

STCU Proposal Funding Table
1st Governing Board Meeting 14-15 December, 1995

Project No.	Project Title	Serial Number	Requested Funds	US Funds	Canadian Funds	Swedish Funds	Comments Conditions	Grand Total	Participation
25	Development of Methods of Holographic Interferometry for Diagnostics of Stress-Strain State and Quality Control of Machine-Building Structures	17	\$112,760	\$101,484	\$11,276		5		90-10 US/CA
36	Development of Holographic Techniques for Contactless Diagnostics of Nuclear Power Plant Structures	18	\$81,000				3		
57	Plasma Sterilizer	2	\$73,323				3		
51	Titanium Alloys with Stable Mechanical Characteristics on Exploitation in Wide Temperature range	1	\$80,000	\$72,000	\$8,000		5		90-10 US/CA
128	Development of High Performance Equipment and Process Engineering to Bore the Boreholes by Means of Mining Rock Melting	3	\$200,000	\$200,000	0		4, 5		
177	Investigation of Multipurpose Explosive Charges and the Development of methods of Harnessing Them	19	\$90,000	\$81,000	\$9,000		4, 5		90-10 US/CA
178	Simulation of Resonant Vibrational Processes of Nuclear Power Plant Heat Exchanges	20	\$90,000				2		
183	Radiation Technologies for Public Health Control, Food Industry and Ecology	21	\$460,000				2		
237	Recommendation for High-Speed Rail Transport and Rolling Stock Parameters in Ukraine	22	\$100,000				2		
238	Studies into Reduction of Wear of Railway Wheels and Rails	23	\$100,000	\$100,000			5		100-0 US
244	Development of Techniques for Diagnostics of Deep Levels of Multi-Layered thin-Film Semiconductor Materials	4	\$52,000	\$41,800	\$10,400		6		80-20 US/CA
247	Radiant Energy System R&D	24	\$90,000				3		
248	Design of Storage Silos and Other Structures Based on Engineering Techniques Used on Rocket and Space Structures	25	\$50,000				3		
262	Feasibility Studies of Clearing Near-Orbital Debris	26	\$95,644				2		
276	Investigating the Use of Traveling Discharges for Plasmachemistry and Ecology	27	\$100,000				3		
318	Working Out Algorithmic Methods and Software for Efficient Data Processing in Computer Tomography Directed on Output High Dimension Matrices	5	\$110,000				2		
320	Development of Magnetic Measuring Devices and Systems for Using Under Radiation in Charged Particle Accelerators, Space Crafts' Orbits, Nuclear Power Plants	28	\$280,000	\$252,000	\$28,000		5		90-10 US/CA

1. Reviews Incomplete - Consideration deferred
2. Reviews Complete- No Willingness to fund expressed
3. Rewrite and resubmit - See comments
4. Other. See comments
5. Funding Party's collaborator required

Footnote 3 - Specific Comments on Proposals Recommended for Rewrite and Resubmit:

Project 036 - The United States sees technical merit in this proposal, although more detail is necessary to make a final judgment. Above all, however, the U.S. can fund the project if the team includes a significant number of WMD* scientists.

Project 057 - Project design should include personnel with background in bacteriology or other appropriate biological science. Also, in order to obtain support from the United States, the project needs to have a greater number of WMD* scientists. Proposals could be rewritten in cooperation with a U.S. collaborator, who is already working with the proposer on other work and who has expressed interest in this project.

Project 247 - Proposal should provide more details particularly on how proposer's existing technology would be transferred to design of solar collectors. The research team has sufficient WMD* scientist participation for partial funding by the United States; if WMD scientist participation were increased, and the revised project is acceptable, the U.S. could potentially provide full funding.

Project 248 - The parties have not expressed an interest in this particular project. There is question whether there is a need for this type of high-technology storage system. The United States looks favorably upon this team of scientists because it includes a relatively high proportion of WMD* scientists. The U.S. suggests the team redirect itself to a new project in another area.

