

## (RESULT BRICS CALL 2017)

### Provisional List of scientifically recommended Projects for BRICS CALL 2017 under BRICS STI Cooperation

S. No.	Registration No. and Acronym	Full title	Country	PI Name and Organisation
	<b>Material science including nanotechnology</b>			
1.	BRICS2017-146 <b>IEEE-OSC</b>	Interface-engineered and energy-efficient organic solar cells based on porphyrin small molecules	INDIA	Sai Santosh Kumar Raavi, Department of Physics, Indian Institute of Technology Hyderabad
			BRAZIL	Prof. Paulo B. Miranda, Polymer Group, University of Sao Paulo Sao Carlos Physics Institute
			CHINA	Prof. Xiaobin Peng, State Key Laboratory of Luminescent Materials and Devices, South China University of Technology
2.	BRICS2017-150 <b>EPNAPT</b>	Engineering peptide-based nanobiomaterials for antitumor photodynamic therapy	INDIA	Thimmaiah Govindaraju, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore
			RUSSIA	Rawil Fakhruллин, Kazan Federal University, Institute of fundamental medicine and biology
			CHINA	Xuehai Yan, Chinese Academy of Sciences, Institute of Process Engineering
3.	BRICS2017-191 <b>BNEAT</b>	Energy Band and Nanostructure Engineering of AIV-BVI — based Thermoelectrics for Efficient Heat Energy Conversion	INDIA	Kanishka Biswas, New Chemistry Unit, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Jakkur, Bangalore, 560064
			RUSSIA	Prof. Alexander Burkov, Head of the laboratory for physics of thermoelements, Ioffe Institute, Politekhnikeskaya 26, Saint-Petersburg 194021, Russia.
			CHINA	Prof. Yanzhong Pei, Professor, School of Materials Science and Engineering, Tongji University (Jiading Campus) 4800 Caoan Road, Shanghai 201804, China
4.	BRICS2017-258 <b>EMPM</b>	Electronic and magnetic properties of multiferroic materials	INDIA	A. Sundaresan Chemistry and Physics of Materials Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore
			RUSSIA	Alexander Pyatakov, Physics Department, Moscow State University
			CHINA	Ren Wei MGI / Physics, Shanghai University

5.	<b>BRICS2017-390 SCBCPCVD</b>	Silicon Carbide Biomedical Coatings Prepared By Chemical Vapor Deposition	INDIA	Bikramjit BASU, Materials Research Centre ,Indian Institute of Science, Bangalore
			RUSSIA	Marina KOSINOVA Nikolaev, Institute of Inorganic Chemistry, Russian Academy of Sciences, Siberian Branch
			CHINA	Rong TU, Wuhan University of Technology State Key Lab of Advanced Technology for Materials Synthesis and Processing
6.	<b>BRICS2017-433 NFMAFPSC</b>	Development of efficient polymer solar cells based on non fullerene small molecules acceptors with low energy loss	INDIA	Ganesh D. Sharma, The LNM Institute of Technology, Physics department, Jaipur, India
			RUSSIA	Prof. A.R. Khokhlov, Members of Russian Academy of Sciences, A.N. Nesmeyanov Institute of Organoelement Compounds of Russian Academy of Sciences (INEOS RAS), Laboratory for Polymer Physics (LPP), Moscow, Russia
			CHINA	Prof. Chuandong Dou, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China.
7.	<b>BRICS2017-617 FDDL</b>	Fracture and delamination under dynamic loading	INDIA	P. Venkitanarayanan, Department of Mechanical Engineering, Indian Institute of Technology Kanpur, India,
			RUSSIA	Yuri Petrov, Department of Elasticity Mathematics & Mechanics St.Petersburg State University
			CHINA	Ya-Pu Zao, State Key Laboratory of Nonlinear Mechanics, Institute of Mechanics, Chinese Academy of Sciences
8.	<b>BRICS2017-624 FAIE</b>	Fluxes-Assisted Inclusion Engineering: Applications in Low-carbon Low-alloy Shipbuilding Plates	INDIA	Somnath Basu Department of Metallurgical Engineering and Materials Science, Indian Institute of Technology Bombay, Mumbai
			CHINA	Cong Wang, North eastern University School of Metallurgy Shenyang CHINA 110819
			SOUTH AFRICA	Theresa Coetsee, University of Pretoria Department of Materials Science and Metallurgical Engineering Pretoria SOUTH AFRICA
9	<b>BRICS2017-663 Optonanospin</b>	Nanostructures with large magneto-optical activity and spin-orbit interaction	INDIA	Venu Gopal Achanta, Tata Institute of Fundamental Research, Mumbai
			RUSSIA	Vladimir I Belotelov, International Center for Quantum Optics & Quantum Technologies, Moscow, Russia
			CHINA	Yujun Song, University of Science and Technology Beijing, China

