#### INTERNATIONAL SCIENCE AND TECHNOLOGY CENTER

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МЕЖДУНАРОДНЫЙ НАУЧНО-ТЕХНИЧЕСКИЙ ЦЕНТР

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# Projects Approved for Funding by ISTC Governing Board at the 39th Funding Session 30 March 2006 Held in Moscow. Russia

#### 1. Newly Approved Projects

# 2253.2 Investigation of the Delayed Neutron Characteristics from the Fission of Compound Nuclei Th-233, U-234, U-235, Am-244, Np-238, Cm-246, Pa-233, Pa-234, Np-239, Np-240 at the Excitation Energies from 5 to 20 MeV

Project Manager: Furman W I; Leading Institution: Joint Institute of Nuclear Research (Dubna, Moscow reg.); Supporting Institutions: FEI (IPPE) (Obninsk, Kaluga reg.), VNIIEF (Sarov, N. Novgorod reg.); Collaborators: CEA / DSM / DAPNIA/CEN Saclay (Saclay, France), ENEA (Rome, Italy), Lawrence Livermore National Laboratory (Livermore, CA, USA); Duration: 12 months; Funding parties: EU

## 3032 The Study of Atmospheric Pollution Transport from Europe to Pacific Region Using Ground-Based and Satellite Measurements

Project Manager: Grechko E I; Leading Institution: Institute of Atmospheric Physics (Moscow); Supporting Institutions: Karpov Institute of Physical Chemistry (Moscow), Institute of Atmospheric Optics (Tomsk, Tomsk reg.); Collaborators: CNRS / Laboratoire des Sciences du Climat et de l'Environnement / Biogeosciences Department (Gif-sur-Yvette Cedex, France), Frontier Research System for Global Change (Yokohama, Japan), Max-Planck-Institut fur Meteorologie (Hamburg, Germany), Max-Planck-Institute for Biogeochemistry (Jena, Germany), University of Bremen (Bremen, Germany), University of Iowa (Iowa City, IA, USA), University of Toronto / Department of Physics (Toronto, ON, Canada), University of Uppsala / Department of Earth Science (Uppsala, Sweden); Duration: 36 months; Funding parties: EU JP

#### 3177 Development of the Laboratory-Experimental Technology of Neutralization of B.anthracis Spores in Soil with Spore Germination Activators and Bacterial Phages

Project Manager: Popov V G; Leading Institution: Institute of Immunological Engineering (Lyubuchany, Moscow reg.); Supporting Institution: Center of Science of Biomedical Technologies (Moscow); Collaborators: Immune Network Ltd. (Vancouver, BC, Canada), MDM Group, Inc. (Santa Clara, CA, USA), Universitat Hohenheim / Institut fuer Umwelt- und Tierhygiene (Stuttgart, Germany); Duration: 36 months; Funding parties: EU CA

## 3257 New strategy of anti-tuberculosis BCG vaccination: oral administration in conjunction with heterologous protective antigens prime-boost delivery strategy

Project Manager: Yeremeev V V; Leading Institution: Central Tuberculosis Research Institute (Moscow); Supporting Institution: Institute of Immunological Engineering (Lyubuchany, Moscow reg.); Collaborators: CNRS / Institut de Transgenose (ORLEANS CEDEX 2, France), Texas A&M University System / Health Science Center (College Station, TX, USA); Duration: 36 months; Funding parties: US

# 3262 Combinatorics, Research and Development of Multifunctional Polyfiber Infrared Systems for Delivery and Processing Molecular and Thermal Information of Exploratory, Industrial and Biomedical Purpose

Project Manager: Baskov P B; Leading Institution: VNIIKhT (Chemical Technology) (Moscow); Supporting Institution: Institute of General Physics named after A.M. Prokhorov RAS / Natural Sciences Center (Moscow); Collaborators: ART-Photonics GmbH (Berlin, Germany), Centro Ricerche FIAT (Torino, Italy), Charite Campus Benjamin Franklin / Institut fur Medizinische Phyzik und Lasermedizin (Berlin, Germany), High Tech Photonics (London, UK); Duration: 36 months; Funding parties: EU