Project 276 - **Canadian comments:** The project has an interesting and important concept. However, there is no information on the geometry of the discharge, and references are to old work (e.g., 1943). There is more modern work done in the area which, if taken into consideration, could strengthen the proposal. The project team needs members who are experience in chemistry, gaseous chemical reactions, and plasma physic at atmospheric pressure. **U.S. Comments:** The U.S. sees good potential for the project. However, in order for the U.S. to consider funding, the proposal needs to include a significant member of WMD* scientists. This could be accomplished by having joint work done between the proposer and a Ukrainian institute with WMD* experience and expertise.

*WMD Scientist - Scientist or engineer with expertise and experience in weapons of mass destruction or missile delivery systems.

(2)

Project 417 - The Canadian party could potentially be interested in a rewritten proposal that provides more information as on equipment, (either present or to be constructed); protocols for experiments; assessments for product quality after drying; and a list of background literature.

Footnote 4 - Other Comments:

Project 128 - The U.S. will provide support of \$200,000, for a revised project that will cover activities listed in the original proposal through the first stage, which includes development and testing of prototype melting chambers. The STCU and Ukrainian recipient will develop a work statement during the preparation of the project agreement to reflect the particulars of the revised project (participants, financial information, work schedule), consistent with this level of financial support.

Project 177 - As a condition of financing this proposal activities should not include efforts related to space rocket and rocket motor activities. All other activities listed on the proposal are acceptable.

Project 344 - This project will cofunded by United States and Sweden. In the course of writing the Project Agreement between the STCU and the Ukrainian proposer, there will be communications between scientists from the United States/Sweden and the Ukrainian principal investigator to identify modifications that could improve the project design.

Special Canadian Project - Collaboration Grants for Ukraine Scientists

The purpose of this grant application is to provide Ukraine scientists the opportunity to collaborate with Canadian scientists and the business community to further their scientific efforts and increase the potential for commercial and funding opportunities with the private sector in Canada. Funds would be provided for travel of Ukraine scientists to Canada for a maximum period of two weeks. The Canadian private sector will contribute up to 50% of the cost of each collaboration where visitations/placements are made with Canadian industry.

Applications for collaboration grants would be involved on the basis of the Canadian peer review, where NSERC (through the review process) is strongly recommending collaboration with Canadian scientists and/or companies. Applications would also be invited where, on the basis of promotional activities (prior to and during the peer review process) there is good potential for Canadian private sector interest or where downstream participation (either in research funding or commercialization) is achievable. The Canadian Steering Committee will review recommendations of NSERC and of Dr. T. Speers providing direction to the Canadian CEA regarding the number and nature of grant applications to be invited.

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The Canadian CEA will work closely with the STCU, CIDA and NSERC to facilitate information transfer related to collaboration grants. The STCU will review and consider the Steering Committee recommendations and will validate the invitations for collaboration grant applications, providing requests for grants to the Canadian CEA.

Upon receipt of the validation and request from the STCU, the Canadian CEA (through the promotional activities) will develop placements, itineraries and schedules in consultation with the STCU, NSERC, CIDA and Canadian industry. Funds for international travel will be forwarded (by the Canadian CEA) to the STCU for administration; funds for Canadian travel and subsistence while in Canada will be administered by the Canadian CEA.

A grant of \$100,000 is requested. The funds will be used to support travel for up to 20 scientists visiting Canada during the period of January 1, 1996 to August 31, 1996 at a cost of up to \$5,000 per trip. Funds will cover direct air fare costs to Canada, air fares within Canada as well as accomodation and per diem. Canadian industry will be asked to contribute up to 50% of costs of each grant where placements are made within industry.

Footnote 5 - Funding Party Collaborator Required:

All projects funded by the United States will have as a requirement the participation in the project of a United States collaborator. The Ukrainian recipients will be free to identify a U.S. collaborator of their choice. Otherwise, the U.S. Government will identify a collaborator, either from the U.S. national laboratories, the U.S. academic community or U.S. industry or other appropriate entity which is acceptable to the Ukrainian participants. STCU funds will not be used to support activities of the U.S. collaborator. Activities by any U.S. collaborator will be funded from other sources