

### DST-RFBR Approved Proposals 2016

S. No.	TITLE	INDIAN COORDNATOR	RUSSIAN COORDINATOR	New DST Ref. No.
1	Localization of selenium and other trace elements in edible crops cultivated in seleniferous soils	Dr. N. Tejo Prakash, Thapar University, Patiala 147004	Margarita G. Skalnaya, P.G. Demidov Yaroslavl State University, Yaroslavl	INT/RUS/RFBR/P-252
2	Probing the ligand binding and structural dynamics of an enigmatic human chemokine receptor, the D6R by NMR	Dr. Arun K. Shukla, IIT Kanpur 208016, India	Prof. Dr. Alexander S. Arseniev, Shemyakin and Ovchinnikov Institute of Bioorganic Chemistry, Moscow, R	INT/RUS/RFBR/P-253
3	Synthesis and therapeutic potential of most promising anticancer, cytotoxic and anti-inflammatory beta carboline derivatives.	Dr. Kakali Bhadra, University of Kalyani, Kalyani,	Prof. Valentine G. Nenaidenko, Lomonosov Moscow State University, Moscow	INT/RUS/RFBR/P-254
4	Folding mechanism of Trans Activation Domain of E2A-PBX1, an Intrinsically Disordered Protein involved in Leukemia induction.	Dr. RajanishGiri, Indian Institute of Technology Mandi,	Irina M. Kuznetsova, 4, St. Petersburg, Russia	INT/RUS/RFBR/P-255
5	Interplay of metabolic and signal pathways of N-acyl dopamines and cholesterol in cancer cells	Dr. Chandi C. Mandal, Central University of Rajasthan, NH-8, Kishangarh, Ajmer-	Dr. Vladimir V. Bezuglov, Professor, Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Moscow,	INT/RUS/RFBR/P-256
6	Cellular localization and functional characterization of the Voltage-gated Ca <sup>2+</sup> - channel VGCC and enzyme-rhodopsin COP5 in the microalga Chlamydomonas reinhardtii using genome editing, biochemical	Dr. Suneel Kateriya, Jawaharlal Nehru University, New Delhi-	Dr. Irina Sizova, The Petersburg Nuclear Physics Institute, Russia	INT/RUS/RFBR/P-257

	and transcriptomics approaches			
7	New chromatin insulator-associated factors in Drosophila	Dr. Rakesh K Mishra, Centre for Cellular and Molecular Biology, Hyderabad	Dr. Pavel Georgiev, Director, Institute of Gene Biology, Moscow	INT/RUS/RFBR/P-258
8	Probing of interactions between proteins from bacterium Neisseria gonorrhoeae mismatch repair system by mass spectrometric analysis of crosslinked biomolecules.	Dr. D.N. Rao, Professor, Indian Institute of Science Bangalore	Dr. Elena A. Kubareva, A.N. Belozersky Institute of Physico-Chemical Biology, Moscow	INT/RUS/RFBR/P-259
9	Studies on the function of AOX 1 and NDB2 in regulating cold stress in plants	Prof. Sanjib Kumar Panda, Assam University, Silchar-	Prof. Gennadii Borisovich, Borovskii Institute of Plant Physiology and Biochemistry Irkutsk,	INT/RUS/RFBR/P-260
10	Multi-wavelength studies of galactic star-forming regions	Prof. Devendra Kumar Ojha, Tata Institute of Fundamental Research, Mumbai	Dr. Igor I. Zinchenko, Institute of Applied Physics, Nizhny Novgorod-	INT/RUS/RFBR/P-261
11	The phase structured coherent light beams for enhanced transmission	Dr. Jayachandra Bingi, Indian Institute of Information Technology, Design and Manufacturing, Kurnool	Prof. Almas Sadreev, Kirensky Institute of Physics, Federal Research Center KSC SB RAS, 660036	INT/RUS/RFBR/P-262
12	The establishment of the relationship between composition, atomic structure and properties of crystalline materials with hydrogen bonds	Dr. R. Chitra, Bhabha Atomic Research Centre, Mumbai-	Dr. I.P. Makarova, Federal Scientific Research Centre,	INT/RUS/RFBR/P-263
13	Modeling and experimental investigation of half-metallic epitaxial films based on Heusler alloys for spin-injection Terahertz and Far-Infrared Photonics	Dibya Prakash Rai, Pachhunga University College, Aizawl,	Gennady Mikhailov, Institute of Microelectronics technology and High purity materials Moscow	INT/RUS/RFBR/P-264