## 3297 Development and Creation of Radioactive Be-10 Targets on the Basis of Russian Nuclear Technologies

Project Manager: Gurov Yu B; Leading Institution: MIFI (Moscow); Supporting Institutions: FEI (IPPE) (Obninsk, Kaluga reg.), Joint Institute of Nuclear Research (Dubna, Moscow reg.); Collaborators: Hahn-Meitner Institut

Berlin (Berlin, Germany), Ludwig-Maximilians-Universität / Sektion Physik (Garching, Germany); Duration: 30 months; Funding parties: EU

#### 3301 Myocardial Infarction: New Approaches to Prophylaxis and Treatment; Apoptosis Regulation

Project Manager: Mironova G D; Leading Institution: Institute of Theoretical and Experimental Biophysics (Puschino, Moscow reg.); Supporting Institution: Institute of Immunological Engineering (Lyubuchany, Moscow reg.); Collaborators: New York University / David B. Kriser Dental Center / College of Dentistry (New York, USA), Universite Claude Bernard - Lyon I (Lyon, France), University of Helsinki / Department of Applied Chemistry and Microbiology (Helsinki, Finland); Duration: 36 months; Funding parties: EU

## 3303 The Role of Molecular-Genetic Mechanisms of Resistance to the Stress Impact in Human Senility and Active Longevity

Project Manager: Semenkov V F; Leading Institution: Institute of Gerontology (Moscow); Supporting Institutions: Institute of Bioorganic Chemistry (Moscow), Institute of Immunological Engineering (Lyubuchany, Moscow reg.); Collaborators: University of Chicago / Pritzker School of Medicine (Chicago, IL, USA), University of Turku / Finnish-Russian Joint Biotechnology Laboratory (Turku, Finland); Duration: 36 months; Funding parties: EU

#### 3305 Synthesis and Investigation of the Metal Oxide Catalysts for Photocatalytic Degradation of Harmful Gases Resulted from Terrorist Acts and Man-Caused Catastrophes

Project Manager: Vorozhtsov A B; Leading Institution: Institute of problems of chemical-energetic technologies Siberian Branch of Russian Academy of Sciences (Biysk, Altay reg.); Supporting Institutions: Institute of Atmospheric Optics (Tomsk, Tomsk reg.), Boreskov Institute of Catalysis (Akademgorodok, Novosibirsk reg.), Institute of Chemical Kinetics and Combustion (Novosibirsk, Novosibirsk reg.); Collaborators: Fraunhofer Institute Chemische Technologie (Pfinztal, Germany), INASMET (San Sebastian, Spain), JAXA / Institute of Space and Astronautical Science (Kanagawa, Japan), Korea Atomic Energy Research Institute / Laboratory for Quantum Optics (Yusung Taejon, Korea), Lawrence Livermore National Laboratory / Energetic Materials Center (Livermore, CA, USA), NASA / Goddard Space Flight Center (Greenbelt, MD, USA), Politecnico di Milano / Space Propulsion Laboratory (Milan, Italy), Recan GmbH (Aalen, Germany), Universitat Rovira i Virgili / Dinamic Applied Biotechnology Innovation Centre (Tarragona, Spain), University of Cincinnati / College of Engineering (Cincinnati, OH, USA), University of Toronto / Institute for Aerospace Studies (Toronto, ON, Canada); Duration: 36 months; Funding parties: EU

#### 3312 Methylation as Epigenetic Factor in Progression of Cervical Tumors Associated with Human Papilloma Virus Infection

Project Manager: Netesova N A; Leading Institution: State Research Center of Virology and Biotechnology VECTOR (Koltsovo, Novosibirsk reg.); Supporting Institutions: Cancer Research Center (Moscow), Siberian Branch of RAS / Institute of Chemical Biology and Fundamental Medicine (Novosibirsk, Novosibirsk reg.); Collaborators: Karolinska Institute / Microbiology and Tumor Biology Center (Stockholm, Sweden), Northwestern University / Feinberg School of Medicine (Chicago, IL, USA), University of Massachusetts / Medical School (Worcester, MA, USA), University of Toronto / Banting and Best Department of Medical Research (Toronto, ON, Canada); Duration: 30 months; Funding parties: US

