

## List of Jointly Selected Proposals for the 2018 DST-RFBR Call

Sr. No.	Project Number	Project Title	Indian PI	Russian PI
1	<b>INT/RUS/RFBR/305</b>	Development of decision support systems integrating parallel adaptive heuristic algorithms for large-scale multi-objective optimization problems for socio-economic and environmental planning	Manoj Thakur	Akopov Andranik
2	<b>INT/RUS/RFBR/306</b>	Development of models of immune-dependent disorders and finding optimal strategies for their treatment: analytical and computational approaches	Priti Kumar Roy	Khailov Evgenii
3	<b>INT/RUS/RFBR/307</b>	Modeling the dynamics and evolution of predator-prey communities under anthropogenic impacts: Comparison of discrete and continuous time approaches	Bapan Ghosh	Frisman Efim
4	<b>INT/RUS/RFBR/308</b>	Investigations of multidimensional fractional diffusion-wave equations and their application to the study of dissipative physical processes	Praveen Agarwal	Pskhu Arsen
5	<b>INT/RUS/RFBR/309</b>	Multi-colored link invariants	Ramadevi Pichai	Mironov Andrey
6	<b>INT/RUS/RFBR/310</b>	The type 2 diabetes-induced changes in the regulatory effects of apelin and leptin on the steroidogenesis and spermatogenesis in the rodents' testes and the approaches to their correction	Dr. Vikas Kumar Roy	Shpakov Alexandr
7	<b>INT/RUS/RFBR/311</b>	Novel aspects of molecular pathogenesis of hereditary breast cancer	Aklank Jain	Imyanitov Evgeny
8	<b>INT/RUS/RFBR/312</b>	Optical Metrology of Ultra-Short Pulses for Design of Flexible MIMO Based Next Generation Optical Communication Networks	Surinder Singh	Anashkina Elena
9	<b>INT/RUS/RFBR/313</b>	Study of void galaxies in the local Universe: gas-rich extremely low metallicity	Jayaram N. Chengalur	Pustilnik Semen

		dwarfs		
10	<b>INT/RUS/RFBR/314</b>	Theory and modeling of nonequilibrium and spintronics phenomena in superconductor-ferromagnet-superconductor structures.	Krishnendu Sengupta	Shukrinov Yury
11	<b>INT/RUS/RFBR/315</b>	Inflation and late time acceleration of the Universe and its observational signatures.	Mohammad Sami	Kamenshchik Alexandr
12	<b>INT/RUS/RFBR/316</b>	Optimization of Heusler based nanocomposite materials for thermoelectric energy conversion	Satyabrata Patnaik	Khovaylo Vladimir
13	<b>INT/RUS/RFBR/317</b>	Plasmonic structures with broken time and space symmetries	Achanta Venu Gopal	Belotelov Vladimir
14	<b>INT/RUS/RFBR/318</b>	Active plasmonics: modifying the light emission of quantum emitters using optical resonances induced by metal-dielectric nanophotonic structures	Rajesh V. Nair	Fedyanin Andrey
15	<b>INT/RUS/RFBR/319</b>	High Mobility Single Crystals for n-Channel Organic Field-Effect Transistors	Surya Prakash Singh	Paraschuk Dmitry
16	<b>INT/RUS/RFBR/320</b>	Synthesis and study of properties of electrochemically active composites based on lithium intercalated silicates of iron, manganese, cobalt and having high electron conductivity carbo-silicides of transition metals	Ambesh Dixit	Ivanishchev Alexandr
17	<b>INT/RUS/RFBR/321</b>	Study of human anti-sialoside antibodies by methods of chemical biology	Jaideep Saha	Bovin Nikolai
18	<b>INT/RUS/RFBR/322</b>	Directed functionalization of oxide and carbon nanomaterials for the development of efficient catalysts for carbon dioxide conversion into value-added products	Pankaj Bharali	Kerzhentsev Mikhail

19	<b>INT/RUS/RFBR/323</b>	Catalytic Transformation of Indian and Russian Origin Biomass Feedstocks to Biofuel via Levulinic Acid	Vijay V. Bokade	Simakova Irian
20	<b>INT/RUS/RFBR/324</b>	Ultrasonic encapsulation of bioactive compounds to deliver in the food matrix	Shirish H Sonawane	Potoroko Irian
21	<b>INT/RUS/RFBR/325</b>	Effect of Ion Specificity on Nano-Structuring in Ion-Containing Polymer Systems Caused by Ion Association in Organic and Aqueous Media: Complex Experimental and Theoretical Study	Priyadarsi De	Kramarenko Elena
22	<b>INT/RUS/RFBR/326</b>	Ru and Os Complex Catalyzed Activation and Functionalization of Alkane C-H Bonds.	Sabuj Kundu	Belkova Natalia
23	<b>INT/RUS/RFBR/327</b>	Novel wide bandgap copolymers featuring excellent comprehensive characteristics towards practical application for organic solar cells	Ganesh Datt Sharma	Nikolaev Alexander
24	<b>INT/RUS/RFBR/328</b>	Unraveling the links between bioenergetics constrains, cell wall integrity, and multidrug resistance in fungi	Rajendra Prasad	Knorre Dmitry
25	<b>INT/RUS/RFBR/329</b>	Histochemistry, Ultrastructure and Targeted Metabolomics in Fragrant Flowers of Some	Adinpunya Mitra	Muravnik Lyudmila
26	<b>INT/RUS/RFBR/330</b>	Integrative study of parasitic crustacean copepods from coral communities of the Northwest Indian Ocean	SUDHA KAPPALLI	Ivanenko viatcheslav
27	<b>INT/RUS/RFBR/331</b>	Regulation of TGF- $\beta$ -induced CCL2 gene expression and impact of CCR2-positive cell populations on breast cancer progression	Arindam Bhattacharyya	Kuprash Dmitry
28	<b>INT/RUS/RFBR/332</b>	Investigation of fundamental mechanisms of regeneration of deep-layer skin wounds in response to treatment with polyelectrolyte-hydrogel complex dressings and gene therapy	Arindam Bit	Salafutdinov Ilnur

