

# **Decision Document on Science and Technology Cooperation Projects (2022-2024) between the Republic of Serbia and the Republic of India**

In compliance with the Agreement in the fields of Science and Technology between the Government of the Republic of Serbia and the Government of Republic of India, signed at Belgrade, on 28<sup>th</sup> October 2004; and the Programme of Cooperation (POC) on science and technology between the Ministry of Education, Science and Technological Development of the Republic of Serbia (hereinafter referred to as "MESTD") and the Department of Science and Technology of the Ministry of Science and Technology of the Republic of India (hereinafter referred to as "DST") signed in Belgrade on October 3<sup>rd</sup>, 2017 on 2<sup>nd</sup> Session of the Serbia - India Scientific and Technological Cooperation Committee,

the Ministry of Education, Science and Technological Development of the Republic of Serbia (hereinafter referred to as "MESTD") and the Department of Science and Technology of the Ministry of Science and Technology of the Republic of India (hereinafter referred to as "DST") (hereinafter referred to as "Parties") confirm the following:

## **I. Selection and approval of the cooperation projects for years 2022-2024**

- 1) DST and MESTD announced the call for joint mobility project proposals for 2021-2023 on 24<sup>th</sup> February, 2020, planned to keep it open until 31<sup>th</sup> May 2020 and yet because of the COVID-19 pandemic had to prolongate it to 31<sup>th</sup> July 2020.
- 2) During the call, 149 joint project proposals on the Serbian and the Indian side were submitted.
- 3) 146 project proposals were matched and thus accepted for expert evaluation carried out by two sides.
- 4) 18 project proposals were finally recommended for funding by both Parties. The list of recommended project proposals is included in the Annex I (DST and MESTD Mobility Projects (2022-2024)). Due to the pandemic the results of the call were approved by circulation.
- 5) The total support for each project will be in accordance with the POC:

The sending Party will cover the costs of international travel via economic class, VISA fee and travel medical insurance.

The receiving Party will cover the costs of maintenance and accommodation up to the limits stipulated in the calls for applications

(The Indian Scientists visiting Serbia shall be provided amount 80 € - per day in case of short visit up to 10 days and 800 € per month in case of longer visit. The amount of 800 EUR will be applied also for the visits longer than 10 days, up to one month. These amounts will cover the expenses related to accommodation, local transport and out of pocket expenses.

The Serbian Scientists visiting India shall be paid per diem amount INR 2500 per day in case of short visit (up to 21 days), and INR 60,000/- per month in case of long visits (more than 21 days). These amounts will cover expenses related to local transport and out-of-pocket allowance. Free furnished accommodation in Guest House/Hotel with reasonable amenities).

- 6) The implementation guidelines for the approved projects are stipulated in the internal regulations of the partner organizations.
- 7) The implementation of bilateral mobility projects shall be completed before the 31<sup>st</sup> December 2024. In case of force majeure, such as long duration of the pandemic and its consequences affecting the proper completion of the projects, the exact deadline for implementation will be specified later - once the sanitary situation in both countries allow for that.

Each Party shall notify the other Party of any changes to this document in writing sent by letter or email.

This document is signed in two originals in English.

**On behalf of the Serbian Ministry of Education,  
Science and Technological Development**      **On behalf of the Ministry of Science and  
Technology of the Republic of India**

Aleksandar JOVIC  
Assistant minister of the  
Department of International Cooperation

Date: January, 2022.

Sanjeev Kumar Varshney  
Head & Advisor  
International Cooperation Division  
Department of Science and Technology

Date: January 2022

**Annex I**

**MESTD and DST Mobility Projects (2022-2024)**

<b>Project Number</b>	<b>Project Heading</b>	<b>Serbian Institution</b>	<b>Serbian PI</b>	<b>Indian Institution</b>	<b>Indian PI</b>
1	Study of the local structure of Zirconium based Laves phases for batteries applications	Institute of Nuclear Sciences "Vinča"	Dr Ana Umicevic	VARIABLE ENERGY CYCLOTRON CENTRE	Dr Debasish Banerjee
2	Multiferroic Perovskite-Based Nanostructures for EMI Shielding and Photovoltaic Applications	Institute of Physics Belgrade	Dr Dejan M Djokic	SCHOOL OF PURE AND APPLIED PHYSICS P D Hills P O, Kottayam Kottayam Kerala (686560)	Dr. Nandakumar Kalarikkal
3	Scalable Convolution Neural Network CNN fused with hand crafted descriptors for detection of COVID-19 infection based on Lung Congestion using X-Ray images	University of Novi Sad, Faculty of Technical Sciences	Dr Dubravko Culibrk	INDIAN INSTITUTE OF INFORMATION TECHNOLOGY LUCKNOW Chak Gajaria Maste Mau Lucknow, Lucknow , Uttar Pradesh , 22600	Dr. Soumendu Chakraborty
4	Development of Secure and Spectral Efficient Simultaneous Wireless Information and Power Transfer Systems for Large-Scale Wireless Networks	University of Niš, Faculty of Electronic Engineering (FEE)	Dr Dragana Krstic	National Institute of Technology, Silchar, Cachar, Assam, India Silchar Assam (78 8010)	Dr. Devendra Singh Gurjar
5	Design of metamaterials for biosensing and ICT applications	University of Belgrade School of Electrical Engineering	Dr Jelena Radovanovic	ATAL BIHARI VAJPAYEE INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT GWALIOR ABV-IIITM Gwalior, Moorena Link Road,	Dr. PINKU RANJAN