14	Determination of the fundamental characteristics of interstellar extinction	Dr. Jayant Murthy, Indian Institute of Astrophysics, Koramangala, Bangalore	Oleg Malkov (Professor), INASAN, Moscow	INT/RUS/RFBR/P-265
15	A systematic study of fusion and quasifission in heavy nuclei – paving the road to new element synthesis.	Dr. E. Prasad, Assistant Professor, School of Mathematical and Physical Sciences, Central University of Kerala, Kasaragod	Prof. Nikolai Antonenko, Joint Institute of Nuclear research (JINR) Dubna,	INT/RUS/RFBR/P-266
16	Magnetic properties and structure transformations in binary Fe-Pd and ternary Fe-Pd-M (M – Ni, Ga) alloys. Experimental investigation and ab-initio study	Dr. Arti Kashyap, Associate Professor, IIT Mandi, Kamand, Mandi-	Dr. Aleksandr Popov, M.N. Miheev Institute of Metal Physics. Ekaterinburg,	INT/RUS/RFBR/P-267
17	Studies of the molecular orientation and radiation damage of DNA adsorbed on Zirconia	Dr. Subrata Majumder, National Institute of Technology, Patna,	KholmirzoKholmurodov, FLNP JINR 141980 Dubna,	INT/RUS/RFBR/P-268
18	New multiferroical huntites with giant effects: synthesis, experimental and theoretical investigation of magnetoelectric, magnetic and ferroelectric properties	Dr. Dinesh Kumar Shukla, Scientist-D, UGC-DAE Consortium of Scientific Research, Indore,	Dr. Irina Anatolievna Gudim, Institute of Physics, Krasnoyarsk,	INT/RUS/RFBR/P-269
19	The 500 parsecs around the Galactic Center	Prof. Biman B. Nath, Raman Research Institute, Bangalore	Prof. Yuri Shchekinov, P. N. Lebedev Physical Institute, Moscow	INT/RUS/RFBR/P-270
20	Stars, late-type, magnetic activity, flares	Dr. Jeewan C. Pandey, Aryabhata Research Institute of Observational Sciences (ARIES), Nainital	Dr. Igor S. Savanov, Institute of Astronomy, Moscow,	INT/RUS/RFBR/P-271
21	Ultrabright plasma-based gamma ray sources with petawatt laser pulses	Dr. Punit Kumar, University of Lucknow, Lucknow	Dr. Arkady Kim, Institute of Applied Physics, Nizhny Novgorod	INT/RUS/RFBR/P-272

22	Study of non-collinear spin textures in asymmetric antiferromagnetic and ferromagnetic multilayer nanostructures with the Dzyaloshinskii-Moriya interaction enhanced by interface engineering	Dr. Jyoti Ranjan Mohanty, IIT Hyderabad,	Prof. LudmilaChebotkevich, Far Eastern Federal University, Vladivostok, Russia	INT/RUS/RFBR/P-273
23	Topological phase transitions in quasi-two-dimensional magnets	Dr. Tanusri Saha-Dasgupta, S.N.Bose National Centre for Basic Sciences, Kolkata-	Dr. Alexander N. Vasiliev Professor, M.V. Lomonosov Moscow State University, Moscow,	INT/RUS/RFBR/P-274
24	Investigation of structural, optical, magnetic properties and electronic structure of binary inter-metallic alloys for the spintronic applications.	Dr. M.Vasundhara, CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram	Dr Yu. V. Knyazev, M. N. Miheev Institute of Metal Physics Yekaterinburg,	INT/RUS/RFBR/P-275
25	Probing the reionization epoch and the high redshift IGM	Dr. Shiv Sethi, Raman Research Institute, Bangalore.	Dr. Evgenii O. Vasiliev, Southern Federal University, Rostov,	INT/RUS/RFBR/P-276
26	Response of near-surface anisotropic objects in the electromagnetic field of a high-frequency horizontal electric dipole	Dr. SudhaAgrahari, Department of Geology and Geophysics, Indian Institute of Technology, Kharagpur –	Dr. Alexander Saraev, Saint Petersburg State University, Saint Petersburg	INT/RUS/RFBR/P-277
27	Mesoproterozoic microbiotas of Eurasia: an integrated approach to the Indian and Russian early eukaryote-dominated assemblages	Dr. Mukund Sharma, BirbalSahni Institute of Palaeosciences, Lucknow-	Dr. V.N. Sergeev, Geological InstituteMoscow, RUSSIA	INT/RUS/RFBR/P-278
28	Petrology and geology of Archaean greenstone complexes of the Bundelkhand (Indian Shield) and Karelian (Fennoscandian	Dr. Vinod K. Singh, Bundelkhand University, Jhansi,	DrSc Sergei A. Svetov, Karelian Research Centre (KRC), Petrozavodsk, Russia	INT/RUS/RFBR/P-279