29	<b>INT/RUS/RFBR/333</b>	Development of Upconversion Nanoparticles Loaded with Anticancer Drugs for Solid Tumor Theranostics	Jayaraman Senthilselvan	Zvyagin Andtrei
30	<b>INT/RUS/RFBR/334</b>	Himalaya-Burma arc: modeling of seismicity and recognition of earthquake-prone areas	Prantik Mandal	Gorshkov Alexander
31	<b>INT/RUS/RFBR/335</b>	Collision tectonics and seismicity in the Alpine-Himalayan belt: A comparative study between Great Caucasus (Russia) and Himalaya (India)	Surendra Nadh Somala	Rogozhin Evgeny
32	<b>INT/RUS/RFBR/336</b>	Analysis of urban 'heat islands', air pollution dynamics and extreme weather phenomena in India and Russia	Krushna Chandra GOUDA	Lokoshchenko Mikhail
33	<b>INT/RUS/RFBR/337</b>	GLOBAL BIODIVERSITY, EVOLUTION AND BIOGEOGRAPHICAL CONNECTIONS OF BELEMNTES FROM THE SOUTHERN AND NORTHERN HEMISPHERES AROUND THE EARLY/LATE CRETACEOUS BOUNDARY	Desai Bhawanisingh Gaurang	Ippolitov Alexei
34	<b>INT/RUS/RFBR/338</b>	Development of methods for in-season monitoring of sugarcane crop in Peninsular India using Earth Observations for precision water and nitrogen management	Virupakshagouda Channabasappagouda Patil	Bartalev Sergey
35	<b>INT/RUS/RFBR/339</b>	Identification and modelling of microplastics transport in the coastal areas under the influence of dominant wind patterns	R. Venkatachalapathy	Bagaev Andrei
36	<b>INT/RUS/RFBR/340</b>	Irregular wave transformation over the submerged sand bars and mudbanks: role of dissipation and nonlinear processes	Samiksha S. Volvaiker	Kuznetsov Sergey
37	<b>INT/RUS/RFBR/341</b>	Research and development of ultra-wideband emitters and smart antennas for different radio systems	Malay Ranjan Tripathy	Lagovsky Boris
38	<b>INT/RUS/RFBR/342</b>	An adaptive security System for optimum inter-domain Virtual Machines (VM) migration	Maninder Singh	Perl Ivan

		management in dynamic cloud environment		
39	<b>INT/RUS/RFBR/343</b>	Intelligent Control of Multi robot systems based on serial and parallel manipulators in Cyber Physical Framework	Laxmidhar Behera	Rybak Laris
40	<b>INT/RUS/RFBR/344</b>	Membrane processes for CO2 recovery and its utilization	Kandasamy PALANIVELU	Syrtsova Daria
41	<b>INT/RUS/RFBR/345</b>	The study of flow, turbulence and heat transfer enhancement in a gas-liquid near-wall bubbly flow considering bubble breakup and coalescence.	Prasanta Kumar Das	Pakhomov Maksim
42	<b>INT/RUS/RFBR/346</b>	Systematic analysis of the effect of combined mode of deformation on the structure and properties of pearlitic grade steel wires	Krishnaiyengar Narasimhan	Polyakova Marina
43	<b>INT/RUS/RFBR/347</b>	Municipal wastewater treatment by microalgae and its following hydrothermal liquefaction to reach the sustainable and efficient use of renewable resources	Vinod Kumar	Vlaskin Mikhail
44	<b>INT/RUS/RFBR/348</b>	New ion-conducting Hybrid Membranes for Electro-membrane Processes and Energy Applications	Vaibhav Kulshrestha	Raskulova Tatyana
45	<b>INT/RUS/RFBR/349</b>	Numerical modeling and development of new methods for hybrid metal forming of complex parts of ultra-high strength (UHS) materials	Puneet Tandon	Pesin Alexandr
46	<b>INT/RUS/RFBR/350</b>	Heat transfer intensification in novel design micro-pin-fin heat sink for microprocessor cooling with improved temperature uniformity	Ritunesh Kumar	Abiev Rufat
47	<b>INT/RUS/RFBR/351</b>	Thermo-hydrodynamics of Micro-Droplets Interacting with Engineered Surfaces	Krishnamurthy Muralidhar	Kabov Oleg
48	<b>INT/RUS/RFBR/352</b>	Autonomous calibration of robot cameras using on-body markers	Subir Kumar Saha	Magid Evgeni

**Project coordinators are being informed separately to complete administrative formalities for release of DST grant.**