#### 3316 Surface Decontamination after Chemical Terrorism: Safety Standards Development

Project Manager: Britanov N G; Leading Institution: Scientific Research Institute of Hygiene, Toxicology and Occupational Pathology (Volgograd, Volgograd reg.); Collaborator: Emergencies Science and Technology Division Environment Canada (Ottawa, ON, Canada); Duration: 36 months; Funding parties: CA

## 3341 Implementation of an Irradiation Base for Clinical Studies on Neutron Capture Therapy at the IRT MEPhI Nuclear Reactor with use of an Epithermal and Thermal Neutron Beam

Project Manager: Khokhlov V F; Leading Institution: MIFI (Moscow); Supporting Institutions: State Research Center – Institute of Biophysics (Moscow), Cancer Research Center (Moscow); Collaborator: Massachusetts Institute of Technology (MIT) / Nuclear Engineering Department (Cambridge, MA, USA); Duration: 30 months; Funding parties: CA

#### 3357 Fabrication of Nanostructures on the Base of Oxides of Mixed Valence Metals and Investigation of their Structural, Magnetic and Electron Properties

Project Manager: Berezin V A; Leading Institution: Institute of Microelectronics Technology and High Purity Materials (Chernogolovka, Moscow reg.); Supporting Institution: NPO Lutch (Podolsk, Moscow reg.); Collaborators: Ecole Polytechnique de Montreal / Centre for Research in Computational Thermochemistry (Montreal, QC, Canada), Portland State University (Portland, OR, USA), URA 0073/Universite Paris-Sud / Laboratoire de Physique des Solides (Orsay, France); Duration: 30 months; Funding parties: EU

## 3363 Developing the Experimental Database on Fragment Yield in Fission of the Main Nuclear Fuel Isotopes and other Minor Actinides Induced by Intermediate Energy Neutrons

Project Manager: Batenkov O I; Leading Institution: Khlopin Radium Institute (St Petersburg); Collaborators: NRG an ECN KEMA company (Petten, Netherlands), Oregon State University (Corvallis, OR, USA), Tohoku University / Cyclotron and Radio Isotope Center (Sendai, Japan), University of Uppsala / Department of Neutron Research (Uppsala, Sweden); Duration: 36 months; Funding parties: EU

#### 3364 Development of an Analytical Methodology for Quantification of Stable Elements in Radioactive Solutions Using Electronic Tongue Multisensor Systems

Project Manager: Dushin V N; Leading Institution: Khlopin Radium Institute (St Petersburg); Supporting Institutions: NPO Mayak (Oziorsk, Chelyabinsk reg.), St Petersburg State University / Scientific Research Institute of Chemistry (St Petersburg); Collaborators: Aalborg University (Aalborg, Denmark), Battelle Energy Alliance LLC (BEA) / Idaho National Laboratory (Idaho Falls, ID, USA), Idaho National Engineering and Environmental Laboratory (Idaho Falls, ID, USA), University of Manchester / School of Chemical Engineering and Analytical Science (Manchester, UK); Duration: 36 months; Funding parties: US

#### 3368 Remote IR Laser Sensing Technique for Methane Emission in the Sites of Fossil Fuels Production

Project Manager: Bravy B G; Leading Institution: Institute of Problems of Chemical Physics (Chernogolovka, Moscow reg.); Supporting Institution: Russian Scientific Center of Applied Chemistry (St Petersburg); Collaborators: Forschungszentrum Karlsruhe GmbH / Institut fur Meteorologie und Klimaforschung Atmospharische Umweltforschung (Garmisch-Partenkirchen, Germany), Oregon State University / Civil, Construction and Environmental Engineering (Corvallis, OR, USA); Duration: 24 months; Funding parties: EU CA

## 3392 Development of Means and Methods to Ensure Microbiological Safety of Long-Operating Space Equipment

Project Manager: Novikova N D; Leading Institution: Russian Academy of Sciences / Institute of Biomedical Problems (Moscow); Supporting Institution: FEI (IPPE) (Obninsk, Kaluga reg.); Collaborators: Bremen Institute for Materials Testing (Bremen, Germany), SCK-CEN (Mol, Belgium), Universita degli studi della Tuscia / Dipartimento di Agrobiologia e Agrochimica (Viterbo, Italy), Universität Bremen / UFT (Bremen, Germany), University of Groningen / University Medical Center Groningen (Groningen, Netherlands); Duration: 30 months; Funding parties: EU