	Shield) Cratons: Implication for geodynamic reconstruction of the early Earth			
29	Approach for the processing of data of vibro-seismic waves records and theoretical investigations on seismic waves.	Dr. S. Kundu, IIT(ISM) Dhanbad	Dr. Znak Vladimir Ilich, Institute of Computational, Mathematics and Mathematical Geophysics	INT/RUS/RFBR/P-280
30	Petrology, ore-potential and genesis of alkaline and carbonatite complexes of Indian and Aldan shields	Dr. Prosenjit Ghosh, Indian Institute of Science, Bangalore 560012	Dr. Vladykin Nikolay Vasilievich, Institute of Geochemistry SBRAS,	INT/RUS/RFBR/P-281
31	Modeling of MHD Convective Heat Transfer Combined with Entropy Generation in Closed and Semi-open Cavities	Dr. C. Sivaraj, Assistant PSG College of Arts & Science, Coimbatore – 641014, India.	Dr. M. A. Sheremet, Tomsk State University, Tomsk,	INT/RUS/RFBR/P-282
32	Application of a Novel Viscoplastic Material Model for Sheet Forming of Polymer-Metal Powder Aggregates: Experiments and Modelling.	Prof. P. P. Date, IIT Bombay,	Dr. Sergei Alexandrov, Research A. Ishlinskii Institute for Problems in Mechanics Moscow,	INT/RUS/RFBR/P-283
33	Effect of alloying on kinetics of globularization during hot deformation of two-phase titanium alloys	Dr. K.S. Suresh, Assistant, Indian Institute of Technology, Roorkee,	Dr. Sergey Zherebtsov, Belgorod State University, Belgorod,	INT/RUS/RFBR/P-284
34	Evaluation of the lightning attachment to different protection schemes	Dr. Udaya Kumar, Indian Institute of Science , Bangalore	Prof. Potapenko A., Belgorod State Technology University Belgorod,	INT/RUS/RFBR/P-285

35	Theoretical and experimental research of compositematerials and structuresbehavior taking into account their manufacturing processes, intensivedeformation , and fracture	R Velmurugan, Indian Institute ofTechnology, Madras, Chennai	A. V. Manzhirrov, Institute for Problems in Mechanics Moscow,	INT/RUS/RFBR/P-286
36	Study of basic principles of phase transition in metal drops at nanoscale under electric current and laser radiation	Dr. Praveen Kumar, Indian Institute of Science (IISc), Bangalore	Dr. Victor Koledov, Institute of Radio Engineering and Electronics, Moscow,	INT/RUS/RFBR/P-287
37	Conjugacy problems in Groups of Lie type	Dr. Anupam Singh, IISER Pune	Dr. EvgenyVdovin, Sobolev Institute of Mathematics, Novosibirsk,	INT/RUS/RFBR/P-288
38	Development of New Control Schemes with Optimal Trajectory Planning for a Group of Autonomous Underwater Robots in Unknown Environments.	Dr. BidyadharSubudhi, National Institute of Technology Rourkela,.	Dr. Vladimir Filaretov, Institute of Automation and Control ProcessesVladivostok	INT/RUS/RFBR/P-289
39	Novel Methods of Logic Analysis And Optimization For Reconfigurable Computer Architectures	Dr. Soumitra K Nandy, Indian Institute of Science, Bangalore	Dr. Denis Ponomaryov, Novosibirsk State University, Novosibirsk	INT/RUS/RFBR/P-290
40	Structure based design and synthesis of novel antitumor eteroareneanthracen ediones	Dr. Punit Kaur, All India Institute of Medical Sciences, New Delhi	Dr. Alexander M. Korolev, Gause Institute of New Antibiotics, Moscow	INT/RUS/RFBR/P-291
41	Regularities of low molecular weight analytes detection by natural and synthetic receptors: Comparative analysis and application in the development of systems for	Dr NaziaTarannum, ChaudharyCharan Singh University, Meerut	Prof Dzantiev Boris B, , Russian Acad. Sci., Pudhchino, Moscow region	INT/RUS/RFBR/P-292

