BRICS STI FRAMEWORK PROGRAMME
5th CALL 2021

List of successful projects

№	Registration number (BRICS2021-) and Acronym	Full Title	Country	PI	Organization	National funding organization
1	007 - DESLDPNSC	Developing Efficient and Stable Low Dimensional Perovskite Nanocrystal Solar Cells	BRAZIL	Ana Flavia Nogueira	University of Campinas	CNPq
			RUSSIA	Lyubov A. Frolova	The Institute for Problems of Chemical Physics of RAS	MSHE
			INDIA	K.V. Adarsh	Indian Institute of Science Education and Research, Bhopal	
			CHINA	Jianyu Yuan	Soochow University	NSFC
2	033 - Novel MBLI's	Unlocking bacterial resistance to antibiotics with the development of novel metallo-β-lactamase inhibitors	BRAZIL	Jose RA Silva	Federal University of Pará Chemistry	CNPq
			INDIA	D. Tiwari	Hericure Healthcare LTD	
			CHINA	Hua-Li Qin	Wuhan University of Technology	
			SOUTH AFRICA	Tricia Naicker	University of KwaZulu-Natal	SAMRC

3	038 - UNCMSIB	Design and Development of Ultra-Small Nanocrystal Based Materials for Advanced Sodium Ion Batteries	INDIA	Amartya Mukhopadhyay	Indian Institute of Technology, Bombay	DST
			CHINA	Li Li	Northeastern University	
			SOUTH AFRICA	Michael Daramola	University of Stellenboch	NRF
4	067 - BioReRAM	Development of Biodegradable Nanocomposite-based Resistive Random Access Memory/Development of Bio-ReRAM	BRAZIL	Igor Polikarpov	University of São Paulo	CNPq
			INDIA	A Srinivasan	Indian Institute of Technology, Guwahati	
			SOUTH AFRICA	Sreedevi Vallabhapurapu	University of South Africa	NRF
5	083 - KTCSUUPWDK	Key Technologies of Carbonization and Sustainable Utilization of Urban Perishable Waste Driven by Data and Knowledge	RUSSIA	Rajput Vishnu Dayal	Southern Federal University	MSHE
			INDIA	Sudhakar Srivastava	Banaras Hindu University	
			CHINA	Shan Shengdao	Zhejiang University of science and technology	MOST
6	095 - RTbEcKpRxP	Target identification and efficacy enhancement of proven MDR overcoming Piper spp derived compounds towards candidate drug development against WHO priority 1 (critical) MDR pathogens: P. aeruginosa, E. coli, K.	BRAZIL	Raghuvir K. Arni	Multiuser Centre for Biomolecular Innovation	CNPq
			RUSSIA	Andrey Zamyatnin	Sechenov First Moscow State Medical University	MSHE
			INDIA	Khalid Raza	Jamia Millia Islamia	
			SOUTH AFRICA	Awelani Mutshembele	South African Medical Research Council	SAMRC

		pneumoniae, and M. tuberculosis				
7	100 - SAPTARISI	Search and Follow-up Studies of Time-domain Astronomical Sources using Sky Surveys, BRICS Telescopes and Artificial Intelligence	RUSSIA	Oleg Malkov	Institute of Astronomy RAS	MSHE
			INDIA	Santosh Joshi	Aryabhatta Research Institute of Observational Sciences	DST
			CHINA	Kefeng Tan	National Astronomical Observatories, CAS	NSFC
8	112 - SEBIPMI	Surface Engineering of Biomedical Implants for the Prevention of MDR Infection	BRAZIL	Valentim A R Barão	University of Campinas	CNPq
			INDIA	Selvakumar Murugesan	National Institute of Technology Karnataka	DST
			CHINA	Xu Liqun	Southwest University	MOST
9	115 - 3DBioPhoto	3D photonic bioprinting assisted by 2D materials for the new generation of biomedical devices	BRAZIL	Arnaldo Leal Junior	Federal University of Espirito Santo	CNPq
			INDIA	Anuj Kumar Sharma	National Institute of Technology Delhi	DST
			CHINA	Rui Min	Beijing Normal University	MOST
10	121 - IRMMA	New strategy of plasma water treatment driven by renewable energy	RUSSIA	Dmitry Sorokin	Institute of High Current Electronics, RAS	MSHE
			CHINA	Cheng Zhang	Institute of Electrical Engineering, CAS	NSFC
			SOUTH AFRICA	Bernard Bladergoen	University of the Western Cape	NRF