#### 3394 On the Capability of Liquid Homogeneous Materials to Detonate

Project Manager: Torunov S I; Leading Institution: Institute of Problems of Chemical Physics (Chernogolovka, Moscow reg.); Collaborators: Lawrence Livermore National Laboratory (Livermore, CA, USA), McGill University / Department of Mechanical Engineering (Montreal, QC, Canada), National Institute of Advanced Industrial Science and Technology (AIST) (Tsukuba, Japan), Université de Poitiers / Laboratoire de Combustion et de Détonique (Futuroscope, France), Yokohama National University / Graduate School of Engineering (Yokohama, Japan); Duration: 36 months; Funding parties: CA

### 3401 Development of Approaches in Methods of X-Ray Reflectometry with Application to Process Engineering in Micro and Nanoelectronics

Project Manager: Filatova E O; Leading Institution: St Petersburg State University / Institute of Physics (St Petersburg); Supporting Institution: VNIIEF (Sarov, N. Novgorod reg.); Collaborators: CNRS / Universite Pierre & Marie Curie / Laboratoire de Chimie Physique - Matiere et Rayonnement (Paris, France), Institute of Electronic Structure & Laser (Heraklione, Greece); Duration: 30 months; Funding parties: EU

## 3403 Forsterite-Laser-Based Multichannel Optical Frequency Generator for Precision Metrology in the Infrared Range

Project Manager: Denisov V I; Leading Institution: Institute of Laser Physics (Akademgorodok, Novosibirsk reg.); Collaborators: Heinrich Heine Universität Düsseldorf / Institut fuer Experimentalphysik (Düsseldorf, Germany), Korea Research Institute of Standards and Science (Taejeon, Korea), National Research Council Canada / Institute for National Measurement Standards (Ottawa, ON, Canada); Duration: 24 months; Funding parties: RK

#### 3410 Technology of Bioplankton Monitoring

Project Manager: Rubin A B; Leading Institution: Moscow State University / Department of Biology (Moscow); Collaborator: Dongseo University / Research Center for Advanced Science and Technology (RCAST) (Busan, Korea); Duration: 36 months; Funding parties: RK Other

## 3412 Investigation of Astrosols in Near-Earth Space Using the Onboard Measurements and Computer Modeling, Analysis of Astrosol Effect on Components of a Spacecraft

Project Manager: Shutov V I; Leading Institution: Research Institute of Aviation Systems (Moscow); Supporting Institutions: Institute of Applied Mechanics (Moscow), St Petersburg State University / Smirnov Scientific Research Institute of Mathematics and Mechanics (St Petersburg); Collaborators: Fraunhofer Institut

Kurzzeitdynamik (Freiburg, Germany), NASA Jonson Space Center (Houston, TX, USA), ONERA (Toulouse, France); Duration: 36 months; Funding parties: EU

#### A-1229 Simulating Space Conditions and Their Effect of Materials and Devices Intended for Application in Space

Project Manager: Yeritsyan H N; Leading Institution: Yerevan Physics Institute (Yerevan, Armenia); Collaborators: Helsinki University of Technology / Laboratory of Materials Processing and Powder Metallurgy (Helsinki, Finland), Kingston University / Faculty of Science (Kingston, UK), Liverpool John Moores University (Liverpool, UK), National Technical University of Athens / Laboratory of Microwave and Fiber Optics (Athens, Greece), ONERA (Chatillon, France), Pacific Northwest National Laboratory (Richland, WA, USA); Duration: 36 months; Funding parties: CA

## A-1269 Production of New Types of Continuous Mineral Fibers and their Application in Polymer Composite Materials

Project Manager: Petrosyan G Kh; Leading Institution: NPF "Stone & Silicates" (Yerevan, Armenia); Supporting Institution: Russian Academy of Sciences / Semenov Institute of Chemical Physics (Moscow); Collaborators: Georgia Institute of Technology / School of Polymer, Textile & Fiber Engineering (Atlanta, GA, USA), Universita' Degli Studi di Modena / Dipartimento Ingegneria dei Materiali e dell'Ambiente (Modena, Italy); Duration: 24 months; Funding parties: US

#### A-1358 Development and Study on Thromboresistant Polymers and Coverings for Implantants and Miscellaneous Medical Articles

