## Department of Science & Technology International Division

An Indo-Russian Joint call for proposals under DST-RFBR MoU was advertised in September 2007. 88 project proposals were received against the joint call for which last date was 15<sup>th</sup> December 2007. Based on scientific merit, national priority of both the countries and scientific strengths of the project coordinators, Department of Science & Technology and Russian Foundation for Basic Research have jointly decided to support following 33 proposals. The duration of the project would be for 2 years. Project coordinators are being informed separately to complete administrative formalities for release of DST grant.

SI No	DST Code	Area	Title	Indian Coordinator	Russian Coordinator
1.	RUSP- 801	Chemistry	Reductive cleavage of carbon-chlorine bonds in polychlorobiphenyls –A complementary synthetic, electrochemical and computational approach	M.V.Sangaranarayanan, Professor, Department of Chemistry, Indian Institute of Technology-Madras, Chennai -600036,	Vadim P.Boyarskiy, Associate Professor, Chemistry Department, St.Petersburg State University, St.Petersburg,
2.	RUSP- 803	Physics	Terahertz emission of Si/SiGe/Si structures doped with shallow acceptors	S.K. Ray Professor Dept. of Physics & Meteorology IIT Kharagpur 721 302,	M.S. Kagan, Head of Lab, Institute of Radio Engineering and Electronics, RAS (IRE RAS), 11-7, Mokhovaya, GSP-9, Moscow 125009,
3.	RUSP- 808	Chemistry	Synthesis, structure and stereochemical non-rigidity of organotellurium compounds with intramolecular coordination of the hypervalent type; their use in the synthesis of novel heterocycles	Prof. Harkesh B. Singh, Department of Chemistry, Indian Institute of Technology, Bombay, Powai, Mumbai-400076,	Prof. Vladimir I. Minkin, Head of Institute of Physical and Organic Chemistry, Southern Federal University, 194/2 Stachka Street, Rostov-on-Don-344090
4.	RUSP- 812	Mathematics	Research Studies in Algebra and Topology	Ashwani K. Bhandari, Professor, Department of Mathematics, Panjab University, Chandigarh,	Roman Mikhailov, Research fellow, Steklov Mathematical Institute, RAS, Gubkina 8, Moscow,119991,

5.	RUSP- 813	Chemistry	Search for new methods based on simple diffusion and thermal technologies for production and separation of medical cyclotron radionuclides like <sup>67</sup> Ga, <sup>111</sup> In, <sup>186</sup> Re and <sup>199</sup> TI.	Prof. Susanta Lahiri, Professor, Chemical Sciences Division, Saha Institute of Nuclear Physics, 1/AF Bidhannagar, Kolkata 700064,	Dr. Igor Evgenievich Alekseev, Chief, Department of Radiation Safety, St. Petersburg State University, St. Petersburg, Russia,
6.	RUSP- 814	Chemistry	Studies on new pathways for radiolabeling of proteins using bifunctional ligands and "click chemistry"	Dr. Dalia Nayak, Reader, Chemical sciences Division, Saha Institute of Nuclear Physics, 1/AF Bidhannagar, Kolkata- 700064,	Dr. Ramiz Aliev, Head of Radiochemical laboratory, Skobeltsyn Institute of Nuclear Physics of Lomonosov Moscow State University, Leninskie Gory, 1 MSU, Moscow,
7.	RUSP- 815	Earth Sciences	Intra-pore molecular compounds in microporous silicates as indicators of P-T-fluid conditions of mineral and rock formation	Dr P.S.R. Prasad, Scientist – 'El', National Geophysical Research Institute, Hyderabad – 7,	Dr. A.Yu. Likhacheva research worker, Institute of Geology and Mineralogy, Siberian Division of Russian Academy of Sciences, Novosibirsk90,
8.	RUSP- 818	Physics	Phonon Quantization and Electron-Phonon Interaction in Germanium/Silicon quantum dots by Raman Scattering, Photoluminescence and computer simulation	Prof. Prafulla K. Jha, Professor, Department of Physics, Bhavnagar University, Bhavnagar – 364 002, GUJARAT, India,	Dr. Nikolay Ovsyuk, Senior Scientist, Institute of Mineralogy and Petrology, Russian Academy of Sciences, Novosibirsk, 630090, Russia,
9.	RUSP- 819	Fundamental of Engineering Sciences	Erosion wear of pipelines of pneumotransport installations and definition of critical velocities at pneumotransport of fine bulk silicon-containing materials	V K Agarwal, ITMMEC, Indian Institute of Technology, Hauz Khas, New Delhi 110016,	Putilov Viacheslav Yakovlevich, heat power engineer, Moscow, Krasnokazarmennaya str., 14, MPEI,