11	126 -	Pollutant removal and valorization of livestock and toilet wastewater enhanced via manure-based biochar	BRAZIL	Giovana Tommaso	University of São Paulo	CNPq
			CHINA	Zhidan Liu	China Agricultural University	NSFC
			SOUTH AFRICA	Alfred Odindo	University of Kwazulu-Natal	WRC
12	130 - PARADIGM	A BRICS Predicted Ocean: Roadmap and Demonstration of model validation, intercomparisons and applications for sustainable management of the coastal ocean	BRAZIL	Mauro Cirano	Federal University of Rio de Janeiro	CNPq
			RUSSIA	Roman Sedakov	Shirshov Institute of Oceanology	MSHE
			INDIA	P. N. Vinayachandran	Indian Institute of Science	DST
			CHINA	Fangli Qiao	First Institute of Oceanography	MOST
			SOUTH AFRICA	Jennifer Veitch	South African Environmental Observation Network - Egagasini Node	NRF
13	165 - AIESMx	Artificial Intelligence and Earth System Modelling toward Detection of Extreme Climate Events in the BRICS	BRAZIL	Paulo Nobre	National Institute for Space Research	CNPq
			INDIA	Ayantika Dey Choudhury	Indian Institute of Tropical Meteorology	DST
			CHINA	Zhaohui Lin	Institute of Atmospheric Physics, CAS	MOST
14	178 - ACTSGBAI	Analysis and Control Technologies of Smart Grid Based on Artificial Intelligence	BRAZIL	Mauricio Aredes	Federal University of Rio de Janeiro	CNPq
			RUSSIA	Alexander Voloshin	National Research University "Moscow Power Engineering Institute"	MSHE
			CHINA	Yi Tang	Southeast University,	NSFC

15	196 - iPhotoMat	Novel photoactive nanomaterials for integrated environmental and energy applications	BRAZIL	Caue Ribeiro	Embrapa Instrumentation	CNPq
			RUSSIA	Detlef Bahnemann	Saint-Petersburg State University	MSHE
			CHINA	Jia Hong Pan	North China Electric Power University	NSFC
16	199 - CTMforPSCs	New charge transport materials and interface engineering for highly efficient and stable perovskite solar cells	RUSSIA	Sergey M. Aldoshin	Institute for Problems of Chemical Physics RAS	MSHE
			INDIA	Parameswar Krishnan Iyer	Indian Institute of Technology Guwahati	DST
			CHINA	Qinye Bao	East China Normal University	NSFC
17	203 - SMARTSCAPE	Integrating ecoacoustic, biodiversity and climate change perspectives across urban and rural landscapes: big data solutions toward multifunctional and smarter landscapes	BRAZIL	Milton Ribeiro	Sao Paulo State University	CNPq
			RUSSIA	Irina Beme	Lomonosov Moscow State University	MSHE
			SOUTH AFRICA	Emmanuel Dufourq	Stellenbosch University	NRF
18	205 - Iλprestudy	Comparative research between hydrothermal systems along Southwest Indian Ridge and Northern Mid-Atlantic Ridge: Iλ pre-study	BRAZIL	Paulo Y. G. Sumida	University of São Paulo	CNPq
			RUSSIA	Cherkashov Georgy	FSBI VNII Okeangeologia	MSHE
			CHINA	Chunhui Tao	Second Institute of Oceanography	MOST

19	223 - eWater	Principle of wastewater treatment and resource recovery based on electrochemical anaerobic membrane bioreactor	BRAZIL	Cesar Rossas Mota Filho	National Institute of Science and Technology for Sustainable Wastewater Treatment	CNPq
			INDIA	Shaikh Ziauddin Ahammad	IIT Delhi	
			CHINA	Chengzhi Hu	Research Center of Eco-Environmental Sciences, CAS	NSFC
			SOUTH AFRICA	Thabo T.I Nkambule	University of South Africa	WRC
20	243 - HyWaTS	Hybrid Non Sewered wastewater treatment system for safe discharge and reuse.	BRAZIL	Carlos Alexandre Lutterbeck	University of Santa Cruz do Sul	CNPq
			INDIA	Srikanth Mutnuri	Birla Institute of Technology and Science	DST
			CHINA	Zifu Li	University of Science and Technology Beijing	NSFC
			SOUTH AFRICA	Stefan Schmidt	University of KwaZulu-Natal	WRC
21	248 - ALMOFEW	Active Machine Learning Guided Discovery and Optimization of Effective MOF-based Catalysts for Electrolysis of Water	RUSSIA	Sergey V. Levchenko	Skolkovo Institute of Science and Technology	MSHE
			INDIA	Rajamani Raghunathan	UGC-DAE Consortium for Scientific Research, Indore	DST
			CHINA	Minghua Huang	Ocean university of China	NSFC