Project Manager: Hovhannesyan A N; Leading Institution: Research Center of Radiation Medicine and Burns (Yerevan, Armenia); Supporting Institutions: Yerevan Institute "Plastpolymer" (Yerevan, Armenia), State Engineering University of Armenia (Yerevan, Armenia); Collaborators: Karl-Winnacker Institut (Frankfurt am Main, Germany), Lakehead University (Ontario, Canada), Lund University, Center for Chemistry and Chemical Engineering (Lund, Sweden), McGill University / Department of Chemical Engineering (Montreal, QC, Canada), Universidade de Coimbra (Coimbra, Portugal), Universita di Pisa / Dipartamento di Patologia Sperimentale, Biotecnologie Medicine, Infettivologia ed Epidemiologia (Pisa, Italy), University of Victoria (Victoria, BC, Canada); Duration: 36 months; Funding parties: EU

#### A-1368 Development of on-line radiation monitoring system in the impact zone of the Armenian NPP

Project Manager: Avagyan R M; Leading Institution: Yerevan State University (Yerevan, Armenia); Supporting Institutions: Scientific & Production Association "Typhoon" (Obninsk, Kaluga reg.), Armenian NPP (Metsamor, Armenia); Collaborators: Lawrence Livermore National Laboratory / National Atmospheric Release Advisory Center (Livermore, CA, USA), SCK-CEN (Mol, Belgium); Duration: 36 months; Funding parties: EU US

# B-1341 Analytical and experimental evaluating the possibility of creation of universal volume source of neutrons in the sub-critical booster assembly with low enrichment uranium fuel driven by a neutron generator

Project Manager: Kiyavitskaya H I; Leading Institution: Joint Institute of Energy and Nuclear Research - Sosny (Minsk, Sosny, Belarus); Collaborators: Argonne National Laboratory (Argonne, IL, USA), Forschungszentrum Karlsruhe in der Helmholtz-Gemeinschaft/Institute fur Reaktorsicherheit (Eggenstein-Leopoldshafen, Germany), Ministerio de Ciencia Y Tecnologia (Madrid, Spain), Royal Institute of Technology (Stockholm, Sweden); Duration: 30 months; Funding parties: US

#### B-1375 Development of Methods for Analysis, Indexing and Search of Audio Documents in Multimedia Databases

Project Manager: Kukharchik P D; Leading Institution: Belarussian State University (Minsk, Belarus); Collaborators: CNRS / Universite Joseph Fourier / CLIPS (Grenoble, France), Fraunhofer Institut Digitale Medientechnologie (Ilmenau, Germany); Duration: 36 months; Funding parties: EU

## G-1302 Development of Technological Process for Reception of New Type of Potassium-Containing Fertilizers, Creation and Testing of Experimental Installation

Project Manager: Beruashvili T; Leading Institution: Tbilisi State University (Tbilisi, Georgia); Supporting Institutions: The Black Sea State Agency (Tbilisi, Georgia), Institute of Membrane Technologies of Georgia (Batumi, Georgia); Collaborator: OstWestTransfer e.K. (Regis-Breitingen, Germany); Duration: 30 months; Funding parties: EU

#### G-1366 Short Intense Laser Pulses in Optical and Composite Negative Phase Index Media

Project Manager: Berezhiani V; Leading Institution: Georgian Academy of Sciences / Institute of Physics (Ge) (Tbilisi, Georgia); Collaborators: Universite d'Angers (Angers, France), Université de Nice Sophia Antipolis / Laboratoire de Physique de la matière Condensée (Nice, France), Université Libre de Bruxelles / Faculte des Sciences (Brussels, Belgium), University of Texas at Austin / Center of Electromagnetic Materials and Devices

(Austin, TX, USA), University of Texas at Austin / Institute for Fusion Studies (Austin, TX, USA), University of Tokyo / Graduate School of Frontier Sciences (Tokyo, Japan); Duration: 36 months; Funding parties: EU

## G-1369 Microflora of Inflammatory Process in Chronic Prostatitis and Urogenital Tracts in Men and Phage Therapy Prospects

Project Manager: Alavidze Z; Leading Institution: Georgian Academy of Sciences / Institute of Bacteriophage, Microbiology and Virology (Tbilisi, Georgia); Collaborator: Prostatitis Foundation (Smithshire, IL, USA); Duration: 36 months; Funding parties: US

