

**Department of Science & Technology**  
**International Division**

An India-Russia Joint call for proposals with the Russian Science Foundation (RSF) in the areas of (i) Mathematics, Computer and Systems Science; (ii) Physics and Space Science; (iii) Chemistry and Material Science; (iv) Biology and Life Science; (v) Basic Research for Medicine; (vi) Agricultural Science and (vii) Earth Science was advertised in June 2018. In total, 170 common proposals were received against the joint call for which last date was 14<sup>th</sup> September 2018. Based on scientific merit, complementarities of the project objectives, scientific strengths of the project coordinators and national priorities, the Department of Science & Technology, India and Russian Science Foundation (RSF) have jointly decided to support following 20 proposals. Project coordinators are being informed separately to complete administrative formalities for release of DST grant.

<b>SI No</b>	<b>Title</b>	<b>Indian Coordinator</b>	<b>Russian Coordinator</b>
1	Multistability and hidden attractors in dynamical systems	Dr. M.D. Shrimali Central University of Rajasthan, Jaipur, Rajasthan	Dr. Nikolay Kuznetsov, Federal State Budgetary Educational Institution of Higher Education "Saint-Petersburg State University"
2	Global knot theory: invariants and classification	Dr. K. Gongopadhyay, Indian Institute of Science Education and Research Mohali	Dr. Andrey Vesnin, Sobolev Institute of Mathematics, Novosibirsk, Russia
3	Complex Cu-containing semiconductors and layered structures for economically-viable, environmentally-benign, and high-performance ultrathin solar cells	Dr. S Mukherjee, Indian Institute of Technology Indore	Dr. Victor Atuchin, Rzhanov Institute of Semiconductor Physics, Novosibirsk
4	Cosmological dark matter, primordial black holes, Bose-Einstein condensates, and charge asymmetry of the Universe	Prof. R. Rangarajan, Ahmadabad University. Ahmadabad	Dr. Alexander Dolgov, Novosibirsk State University, Novosibirsk

5	Exotic Magnetic Properties and Spin Dynamics of Low Dimensional and Frustrated Quantum Magnets	Dr. P. Khuntia, Department of Physics Indian Institute of Technology Madras Chennai	Dr. Olga Volkova, Lomonosov Moscow State University, Moscow
6	Investigation of multi-nucleon transfer, quasi-fission, fusion processes in reactions with heavy ions near and above the Coulomb barrier	Dr. P. P. SINGH, Indian Institute of Technology Ropar, Punjab	Dr. Eduard Kozulin, Joint Institute for Nuclear Research, Dubna
7	Development of cyclic saccharide-based synthetic chloride transporters and evaluation of their apoptosis inducing activity	Dr. Pinaki Talukdar, Indian Institute of Science Education and Research, Pune	Dr. Yury Tsvetkov, N.D. Zelinsky Institute of Organic Chemistry, Moscow
8	CO <sub>2</sub> as a building for synthesis of fine chemical and fuel over functionalized materials	Dr. B. Chowdhury, Indian Institute of Technology (Indian School of Mines) Dhanbad	Dr. Sergey Lyubimov, A.N. Nesmeyanov Institute of Organoelement Compounds, Moscow
9	Enabling the targeted delivery of novel P21 activated kinase 1 (Pak1) Inhibitors to aggressive glioblastoma cells by conjugating to tumor specific peptides selected from Phage peptide library	Dr. SK Rayala, Indian Institute of Technology Madras	Dr. Vladimir Richter, Institute of Chemical Biology and Fundamental Medicine of SB RAS
10	Understanding CTD-chromatin crosstalk during transcription through nucleosome	Dr. Akhtar M.S., CSIR-Central Drug Research Institute, Lucknow	Dr. Vasily Studitsky, Lomonosov Moscow State University
11	Development of test methods for control of heavy metals in water for environmental monitoring and prevention of health risks	Dr. Mulayam Singh Gaur, Hindustan College of Science and Technology	Dr. Anna Berlina, Federal State Institution "Federal Research Centre "Fundamentals of Biotechnology" of the Russian Academy of Sciences"

12	Unraveling the molecular mechanism of lncRNAs involvement in glioblastoma	Dr. A.K. Pandey, Amity Institute of Biotechnology, Amity University Haryana, Manesar	Dr. Marat Pavlyukov, Shemyakin - Ovchinnikov Institute of Bioorganic Chemistry of the Russian Academy of Sciences, Moscow
13	p53 in regulation of Epithelial-Mesenchymal Transition in breast cancer: role of micro-RNA	Dr. Ritu Kulshreshtha, Indian Institute of Technology Delhi	Dr. Nickolai Barlev, The Institute of Cytology, St. Petersburg
14	Bacterial endophytes as feasible viricides biocontrol of prevalent potato and tomato viruses	Dr. Bhim Pratap Singh, Mizoram University, Aizawl	Dr. Igor Maksimov, Institute of Biochemistry and Genetics - Subdivision of the Ufa
15	Natural hazards and monitoring for mountain territories in Russia and India	Dr. P.D. Ganapathy, Centre for Disaster Mitigation and Management, Vellore Institute of Technology	Dr. Vladislav Zaalishvili, Vladikavkaz Scientific Centre of the Russian Academy of Sciences
16	Impact of climate change on South Asia extremes: A high-resolution regional Earth System Model assessment	Dr. P. Kumar, Indian Institute of Science Education and Research Bhopal	Dr. Dmitry Sein, P.P. Shirshov Institute of Oceanology of Russian Academy of Science
17	Controlling of the Abnormal Grain Growth in Friction Stir Weld Joints of Heat Treatable Aluminum Alloy	Dr. Dwivedi D.K., Indian Institute of Technology Roorkee	Dr. Sergey Mironov, Belgorod National Research University
18	Development of Nanostructured Titanium Implants with Bioactive and Antibacterial Composite Coatings for Dental and Maxillofacial Applications	Dr. N. Ramesh Babu, National Institute of Technology Tiruchirappalli	Dr. Ruslan Valiev, Ufa State Aviation Technical University, Ufa
19	Development of thick and thin NiTi shape memory alloy intelligent porous structures using laser and	Dr. I.A. Palani Indian Institute of Technology Indore,	Dr. Natalia Resnina, Saint-Petersburg State University, St. Petersburg

	wire arc additive manufacturing for functional applications		
20	Two Phase High Speed Flows in Ground and Space Applications	Dr. T.M. Muruganandam, Indian Institute of Technology Madras	Dr. Eduard Son, Moscow Institute of Physics and Technology, Moscow

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