6	Targeting two diseases with one stone Inhibition of enzyme modulators of androgen receptor function in prostate cancer and COVID-19	University of Novi Sad Department of Biology and Ecology Faculty of Sciences	Dr. Edward T Petri	Gwalior Madhya Pradesh (474015) Jamia Millia Islamia Central University, Jamia Nagar New Delhi (110025)
7	Machine-learning based PV power forecast and grid support solutions for PV integration in diverse climatic zones across Serbia and India	Institute of Technical Sciences of SASA	Dr. Ilija Batas Bjelic	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE, UTTARAKHAND Department of Hydro and Renewable Energy (Formerly, AHEC), Uttarakhand-247667
8	Session Types Applications, Foundations and Flow Security STAFFS	Mathematical Institute, Serbian Academy of Science & Art,	Prof.Dr Silvia Ghilezan	INDIAN INSTITUTE OF TECHNOLOGY Delhi, Hauz Khas, New Delhi (110016)
9	Long cycle life all-solid-state lithium metal batteries encompassing polymer ceramic composite electrolytes	Institute of Technical Sciences of SASA	Dr. Dragana Jugovic	CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE CSIR- CECRI Karaikudi Tamil nadu (630006)
10	Computation driven design of entropy stabilized fluorite structured ceramics and nanocrystalline coatings	Vinca Institute of Nuclear Science, Center for the synthesis, processing and characterization of materials for use in extreme conditions	Dr Branko Matovic	INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI 600036 Chennai Tamil nadu (600036)
11	Development of Zero Backlash Power Transmission Mechanism for Anthropomorphic Robots	University of Novi Sad, Faculty of Technical Sciences	Dr Milan Rackov	NATIONAL INSTITUTE OF TECHNOLOGY JAMSHEDPUR Dept. of Mechanical Engineering NIT Jamshedpur Jharkhand (831014)
				1. Dr. Vineet Sahoo

12	Development of self-healing composite material	Vinca Institute of Nuclear Science	Dr. Milena Marinovic Cincovic	NATIONAL INSTITUTE OF TECHNOLOGY JAMSHEDPUR NIT Jamshedpur Jharkhand (831014)	Dr. Deepak Kumar
13	Development of real-time traffic control algorithms for unconventional intersection designs using artificial intelligence methods	University of Kragujevac	Dr Aleksandar Jovanovic	Symbiosis Institute of Technology Symbiosis International University, Near Lupin Research Park, Gram: Lavale, Tal: Mulshi, Pune 412 115 Lavale Maharashtra (412115)	Dr. Ketan Kotecha
14	Development of State of Health Monitoring Device for Battery Management Systems in Electric Vehicles	University of Belgrade, Faculty of Physical Chemistry	Dr Milica Vujkovic	INDIAN INSTITUTE OF TECHNOLOGY Delhi, Hauz Khas, New Delhi (110016)	Dr. Akhil Garg
15	Recycling of valuable metals from discarded printed circuit boards	Mining and Metallurgy Institute Bor	Dr Silvana Dimitrijevic	INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE Department of Metallurgical Materials Engineering, Roorkee Uttarakhand (247667)	Dr. Nikhil Dhawan
16	Fault detection and localization in a hybrid AC/DC microgrid	University of Belgrade School of Electrical Engineering	Prof. Dr Darko Sosic	INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE Roorkee Uttarakhand (247667)	Dr. Bhajja Bhaveshkumar
17	Adaptive methods for channel and RF front-end equalization in NOMA systems	University of Kragujevac, Faculty of Technical Sciences Cacak	Prof. dr Vladimir Mladenovic	INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DESIGN AND MANUFACTURING KANCHEEPURAM, CHENNAI, Melakottaiyur Village, Off Vandalur-	Dr. Asutosh Kar

		Kelambakkam Road, Nellikuppam, Chennai,, Tamil Nadu Melakottaiyur Tamilnadu (600127)
	VELLORE INSTITUTE OF TECHNOLOGY (VIT) CHENNAI Vandalur - Kelambakkam Road Chennai Tamilna du (600127)	Dr. C Vaithilingam
18	Design and Development of Replicable and Scalable Cyber Physical Micro Grid System  University of Belgrade School of Electrical Engineering  Dr. Zoran Stojanovic	