## K-1342 Development and Investigation of Thin Film Semiconductor Electrodeposition Process for Fabrication High-Effective Solar Cells

Project Manager: Dergacheva M B; Leading Institution: Institute of Organic Catalysis and Electrochemistry (Almaty, Kazakstan); Supporting Institution: Pavlodar Chemical Plant (Pavlodar, Pavlodar reg., Kazakstan); Collaborator: Sheffield Hallam University / Faculty of Arts, Computing, Engineering and Sciences (Shiffield, UK); Duration: 36 months; Funding parties: US

#### K-1346 The Surveillance of New Antibiotics from Kazakhstan Soils Actinomycetes, Active Against Methicillin-Resistant Staphylococci with Multiple Drug-Resistances

Project Manager: Balgimbaeva A S; Leading Institution: Institute of Microbiology and Virology (Almaty, Kazakstan); Supporting Institution: Kazakh Scientific Center for Quarantine and Zoonotic Diseases (Almaty, Kazakstan); Collaborator: University of South Florida / College of Public Health (Tampa, FL, USA); Duration: 36 months; Funding parties: US

#### K-1347 Monitoring of Human and Animal Brucellosis in Kazakhstan

Project Manager: Grushina T A; Leading Institution: Kazakh Scientific Center for Quarantine and Zoonotic Diseases (Almaty, Kazakstan); Collaborator: Canadian Food Inspection Agency; Duration: 36 months; Funding parties: EU CA

# KR-1316 Development of Magnet-Separation Nano-Technology for the Purification of Chemical and Radiation Contaminations, Using Sorbents on the Basis of Magnet-Active Nano-Sized Particles and Humic Substances or Their Derivatives

Project Manager: Kydralieva K A; Leading Institution: National Academy of Sciences of Kyrgyzstan / Institute of Chemistry and Chemical Technology (Bishkek, Kyrgyzstan); Supporting Institution: JSC Biochimmash (Moscow); Collaborators: BioGuard Technologies, Inc. (Richland, WA, USA), Cranfield University / School of Industrial and Manufacturing Science (Cranfield, Beds, UK), Forschungszentrum für Umwelt und Gesundheit GmbH (GSF) / Institut fur Okologische Chemie (Neuherberg, Germany); Duration: 36 months; Funding parties: EU

#### 2. Project Development Grants

#### 3140 Development of an Integrated Separator for Direct Reforming of Hydrocarbons in High-Temperature Fuel Cells

Project Manager: Mishanin S V; Leading Institution: VNIIEF (Sarov, N. Novgorod reg.); Supporting Institution: Boreskov Institute of Catalysis (Akademgorodok, Novosibirsk reg.); Collaborators: European Materials Research Society (EMRS) (Strasbourg, France), Karlsruhe University / Institut fur Technische Chemie und Polymerchemie (Karlsruhe, Germany); Duration: 36 months; Funding parties: EU CA

#### 3366 Methods of Improving Alumo-Oxide Ceramics Strength

Project Manager: Myakin V K; Leading Institution: VNIITF (Snezhinsk, Chelyabinsk reg.); Collaborators: University of Central Florida / College of Engineering and Computer Science (Orlando, FL, USA), University of Michigan / Department of Materials Science and Engineering (Ann Arbor, MI, USA), University of North Carolina / North Carolina State University (Raleigh, NC, USA); Duration: 30 months; Funding parties: CA

## 3376 Development and Research on an Adhesive to Close up the Defects of Natural Rocks to Improve Reliability of the Repositories of Nuclear Wastes

Project Manager: Kashintseva G N; Leading Institution: VNIIEF (Sarov, N. Novgorod reg.); Supporting Institution: St Petersburg Technological Institute (St Petersburg); Collaborator: Sandia National Laboratories (Albuquerque, NM, USA); Duration: 24 months; Funding parties: CA

#### 3393 Development of Highly-Selective Energy-Saving Membrane Technologies of Water Purification and Desalination

Project Manager: Desyatov A V; Leading Institution: Keldysh Research Center (Moscow); Collaborators: Dow Chemical Company (Midland, MI, USA), Dow Deutschland GmbH & Co. OHG (Rheinmunster, Germany); Duration: 24 months; Funding parties: CA