<b>Biotechnology and Biomedicine including human health and neuroscience</b>				
10.	<b>BRICS2017-053 TherNC</b>	Biofunctional theranostics nanocomplexes for combined therapy of solid cancer	INDIA	Indrajit Roy, Department of Chemistry, University of Delhi, Delhi
			RUSSIA	Prof. Andrei V Zvyagin, Centre of Optical Theranostics, Institute of Biology and Biomedicine, Lobachevsky Nizhny Novgorod State University
			CHINA	Prof. Quan Lin, State Key Lab of Supramolecular Structure & Materials, College of chemistry, Jilin University
11.	<b>BRICS2017-209 GPCRArrSig</b>	Understanding the structural basis of biased GPCR signaling to develop novel therapeutics with minimized side-effects	INDIA	Arun Shukla, Indian Institute of Technology, Kanpur
			RUSSIA	Prof. Vadim Cherezov, Moscow Institute of Physics and Technology, State University, Russia
			CHINA	Prof. Haitao Zhang, College of Pharmaceutical Sciences, Zhejiang University, China
12.	<b>BRICS2017-236 CCT</b>	Development of the dual inhibitors targeting Wnt signaling as colorectal cancer therapeutics	INDIA	Dr Ahmed Kamal, Pro Vice Chancellor, Jamia Hamdard (Hamdard University), New Delhi 110 062.
			RUSSIA	Dr. Palyulin, Vladimir A. Department of Chemistry, Lomonosov Moscow State University, Moscow 119991 Russia
			SOUTH AFRICA	Prof. Vines Pillay, Head: Pharmaceutics and Pharmaceutical Research University of the Witwatersrand,
13.	<b>BRICS2017-435 MRP-TB</b>	Multidisciplinary research platform to identify new TB drug targets	INDIA	Shekhar C Mande, National Centre for Cell Science, Pune University
			CHINA	Shiyun Chen, Wuhan Institute of Virology, Chinese Academy of Sciences
			SOUTH AFRICA	Adrie JC Steyn, Africa Health Research Institute (AHRI), Exploratory Science Division,
14.	<b>BRICS2017-526 MBLI</b>	Development of new approaches to overcome MBL-related resistance in bacteria	INDIA	Jayanta Haldar, New Chemistry Unit (NCU), Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Jakkur, Bangalore 560064
			BRAZIL	Cristiano Marcelo, Espinola Carvalho, Dom Bosco Catholic University (UCDB), Department of Biotechnology, Campo Grande, 79117-900, Brazil\
			RUSSIA	Tatiana V. Ovchinnikova, M.M. Shemyakin & Yu.A. Ovchinnikov Institute of Bioorganic Chemistry Russian Academy of Sciences (IBChRAS)
			CHINA	Hixen Xie, East China University of Science and Technology (ECUST), Shanghai, 200237 China