	antibiotics detection			
42	Development of Tunable Chemosensors for Metal Ions Based on the Castagnoli-Cushman Multicomponent Chemistry	Dr. Sandipan Halder, Visvesvaraya National Institute of Technology, Nagpur	Dr. Mikhail Krasavin, St. Petersburg State University,	INT/RUS/RFBR/P-293
43	IMDAV (Intra Molecular Diels-Alder reaction in vinylarenes / vinylhetarenes ) approach in the synthesis of lactone / lactam scaffolds for biological studies and natural product synthesis	Prof. S. G. Tilve, Goa University, Goa	Fedor Ivanovich Zubkov, Associate professor of organic chemistry department, faculty of science	INT/RUS/RFBR/P-294
44	The design, synthesis and evaluation of antiproliferative activity of novel fused N-heterocyclic derivatives of steroids	Dr. Alakananda Hajra, Visva-Bharati University, Santiniketan-731235	Prof. Valerik Z. Shirinian, N. D. Zelinsky Institute of Organic Chemistry Moscow	INT/RUS/RFBR/P-295
45	Development of novel heterocyclic compounds as inhibitors of influenza virus neuraminidase.	Dr. Srinivas Kantevari, CSIR-Indian Institute of Chemical Technology, Hyderabad	Dr. Vladimir V. Zarubaev, Influenza Research Institute, St. Petersburg	INT/RUS/RFBR/P-296
46	Diatom and cyanobacteria flora of Peninsular India: molecular reinvestigation of endemic and cosmopolitan taxa across biodiversity hotspot (Western Ghats)	Dr. Karthick Balasubramanian, Agharkar Research Institute, Pune	Dr. Maxim Kulikovskiy, I.D. Papanin Institute for Biology of Inland Waters, Yaroslavl,	INT/RUS/RFBR/P-297
47	Nucleation on nanostructured surfaces. Computer simulation studies.	Jayant K. Singh, IIT, Kanpur	Sergey Shevkunov, St. Petersburg Polytechnic University	INT/RUS/RFBR/P-298

48	Functional properties of electro- and magnetostrictive materials based on transition metal oxides synthesized by hydrothermal sol-gel method.	Dr. Radheshyam Rai, Shoolini University Solan	Dr. Igor Bdikin, National Research University of Electronic Technology, MIET Moscow	INT/RUS/RFBR/P-299
49	Ultrafast Dynamics of Excitons and Charge Carriers in the White-Light-Emitting Quantum Dots Produced at Low Temperature	Dr. Mohan Singh Mehata, Delhi, Technological University (DTU), Delhi	Prof. Victor A. Nadtochenko, Institute of Chemical Physics (ICP) Moscow,	INT/RUS/RFBR/P-300
50	Study of thermophysical properties of nanofluids and their flows for the design of new generation coolants for industrial applications.	Dr.Sarith P Sathian, , IIT Madras, Chennai,	Dr. Valery Ya. Rudyak, Novosibirsk State University of Architecture and Civil Engineering, Novosibirsk,	INT/RUS/RFBR/P-301
51	Lower atmospheric forcing leading to modifications in the upper atmosphere	Prof. Minakshi Devi, Gauhati University, Guwahati-781014,	Dr. YayaRuzhin/ Dr. A. Depueva Izmiran Moscow, Troitsk	INT/RUS/RFBR/P-302
52	Creation of novel high performance membrane materials and membranes based on them	Prof. Susanta Banerjee, Indian Institute of Technology, Kharagpur	Prof. Dr. Yuri Yampolskii, A.V. Topchiev Institute of Petrochemical Synthesis, Moscow,	INT/RUS/RFBR/P-303
53	Bioactivity guided chemical examination of knotwood of Indian trees	Dr. Rakesh Kumar, Forest Research Institute Dehradun	Dr. Nikolay E. Nifantiev, N. D. Zelinsky Institute of Organic Chemistry Moscow	INT/RUS/RFBR/P-304