22	277 - BIO-LIGHT	High output power emitters and sensitive detectors based on AlGaN nanoheterostructures for deep-ultraviolet radiation: towards biological applications	RUSSIA	Valentin Jmerik	Ioffe Institute	MSHE
			INDIA	Govind Gupta	CSIR-National Physical Laboratory	DST
			CHINA	Xinqiang Wang	Peking University	MOST
23	285 - CoNMuTraMO	Constraining the Nature of Multi-messenger Transients with Coordinated Multi-wavelength Observations	BRAZIL	Ulisses Barres de Almeida	Brazilian Center for Research in Physics	CNPq
			RUSSIA	A. Pozanenko	Space Research Institute	MSHE
			INDIA	Kuntal Misra	Aryabhatta Research Institute of Observational Sciences	DST
			CHINA	Roberto Soria	NAOC Chenzhou	NSFC
			SOUTH AFRICA	David Buckley	SAAO/UCT/UFS	NRF
24	293 - BIOGEN	Intensification of biohydrogen production from agroindustry residues: technologies for integration into circular bioprocesses	BRAZIL	Carlos Ricardo Soccol	UFPR–DEBB	CNPq
			RUSSIA	Yuriy Litti	Research Center of Biotechnology RAS	MSHE
			INDIA	Binod Parameswaran	CSIR-National Institute for Interdisciplinary Science and Technology	
			CHINA	Binghua Yan	Hunan Agricultural University	NSFC
			SOUTH AFRICA	Kugen Permaul	Durban University of Technology	NRF

			RUSSIA	Yulia Sotnikova	SAO RAS	MSHE
25	298 - MALBRICS	Multi-messenger Astronomy League for BRICS	INDIA	Nayantara Gupta	Raman Research Institute	
			CHINA	Lili Yang	Sun Yat-sen University	NSFC
			SOUTH AFRICA	Soebur Razzaque	University of Johannesburg	NRF
26	305 - CRISPAH	Novel siderophore fragments and hybrids for the diagnosis and treatment of drug resistant-infectious pathogens	BRAZIL	Louis Pergaud Sandjo	Universidade Federal de Santa Catarina	CNPq
			INDIA	Jaya Lakkakula	Amity University	
			SOUTH AFRICA	Rui Werner Macedo Krause	Rhodes University	SAMRC
27	307 - SENSFOOD	Research of novel multi-sensing platforms based on emerging low-dimensional materials to applications in food industry under an electronic olfaction paradigm	RUSSIA	Sysoev Victor V.	Yuri Gagarin State Technical University of Saratov	MSHE
			INDIA	Yuvaraj Sivalingam	SRM Institute of Science and Technology, Kattankulathur	
			SOUTH AFRICA	Mhlongo, Gugu H.	Council for Scientific and Industrial Research	NRF
28	311 - MESOLUC	Magnetoelectric spin-orbit (MESO) logic for ultralow-power computing	BRAZIL	Ivair Aparecido dos Santos	State University of Maringá	CNPq
			RUSSIA	Zvezdin K.A.	Russian Quantum Center	MSHE
			CHINA	Weisheng Zhao	Beihang University	NSFC

29	317 - Smart Green pack	Sustainable green nanocomposite for smart edible packaging applications	BRAZIL	Daniel Pasquini	Federal University of Uberlândia	CNPq
			RUSSIA	Anastasia V. Penkova	St. Petersburg State University	MSHE
			INDIA	Radhakrishnan E.K	Mahatma Gandhi University	
			SOUTH AFRICA	Maya Jacob	Council for Scientific and Industrial Research	NRF
30	324 - ENHNPSC	Engineering of novel hybrid nanostructures for perovskite solar cell application	BRAZIL	Fernando Gomes de Souza Junior	Universidade Federal do Rio de Janeiro	CNPq
			INDIA	Nandakumar Kalarikkal	Mahatma Gandhi University	
			CHINA	Yuhua Wang	Lanzhou University	NSFC
			SOUTH AFRICA	Samuel Oluwatobi Oluwafemi	University of Johannesburg	NRF
31	344 - GREENERGY	Processing and enzymatic hydrolysis of agroindustrial and forestry raw materials into C5- and C6-sugars to produce biofuels for low-carbon energy/Biofuels for low-carbon energy	BRAZIL	Luciana Porto de Souza Vandenberghe	Federal University of Paraná	CNPq
			RUSSIA	Ivan N. Zorov	FRC of Biotechnology RAS	MSHE
			SOUTH AFRICA	Suren Singh	Durban University of Technology	
32	358 - Drug-Free Wastewater	Monitoring and removal of antibiotics from wastewater by membrane separation	BRAZIL	Salatiel Wohlmuth da Silva	Federal University of Rio Grande do Sul	CNPq
			RUSSIA	Alexey Volkov	A.V.Topchiev Institute of Petrochemical Synthesis RAS	MSHE

			INDIA	Swachchha Majumdar	CSIR-Central Glass and Ceramic Research Institute	DST
			CHINA	Lin Zhang	Zhejiang University	NSFC
			SOUTH AFRICA	Tshepo Malefetse	University of South Africa	
33	380 - BDUEICNSED	Research on big data analysis technology and application of urban energy Internet for carbon neutralization and sustainable energy development	BRAZIL	Maria Cristina Dias Tavares	University of Campinas	CNPq
			CHINA	Haochen Hua	Hohai University	MOST
			SOUTH AFRICA	P. Naidoo	University of Johannesburg	