New and Renewable Energy and energy efficiency				
15.	BRICS2017- 064 - <b>RICS-MH</b>	Metal hydride materials and systems for the increase of efficiency in renewable and hydrogen energy	INDIA	Muthukumar Palanisamy, Indian Institute of Technology Guwahati
			RUSSIA	Boris Tarasov, Institute of Problems of Chemical Physics RAS
			CHINA	Xiao Fangming, Guangdong Research Institute of Rare Metal
			SOUTH AFRICA	Mykhaylo Lototskyy, University of the Western Cape
16.	BRICS2017-116 <b>ICP-BIO</b>	Development of fundamentals for Integrated Catalytic Processing of BIOMass to fuels and value-added chemicals	INDIA	Bhalchandra M. Bhanage, Department of Chemistry, Institute of Chemical Technology, Mumbai
			BRAZIL	Prof. Simoni Margareti, Plentz Meneghetti, Group of Catalysis and Chemical Reactivity, Institute of Chemistry and Biotechnology, Federal University of Alagoas, Brazil
			RUSSIA	Prof. Dr. Esther M. Sulman Tver State University, Tver, Russia
17.	BRICS2017-418 <b>BRICS-BEST</b>	BRICS technology platform for integrated bioprocessing of agricultural residues for eco-sustainable production of biofuels and by-products	INDIA	Dr. Sudesh K Yadav Center of innovative and Applied Bioprocessing (CIAB), Mohali
			BRAZIL	Department of Bioprocess Engineering and Biotechnology (DEBB) of Federal University of Paraná (UFPR), Curitiba, Paraná, (Brazil)
			RUSSIA	AN Bach Institute of Biochemistry (INBI RAS) MSU- MV Lomonosov Moscow State University, Faculty of Chemistry, Department of chemical enzymology
			CHINA	College of Chemical Engineering and Material Sciences, College of Biotechnology, Tianjin University of Science & Technology, TEDA, Tianjin
			SOUTH AFRICA	Dept of Biotechnology and Food Technology, Durban University of Technology
18.	BRICS2017-422 <b>REMULFUN</b>	Renewable Energy Based Multifunctional Solid Sorption Thermal Battery for Year-Round Building Thermal Management for Diverse Climatic Conditions of Russia, India and China	INDIA	Prof. Pradip Dutta Heat Transfer Laboratory Department of Mechanical Engineering, Indian Institute of Science, Bangalore-560012
			RUSSIA	Prof. Yuri ARISTOV (PI) Borekov Institute of Catalysis Siberian Branch of the Russian Academy of Sciences Lavrentieva Av., 5 Novosibirsk 630090 Russia
			CHINA	Prof. Li Tingxian (PI) Institute of Refrigeration and Cryogenics Shanghai Jiao Tong University (SJTU) 800 Dongchuan Road, Shanghai 200240, China
19.	BRICS2017-591 <b>LargEWiN</b>	Design and Development of Large-Scale Ambient Energy Harvesting Wireless Networks	INDIA	Prabhat Kumar Upadhyay Indian Institute of Technology Indore
			BRAZIL	Daniel Benevides da Costa Federal University of Ceará (UFC), Brazil Department of Computer Engineering Costa