## 3419 Remediation Technology for Soils Contaminated by Fuel Hydrocarbons Based on the Intensification of Soil Natural self-Cleaning Processes

Project Manager: Antsyshkina N D; Leading Institution: VNIIEF (Sarov, N. Novgorod reg.); Supporting Institution: Kazan State University (Kazan, Tatarstan); Collaborators: Friedrich-Schiller-Universitat / Institut fur Geowissenschaften (Jena, Germany), New Mexico Tech (Socorro, NM, USA), University of Saskatchewan / Department of Soil Science (Saskatoon, SK, Canada); Duration: 36 months; Funding parties: EU

# K-1354 Over-all Investigation and Technology Development for Liquidation of At-Conservation Oil Prospecting Wells in the Area of Inundation and Underflooding by the Caspian Sea in Mangystau Oblast of the Republic of Kazakhstan

Project Manager: Kuterbekov K A; Leading Institution: National Nuclear Center of the Republic of Kazakstan / Institute of Nuclear Physics (Almaty, Kazakstan); Supporting Institution: Mangystau-Monitoring Ltd. (Aktau, Kazakstan); Collaborators: Forschungszentrum Jülich / Department of Safety and Radiation Protection (Jülich, Germany), Grand Valley State University (Allendale, MI, USA); Duration: 36 months; Funding parties: CA

## T-1082.2 Inspection of Republican Point of Burial Radioactive Wastage with the Purpose of Development a Technical Decision for its Rehabilitation

Project Manager: Abdushukurov D A; Leading Institution: Physical-Technical Institute (Dushanbe, Tajikistan); Supporting Institutions: Academician Adkhamov Fund (Dushanbe, Tajikistan), Head department on an accomplishment of Dushanbe city (Dushanbe, Tajikistan); Collaborator: Brookhaven National Laboratory / Environment & Waste Technology Center (Upton, NY, USA); Duration: 18 months; Funding parties: CA

# T-1298 The Definition of Real Epidemiological Situation of Brucellosis Disease among the Population of the Republic of Tajikistan, Circulation of the Basic Type of the Activator and Role of Milk and Dairy Products in Transfer of This Infection

Project Manager: Ahmadbekova S S; Leading Institution: Republican Center for State Sanitary Epidemiological Control (Dushanbe, Tajikistan); Supporting Institution: Dushanbe Dairy Combine (Dushanbe, Tajikistan); Collaborator: Universidad de Navarra (Pamplona, Spain); Duration: 36 months; Funding parties: US

#### 3. Reallocation of Funds for Earlier Approved Projects

(Karlsruhe, Germany); Duration: 36 months; Funding parties: EU

# Improvement of Corrosion Resistance of Constructional Steels in Liquid Pb and Pb-Bi Alloys by Means of Their Surface Modification with the Help of Pulsed Electron Beams and Protective Coatings Project Manager: Engelko V I; Leading Institution: NIIEFA Efremov (St Petersburg); Supporting Institutions: TsNIIKM PROMETEY (Construction Materials) (St Petersburg), FEI (IPPE) (Obninsk, Kaluga reg.); Collaborators: CEA / Saclay (Essonne) / Service de la Corroson, d'Electrochimie et de Chimie des Filides / Departament de Physico-Chimie service de la corrosision et du comportement des materiaux dans leur environment (Gif-sur-Yvette Cedex, France), CEA / Saclay (Essonne) / Service de la Corroson, d'Electrochimie et de Chimie des Filides (Gif-sur-Yvette Cedex, France), EURATOM-Ciemat (Madrid, Spain), Forschungszentrum Karlsruhe Technik und Umwelt / Institut für Hochleistungsimpuls und Mikrowellentechnik

## B-1065 The Fraunhofer-Stepanov Joint Laboratory for Optical Diagnostics - Development of Fundamental and Applied Principles for Optical Diagnostics and Instrumentation

Project Manager: Belyi V N; Leading Institution: B.I. Stepanov Institute of Physics (Minsk, Belarus); Collaborator: Fraunhofer Institute Zerstörungsfreie Prüfverfahren (Saarbrücken, Germany); Duration: 18 months; Funding parties: EU