10.	RUSP- 826	Physics	Competition of exchange interactions and functional properties of novel metamagnetic shape memory alloys Ni-Mn-Z (Z = In, Sn, Sb, Al)	Dr. Ratnamala Chatterjee, Associate Professor, Physics Department, I.I.T Delhi, Hauz Khas, New – Delhi -110016,	Dr. Vladimir Khovaylo, Senior Researcher, Institute of Radioengineering & Electronics, Moscow, Russia,
11.	RUSP- 829	Physics, Astronomy	Metal mixing and the search for missing baryons in the universe	Biman B. Nath, Associate Professor, Raman Research Institute, Sadashiva Nagar, Bangalore 560080, INDIA,	Yuri A. Shchekinov Professor Physics Department Southern Federal University Sorge 5, Rostov-on- Don, 344090 Russia
12.	RUSP- 831	Physics	Moving lattice solitons	Avinash Khare, Senior Professor, Institute of Physics, Sachivalaya Marg, Bhubaneswar 751005, India	Sergey V. Dmitriev, Associate Professor, General Physics Dept., Altai State Technical University, 656038 Barnaul, Lenin St. 46, Russia
13.	RUSP- 834	Chemistry	Design, Synthesis and Functional Evaluation of Nano-sized Molecules Derived from Bile Acids	Prof. Uday Maitra, Dept of Organic Chemistry, Indian Institute of Science, Bangalore 560 012,	Prof. Irina P. Beletskaya, Department of Chemistry Moscow State University, 119899, Moscow,
14.	RUSP- 836	Physics & Astronomy	Spect Spectroscopic and phototmetric studies of type Ib/c SNe in the context of GRB-SNe correlation.	Dr. Shashi Bhushan Pandey, Aryabhatta Research Institute of Observational Sciences (ARIES), Manora Peak, Nainital, 263129,	Dr. V. V. Sokolov, The Special Astrophysical Observatory (SAO) of Russian Academy of Sciences, Nizhnij, Arkhyz, Karachai- Cirkassian Republic, Russia 369167
15.	RUSP- 840	Physics & Astronomy	Brane world cosmology with quintessence phantom field, dark matter and dark energy, effectively described by non-linear sigma models	Prof. M Sami, Centre for theoretical Physics, Jamia Millia Islamia, Delhi - 110025,	Prof. Chervon Sergey Viktorovich, Department of Theoretical Physics, 42-Leo Tolstoy Str, Ulyanovsk - 432000, Russia,

16.	RUSP- 842	Chemistry	Design, synthesis, physico-chemical studies and biological evaluation of novel 1-hydrazinophthalazine based hydrazones and their transition metal complexes towards antihypertensive activity	Dr.K.B.Gudasi, Reader in Inorganic chemistry, Department of Chemistry, Karnatak University, Dharwad-580003 India,	Prof. Viktor A.Kogan, Head of the Physical and Colloid Chemistry Department, Chemistry Faculty, Southern Federal University, Rostov-on-Don, Russia,
17.	RUSP- 851	Chemistry	Synthesis and study of ionic liquids possessing complexing cations or anions: towards novel task-specific extractants for metal ions and organic compounds	Dr. Thomas Daniel, Scientist E-II Room No 343, Organic Chemistry Division, National Chemical Laboratory, Pashan Road, Pune 411008. India,	Dr. Igor V. Pletnev, Leading Research Scientist, Chemistry Department, Lomonosov Moscow State University, 119992, Moscow, Russia,
18.	RUSP- 853	Mathematics, Mechanics and Informatics	Numerical simulation of multiscale supersonic flows with low dissipative shock capturing schemes	Prof. SM Deshpande, Engineering Mechanics Unit, JNCASR, Jakkur, Bangalore – 560064.	Prof. M Ivanov, Head of Computational Aerodynamics Laboratory, Khristianovich Institute of Theoretical and Applied Mechanics, Russian Academy of Sciences, Siberian Branch, 4/1, Institutskaya st., Novosibirsk 630090, Russia
19.	RUSP- 856	Biology & Medical Sciences	To study the effect of repeated magnetic stimulation on sensori motor recovery in spinal cord injured patients.	Dr. Rashmi Mathur, Professor, Department of Physiology, All India Institute of Medical Sciences, Ansari Nagar, New Delhi.	Dr. Valery Avelev, Assoc. Professor, I.P. Pavlov Institute of Physiology (RAS), 6, nab. Makarova, St. Petersburg, 199034,
20.	RUSP- 857	Biology & Medical Sciences	Construction of regulatory networks in prokaryotes through protein: protein interaction predictions and transcription regulation predictions	Shekhar C. Mande, Centre for DNA Fingerprinting and Diagnostics, ECIL Road, Nacharam, Hyderabad 500076 INDIA,	Vsevolod J. Makeev , State Research Centre of Industrial Microorganisms, GosNIIgenetika, 1st Dorozny proezd, 1, Moscow, 117545 RUSSIA,

21.	RUSP- 862	Physics	Investigation on synthesis and properties of magnetic nanostructures and nanocomposites by electromagnetic methods	Prof. D. Chakravorty, INSA Honorary Scientist Emeritus Professor, DST Unit on Nanoscience and MLS Unit, Indian Association for the Cultivation of Sciences, Jadavpur, Kolkata – 700032,	Dr. Parkhomenko Michael, Laboratory of spectroscopy and millimeter and submillimeter wave measurements, Fryazino, Mira Av. 11 – 45, IRE RAS, Vvedenski sq.1, Fryazino, Moscow region, 141190 Russia,
22.	RUSP- 863	Mathematics, Mechanics	Cell models of nanofiltration through complex porous membranes	Dr. Satya Deo, Lecturer, Department of Mathematics, University of Allahabad, Allahabad- 211002, India,	Filippov, Anatoly Nikolaevich, Professor, Department of Pure and Applied Mathematics, 11Volocolamskoye shosse, Moscow State University of Food Production, Moscow, 125080, Russia,
23.	RUSP- 868	Mathematics, Mechanics and Informatics	Development of new methods and algorithms for pathophysiological characterization of coronary blockade by processing ECG and similar quasiperiodic biomedical signals and biomedical images.	Tapobrata Lahiri, Assistant Professor, Indian Institute of Information Technology, (IIIT), Allahabad, India,	Anticeperov V.E, Institute of Radio Engineering and Eletronics (IRE), RAS,
24.	RUSP- 872	Telecommuni cations and Computer Sciences	Algorithms for Robust Mobile Wireless Sensor Network.	Soumyendu Raha, Assistant Professor Supercomputer Education and Research Centre, Indian Institute of Science, Bangalore 560012,	Adil I. Erzin, Full Professor, Sobolev Institute of Mathematics, Siberian Branch of the Russian Academy of Sciences, 4 Acad. Koptyug avenue 630090 Novosibirsk Russia,
25.	RUSP- 873	Fundamental of Engineering Sciences	Grain boundary segregation, precipitates morphology and surface modification in case of complete and incomplete grain boundary wetting by a second solid phase in steels.	Prof. I. Manna, Professor, Dept. of Metall. & Mater. Engg. & Chairman, Central Research Facility, Indian Institute of Technology Kharagpur - 721302, India,	Prof. Boris Straumal, Professor and Head of Laboratory for Interfaces in Metals at the Institute for Solid State Physics of the Russian Academy of Sciences, Chernogolovka, 142432 Russia,

26.	RUSP- 875	Mathematics, Mechanics and Informatics	Modeling of technological processes of manufacturing, interaction, and fracture of solids and composite structures	Prof. N.K Gupta, Henry Ford Emeritus Professor, Dept. of Applied Mechanics, IIT Delhi, Hauz Khas, New Delhi 16,	Institute for Problems in Mechanics Russian Academy of Sciences, 101 Vernadsky Avenue, Bldg 1, 119526 Moscow, Russia,
27.	RUSP- 876	Chemistry	Development of scientific bases of technologies for recovery of nonferrous and rare metals from technogeneous raw materials by using binary reagents	Dr. B.D. Pandey, Dy. Director, NML, Jamshedpur,	Prof. A.I. Kholkin, Head of Laboratory, IGIC of RAS, Moscow – 119991,
28.	RUSP- 878	Physics	Study of microscopic phase separation and related magnetoelectric phenomena in manganese multiferroics	D. D. Sarma, MLS Chair Professor Chairman, Centre for Advanced Materials, IACS, Kolkata 700032,	Alexander A. Mukhin, Professor, A.M. Prokhorov General physics Institute of RAS, Moscow, Russian Federation
29.	RUSP- 880	Mathematics, Mechanics and Informatics	Mathematical modeling of high complexity problems on supercomputers	Mr. S. Ramkrishnan, Director General, Centre For Development of Advanced Computing (C- DAC), Pune University Campus, Ganesh Khind, Pune 411 006,	Acad. Oleg. M. Beloserkovskii , Russian Academy of Sciences, ICAD, Moscow, Russia,
30.	RUSP- 881	Mathematics, Mechanics and Informatics	Mathematical Modeling and Research of Fundamental problems in mechanics of continuum media on multiprocessor computer systems like PARAM PADMA	Mr. S. P. Dixit, Director Incharge, Centre For Development of Advanced Computing (C-DAC), Pune University Campus, Ganesh Khind, Pune 411 006,	Dr. V.A. Gushchin, Deputy Director, Russian Academy of Sciences, ICAD, Moscow, Russia,
31.	RUSP- 883	Biology & Medical Sciences	Development of novel lead compounds for antimonial resistant Leishmania donovani	Rentala Madhubala, Professor, School of Life Sciences, Jawaharlal Nehru University, New Delhi-10067, India,	Alex R Khomutov, Principle scientist, Engelhardt Institute of Molecular Biology, Russian Academy of Sciences, Vavilov st. 32, Moscow, 119991, Russia,

Prof. A V Manzhirov,

32.	RUSP- 884	Fundamental of Engineering Sciences	Development of Fluorinated Polymer Membranes for Separation of Industrial Gas Mixtures	Dr. S. Sridhar, Scientist, Membrane Separations Group, Chemical Engineering Division, Indian Institute of Chemical Technology (IICT), Uppal Road, Hyderabad-500007, India	Dr. Yu.L. Moskvin, Institute of Energy Problems of Chemical Physics (Branch) of the Russian Academy of Sciences, Chernogolovka, Moscow Region, 142432, Russia,
33.	RUSP- 885	Physics	Precise X-ray and neutron structural studies of the family of solid solutions crystals based on La3Ga5SiO14 langasite and establishment of regular relationships between chemical composition, atomic structure and physical properties of these materials	R Chitra, BARC, Mumbai,	Prof. VI Simonov, Institute of Crystolography