			CHINA	Haiyang Ding National University of Defense Technology, School of Information Communications Associate
			SOUTH AFRICA	Jules Moualeu University of the Witwatersrand School of Electrical & Information Engineering
<b>Water Resources and Pollution Treatment</b>				
20.	BRICS2017-144 <b>IWMM- BIS</b>	Integrated Water Management Model for BIS Countries Under Climate Change Scenarios	INDIA	Venkata Reddy Keesara, Department of Civil Engineering, National Institute of Technology Warangal, Telangana
			BRAZIL	Suzana Maria Gico Lima Montenegro, Professor Universidade Federal de Pernambuco
			SOUTH AFRICA	Bloodless Dzwauro, Durban University of Technology, Pietermaritzburg, Campus,
21.	BRICS2017-256 <b>GLOSENS</b>	Global and local water quality monitoring by multimodal sensor systems	INDIA	Nabarun Bhattacharyya, Centre For Development of Advanced Computing (C-DAC), Kolkata
			BRAZIL	Prof. Osvaldo Novais de Oliveira Jr, Physics and Material Science, University of Sao Paulo, Brazil
			RUSSIA	Dr. Andrey Legin, Head of Laboratory of Artificial sensory systems, ITMO University Kronverkskiy pr, 49, St. Petersburg, 197101 Russia
			CHINA	Prof. Chunsheng Wu, Professor Institute of Medical Engineering (IME), Xi'an Jiaotong University School of Medicine, No. 76, Yanta West Road, Xi'an, China
			SOUTH AFRICA	Gordon Craig, O'Brien Programme Leader, Aquatic Ecosystem Research Programme, School of life Sciences, University of KwaZulu-Natal, Private Bag X01, Scottsville, 3209, South Africa
22.	BRICS2017-493 <b>Envirorganic</b>	Environmental geochemistry and treatment of organic pollutants in aquatic systems in the selected areas of China, India, and Russia	INDIA	Supriya Pal, Department of Civil Engineering, National Institute of Technology (NIT) Durgapur, West Bengal
			RUSSIA	Dr. Prof. AleksandrYudakov Far Eastern Federal University FEFU Campus, 10 Ajax Bay, Russky Island, Vladivostok Russia
			CHINA	Dr.Linan Zhu, Harbin Engineering University, Harbin, HLJ, P.R.China.
23.	BRICS2017-517 <b>From waste to resources</b>	Development of membrane-based methods to improve the recovery of pure water and valuable products from the waste	INDIA	Sourja Ghosh, CSIR-Central Glass and Ceramic Research Institute, Kolkata, West Bengal(700032)
			BRAZIL	Andréa Moura Bernardes UFRGS – Federal University of Rio Grande do Sul
			RUSSIA	Alexey Volkov, A.V.Topchiev Institute of Petrochemical Synthesis, RAS Membrane Center of TIPS RAS
			CHINA	Tao He, Membrane Materials and Separation Technology; Shanghai Advanced Research Institute, CAS
			SOUTH AFRICA	Lueta-Ann de Kock, University of South Africa, Nanotechnology and Water Sustainability Research Unit (NanoWS)

<b>Information technologies and high performance computing</b>				
24.	<b>BRICS2017-059 SEAMLESSIPS</b>	Development and realization of high accuracy Indoor and Outdoor Seamless positioning system: Hardware and software	INDIA	Dr. R.D. Garg Indian Institute of Technology Roorkee
			RUSSIA	Dr. Vladimir Badenko, Professor, Water management and hydraulic engineering, Peter the Great St. Petersburg State Polytechnic University Russia
			CHINA	Dr. Lei Zhang, Professor East China Normal University, Information Science and Technology 500 Dongchuan Road, Minhang District, Shanghai
25.	<b>BRICS2017-211 2DNEURO</b>	Electronic synapses based on two dimensional materials for neuromorphic computing	INDIA	Santanu Mahapatra, Electronic Engineering Department, Indian Institute of Science Bangalore
			BRAZIL	Gilson Wirth, Professor, Universidade Federal do Rio Grande do Sul
			RUSSIA	Vladimir Gritsenko, Professor, Chief researcher Rzhanov Institute of Semiconductor Physics, Siberian Branch of Russian Academy of Sciences
			CHINA	Mario Lanza, Professor Institute of Functional Nano & Soft Materials Soochow University
<b>Prevention and monitoring of natural disasters</b>				
26.	<b>BRICS2017-022 RDRNCD</b>	Radical decrease in risk of natural catastrophic disasters	INDIA	Pijush Samui, National Institute of Technology Patna,
			RUSSIA	Makarov Vladimir V., Far Eastern Federal University, School of Engineering, Mining
			CHINA	Meifeng CAI, Department of Civil Engineering, University of Science and Technology Beijing
27.	<b>BRICS2017-431 LiESTER</b>	Investigating the links between different environmental conditions and severe thunderstorms characteristics and structure for Different Earth Region.	INDIA	Sunil D Pawar, Thunderstorm Dynamics Indian Institute of Tropical Meteorology Pune
			RUSSIA	Dr Andrei Sinkevich, Sr Scientist MAIN GEOPHYSICAL OBSERVATORY, ST. PETERSBURG
			CHINA	Dr Jing Yang, Associate Professor Institute of Atmospheric physics, Chinese Academy of sciences