: Determination Of Picogram Amounts Of Chemical Compounds In Water Solutions | L.V.Pisarzhevsky Institute of Physical Chemistry, Ukrainian Academy of Sciences Kyiv | Strizhak Peter (044) 2656663, 2656216 strizhak@ipch.kar.net | 120 755 | 120 755 | | | | \$ 120 755 | USA:6, EU:1. |

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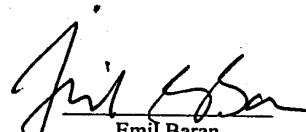
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| 2196 | Variations of atmospheric organic halides during pre-industrial Holocene and the present as revealed by coastal Antarctic ice probes | Institute of Geological Science, NASU Kyiv | Bogillo Vladimir (044) 2966716, 2459099 val@ucs.freenet.kiev.ua | 75 000 | 37 500 | | 45 000 | | \$ 37 500 + EURO 45 000 | USA:6, EU:6. |
| 2266 | Engineering and research investigations of improved- parameters for a magnetic microscope | B.Verkin Institute for Low Temperature Physics and Engineering of the NASU Kharkiv | BONDARENKO STANISLAV (380-572) 30-85-33, 21639 sktb @ ilt.kharkov.ua | 140 000 | 140 000 | | | | \$ 140 000 | USA:6 |
| 2390 | Method for Prediction of the Transfer of 90Sr and 137Cs to Plants by Soil Solution Analysis | Taras Shevchenko Kyiv University Kyiv | Prorok Vassyl (044) 2662296, shaykevi@optics.ups.kiev.ua | 60 000 | 60 000 | | | | \$ 60 000 | USA:6, EU:2. |
| 2457 (R) | Radiation and Breast Cancer in Ukraine Following the Chornobyl Accident | "Poligon", Science Engineering and Ecological Centre, NASU Kyiv | Khirunenko Ludmila Romanenko Anatoly (044) 2659821, 2655588 lik@radiat.ip.kiev.ua | 125 790 | 56 606 | 12 579 | 68 000 | | \$ 69 185 + EURO 68 000 | USA:6, Canada:6, EU:6. |
| 2604 | The Stimulative Influence of a Semiconductor Laser Upon Eye Tissue in the red and Infrared Wavelength Range | Acad. V. P. Filatov Eyes Decease and Tissue's Therapy Institute Odesa | Linnik Leonid (0482) 633725, 684851 | 166 730 | 150 057 | 16 673 | | | \$ 166 730 | USA:6, Canada:6, EU:2. |
| Uzb-23 (j) | Design Energy-Technological Complex for Producing Ecologically Pure Energy Carriers and Subproducts | Institute of Mechanical Engineering Problems of the NASU Kharkov Institute of Nuclear Physics Tashkent | Solovey V. V. (0572) 94-3523 94-4635(f) root@ipmach.kharkov.ua Muminov M. (3712) 61-6120 (3712) 64-2590(f) muminov@pc202.suninp.tashkent.su | 208 980 | 208 980 | | | | \$ 208 980 | USA:6, EU:2. |
| Uzb-45 | Effects of Shell Structure on Yield of Fusion-Fission Reaction Products. | Institute of Nuclear Physics of Uzbek Academy of Sciences Tashkent | D. Y. Kobliik (371) 2 64-98-02 (371) 144-26-61 ion@pc202.suninp.tashkent.su | 94 000 | 94 000 | | | | \$ 94 000 | USA:6, EU:2. |

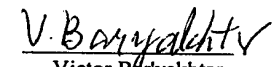
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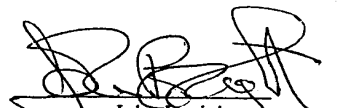
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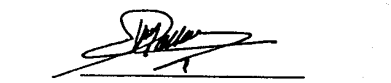
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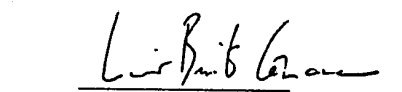
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| Subtotal Regular Projects Approved: | | | | 50 144 641 | 6 108 909 | 106 199 | 683 000 | | \$ 6 215 108+ EURO 683 000 | |
| P033 | Development of the Welding Installation and Electron Beam Welding Technology of Extended Joints | Paton Welding Institute of NASU | Nazarenko Oleg Kuzmich. | 307 000 | | | | 307 000 | \$ 307 000 | |
| P038 | Development of an Advanced technique for Fatigue Life Improvement of Welded Structures with Fatigue Cracks and Software for Fatigue Assessment. | Paton Welding Institute of NASU | Mikheev Pavlo P. | 38 905 | | | | 38 905 | \$ 38 905 | |
| P039 | Development of Personal Digital Assistant Modules | Institute of Cybernetics of NASU | Chaplinskiy Yuriy Petrovich | 42 945 | | | | 42 945 | \$ 42 945 | |
| P041 | Mechanism of beta-grain growth in alpha/beta titanium alloys during continuous, rapid heating | Institute of Metal Physics of NASU | Ivasishin Orest Mikhailovich | 23 500 | | | | 23 500 | \$ 23 500 | |
| P044 | Dynamic Visible-to-Infrared Converter | Institute of Semiconductor Physics, NASU | Malyutenko Vladimir Konstantinovich | 24 900 | | | | 24 900 | \$ 24 900 | |
| P045 | Experimental Technique for Extraction of the Stable Isotopes (208)Pb from the samples of the Natural ore Mixture | Institute of Colloid and Water Chemistry | Kornilovich Boris Yurievich | 4 000 | | | | 4 000 | \$ 4 000 | |
| P047 | Development of Recommendations for Hardening of Machine Parts | Paton Welding Institute of NASU | Borisov Yuriy S. | 9 340 | | | | 9 340 | \$ 9 340 | |
| Subtotal Partner Projects: | | | | 450 590 | | | | 450 590 | \$ 450 590 | |
| Total: | | | | 50 595 231 | 6 108 909 | 106 199 | 683 000 | 450 590 | \$ 6 665 698 + EURO 683 000 | |


Emil Baran
Board Member for Canada


Victor Bar'yakhtar
Board Member for Ukraine


John Boright
Board Member for the United States


Jean Gabolde
Board Member for the European Union


Luis Brito-Camara
Board Member for the European Union

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