

## Department of Science & Technology



विज्ञान एवं प्रौद्योगिकी विभाग  
DEPARTMENT OF  
**SCIENCE & TECHNOLOGY**



### **Announcement of Results of India Sri Lanka R&D and Workshop Calls-2024**

The Department of Science and Technology (DST), Government of India and the Ministry of Science and Technology (Then Ministry of Education), Government of the Democratic Socialist Republic of Sri Lanka has launched two joint calls for ‘**R&D**’ and ‘**Workshop**’ proposals in the areas of **Food Technology, Plant base medicines, Robotics & Automation, Renewable Energy, Waste Management, Information and Communication Technology, Sustainable Agriculture, Aerospace Engineering, Big data analysis, Artificial intelligence and any other area of S&T with national relevance (with Justifications)**; in June 2024 and September 2024, respectively.

In total, 438 R&D proposals and 234 Workshop proposals were received to Indian side while 442 R&D proposals and 208 workshop proposals were received to Sri Lankan side under the joint calls. Based on scientific merit, complementarities of the project objectives, scientific strengths of the project coordinators, national priorities and availability of budget, the Department of Science and Technology (DST), Government of India and the Ministry of Science and Technology (Then Ministry of Education), Government of the Democratic Socialist Republic of Sri Lanka have jointly decided to support 16 R&D proposals and 22 workshop proposals, respectively; under the joint R&D and Workshop Calls-2024.

The list of recommended R&D and workshop proposals may be seen at **Annexure-I and II**, respectively. Project/workshop coordinators are being informed separately to complete administrative formalities for release of grant:

**List of recommended R&D proposals under India-Sri Lanka Joint R&D Call-2024:**

<b>S.No.</b>	<b>Title of project proposal</b>	<b>Indian PI and Institute</b>	<b>Sri Lankan PI and Institute</b>
1.	Dietary LC-PUFA and Micronutrients in Brood-stock Feed for Enhancing Reproductive Efficiency and Quality Seed Production in Indian Major Carps IMC	<b>Dr. Shiba Shankar Giri,</b> Division of Fish Nutrition and Physiology, ICAR Central Institute of Freshwater Aquaculture, Bhubaneswar, Orissa	<b>Dr. Sanchala Gallage,</b> Department of Aquaculture and Fisheries, Wayamba University Sri Lanka
2.	Understanding the role of Chromatin Remodeling Complex NuRD in Microsatellite instability and its clinical relevance in Colorectal and Endometrial Carcinomas	<b>Dr. Rayala Suresh Kumar,</b> Department of Biotechnology, IIT Madras, Chennai, Tamil Nadu,	<b>Dr. Thilini Wathsala Wijesiri,</b> Faculty of Medicine, University of Ruhuna, Sri Lanka
3.	Delineation of subsurface structure and thermal characteristics of Wahawa Geothermal Field, Sri Lanka for geothermal energy exploration using integrated geophysical methods	<b>Dr. Sandeep Kumar Gupta,</b> Department of Seismological Imaging, National Geophysical Research Institute, Hyderabad, Telangana,	<b>Prof. N G S S Gamage,</b> Department of Physics, University of Sri Jayewardenepura, Sri Lanka
4.	High performance and high durable polymer electrolyte membrane fuel cell stack utilizing Pt loaded on a bio-based polymer wrapped Sri Lankan vein graphite as the electrocatalyst	<b>Dr. Raman Vedarajan,</b> Department of Centre for Fuel Cell Technology, International Advanced Research Center for Powder Metallurgy and New Materials, Hyderabad, Telangana	<b>Dr. Don Terrence Dhammika Weerathunga,</b> Department of Polymer Science, University of Sri Jayewardenepura, Sri Lanka,
5.	Landslide Monitoring and Mapping Using a Multimodal Approach with Geospatial, Geophysical, and Machine Learning Techniques	<b>Dr. Surendar M,</b> Disaster Management, Vellore Institute of Technology, Vellore, Tamil Nadu,	<b>Dr. Gamage Sanka Nirodha Perera,</b> Faculty of Geomatics, Sabaragamuwa University Belihuloya, Sri Lanka,
6.	Identification of salinity tolerance gene variants in	<b>Dr. Gayatri Venkataraman,</b> M S Swaminathan Research	<b>Prof. Ovitigala Vthanage Sisira Jagathpriya</b>

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	locally adapted rice <i>Oryza sativa</i> L. genotypes from India and Sri Lanka conferring the best salinity tolerant traits sodium exclusion and tissue tolerance and development of molecular markers by genome and exome profiling	Foundation, Chennai, Tamil Nadu,	<b>Weerasena,</b> Institute of Biochemistry, Molecular Biology and Biotechnology. University of Colombo, Colombo, Sri Lanka,
7.	Investigative the osteoprotective role of Sri-Lankan Traditional Polyherbal preparations in ameliorating Osteoporosis	<b>Dr. Rupesh K Srivastava,</b> Department of Biotechnology, AIIMS, New Delhi,	<b>Dr. Aluthge Dona Dulshara Sachini Amarasekara,</b> Center for Immunology & Molecular Biology, Department of Zoology & Environment Sciences, Faculty of Science University of Colombo, Colombo, Sri Lanka
8.	Artificial-Intelligence-enabled radiotherapy planning with reduced radiation for cancer patients in the Indian Subcontinent	<b>Dr. Neelavalli Jaladhar,</b> IIT Hyderabad, Hyderabad, Telangana,	<b>Dr. Muditha Bandara,</b> Faculty of Science, University of Colombo, Colombo, Sri Lanka,
9.	Distribution, Fractionation and Remediation of Toxic and Rare earth Metals in Soils from E-Waste and Coal Processing Sites	<b>Dr. Rangabhashiyam Selvasembian,</b> Department of Environmental Science and Engineering & Sciences, SRM University, Amaravathi, Andhra Pradesh,	<b>Dr. Anushka Upamali Rajapaksha,</b> Ecosphere Resilience Research Center, Faculty of Applied Sciences, University of Sri Jayewardenepura, Nugegoda, Sri Lanka
10.	Interactive Robotic Wheelchair with collaborative robotic arm for Proactive Interaction through Spatial Awareness in Navigation and Object Handling for Enhanced Service	<b>Dr. Rajesh Kannan Megalingam,</b> Department of Electronics and Communication Engineering, Amrita School of Engineering, Amrita University, Kollam, Kerala,	<b>Dr. A G Buddhika P Jayasekara,</b> Department of Electrical Engineering, University of Moratuwa Moratuwa, Sri Lanka,
11.	Explorative, Economic, and Efficient Perovskite Based Energy Harvesting Devices.	<b>Prof. Murali Banavoth,</b> Department of Chemistry, University of Hyderabad, Hyderabad, Telangana,	<b>Dr. Amalraj Peter Amalathas,</b> Department of Physics, University of Jaffna, Jaffna, Sri Lanka

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12.	Waste to wealth approach by production of poly-hydroxy-alkanoate PHA from the treatment of lipid waste and exploring its use in various applications	<b>Dr. Amit Bafana,</b> CSIR-National Environmental Engineering Research Institute (NEERI), Nagpur, Maharashtra,	<b>Dr. A M L N Gunathilake,</b> Department of Civil Engineering, The Open University of Sri Lanka, Nugegoda, Sri Lanka,
13.	Deciphering pathogenesis of blister blight phytopathogen Exo-basidium vexans of tea using genome and transcriptome-based analysis and its sustainable management using microbial antagonists.	<b>Prof. Praveen Kumar Verma,</b> School of Life Sciences, