INDIA-RFBR Selected Proposals 2015

Department of Science & Technology and Russian Foundation for Basic Research invited joint R&D proposals from Indian and Russian researchers during October-December 2015. Based on independent assessment of two sides and consultations between DST and RFBR, following 22 proposals are identified for support under DST-RFBR programme in Basic Sciences:

S. No.	Title	Indian Coordinator	Russian Coordinator	New DST Reference INT/RUS/R FBR/
1	Controlling Multi- stability in Hidden Attractors and its Applications	Manish Dev Shrimali , Department of Physics, Central University of Rajasthan, Ajmer	Leonov Gennady Alekseevich, Professor, Department of Applied Cybernetics, Saint - Petersburg State University,	P-230
2	Colored knot polynomials	Ramadevi Pichai, Dept of Physics, IIT Bombay,Powai, Mumbai	Mironov Andrey Dmitrievich, Institute for Information Transmission Problems, Moscow, 127051,	P-231
3	Numerical study of dynamic brittle fracture in impact problems	Mohd. Ashraf Iqbal, Associate Professor Deptt. of Civil Engg. IIT Roorkee, Roorkee	Morozov Nikita, Saint Petersburg State University, St.Petersburg,	P-232
4	Dust and magnetic fields in low-mass star-forming molecular clouds	Asoke Kumar Sen, Department of Physics, Assam University, Silchar	Voshchinnikov Nikolai Vasilievich , St. Petersburg State University, Petersburg-	P-233
5	The complex system for processing and real-time analysis of geomagnetic data at high and low latitudes for the study of meridional propagation of disturbances during storm and sub-storms	Dr Kusumita Arora National Geophysical Research Institute, Hyderabad	Dr SY Khomutov Geophysical Observatory Kamchatka	P-234
6	Cloning and targeted delivery of anti-oxidant gene and drug for treatment of Chronic Obstructive Pulmonary Disease (COPD)	Packirisamy Gopinath, Indian Institute of Technology Roorkee (IIT R),	Khlebtsov Nikolai Grigorievich, Saratov State University. Saratov,	P-235
7	Excited configurations in the spectra of fiveand six-times ionized Indium atom	Tauheed Ahmad, Aligarh Muslim University- 202002,	Ryabtsev Alexander Nikolaevich, Institute of Spectroscopy, Troitsk, Russia	P-236
8	Magnetoplasmonic quasicrystals	AchantaVenu Gopal, TIFR, Mumbai 400005,	Belotelov Vladimir A. M. Prokhorov	P-237

			General Physics Institute and Moscow,	
9	Mechanisms of retention and enantioseparation of chiral quinolines on enantioselective adsorbents under liquid chromatographic conditions	Imran Ali, JamiaMilliaIslamia New Delhi	Asnin Leonid Perm National Research Perm	P-238
10	Layered perovskite- related oxide materials: synthesis, structure and properties	A. Sundaresan, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore	Cherepanov Vladimir Alexandrovich Ural Federal University	P-239
11	Research of patterns and mechanisms of influence of the nanoparticles on human health in the industrial production and application of nonmetallic nanomaterials for construction	Rama Shanker Verma Indian Institute of Technology Madras Chennai	Frolova Maria Arkadevna Northern Federal University Arkhangelsk	P-240
12	Nanocomposites based on graphene oxide and transition metal oxides and chalcogenides synthesized by peroxide route for supercapacitor application	Sudip Kumar Batabyal, Amrita School of Engineering, Coimbatore Amrita Vishwa Vidyapeetham University Coimbatore	Prikhodchenko Petr Valerevich, Kurnakov Institute of General and Inorganic Chemistry Moscow	P-241
13	Sorption of actinides and fission products by clays: molecular speciation at mineral/water interface.	Prasanta K. Mohapatra, Bhabha Atomic Research Mumbai-400085	KalmykovStepanNikolaevich Lomonosov Moscow State University, Russai	P-242
14	Metal Nanoparticles Embedded into Hyperbranched Polymer Matrix as Efficient and Reusable Catalysts for Organic Transformations	Manojit Pal, Dr Reddy's Institute of Life Sciences, University of Hyderabad Campus Gachibowli, Hyderabad	ShifrinaZinaida .N.Nesmeyanov Institute of Organoelement Compounds Moscow,	P-243
15	Network pharmacology based identification of phytomolecules from traditional indian medicine for effective treatment of dementia.	Rajesh Kumar Goel, Punjabi University, Patiala-147002,	Lagunin Alexey Alexandrovich Institute of Biomedical Chemistry (IBMC) Moscow	P-244
16	Conservation of tigers:	Dr.	Naidenko Sergey	P-245

	understanding the glucocorticoid stress status in relation to anthropogenic disturbance and extreme climatic conditions in Amur and Bengal tigers	GovindhasamyUmapathy, Centre for Cellular and Molecular Biology (CCMB)	A.N.Severtsov Institute of Ecology and Evolution Russia	
17	Coupling GPR measurements and modelling for mountain glacier volume assessment in India and Russia	Dr. Snehmani , SASE, RDE, Chandigarh ,	Lavrentiev Ivan Ivanovich institution of Geography	P-246
18	Deep structure of the tectonosphere in the Eastern Himalaya from joint electromagnetic and seismic soundings: Analysis of magnetotelluric responses and receiver functions	Devesh Walia, North-Eastern Hill University, Shillong-	Varentsov Ivan Mikhailovich Geoelectromagnetic Res. Centre, Troitsk,	P-247
19	Exploration of Continuous Morphological Models for Analysis and Recognition of Dynamic Depth Images/Videos	Basawegowda Hema Shekar, Mangalore University, Mangalore,	Mestetskiy Leonid Moiseevich Moscow State University, Moscow, RUSSIA.	P-248
20	Non-equilibrium dynamics of correlated quantum systems: application to Josephson junctions and ultracold atoms	Krishnendu Sengupta, Institute of Indian Association for the Cultivation of Science, Kolkata	ShukrinovYuryMadzhnunovi ch, Joint Institute of Nuclear Research , Russia	P-249
21	Fast Neutrons as a probe for Elemental Analysis, Nuclear Reaction Studies and Cross Section Measurements	Ajay Kumar, , Banaras Hindu University, Varanasi	Kopatch Yuri Nikolaevich, Joint Institute for Nuclear Research (JINR) Dubna,	P-250
22	New Family of Fe- Containing Magnetic Shape Memory Alloys with Giant Reversible Strain	Prof. V. Sampath, IIT Madras	Shavrov Vladimir Grigoryevich, Kotelnikov IRE RAS, Russia	P-251

All Scientists, who are awarded these proposals should give new DST reference number, as given in the last column, for all future communications.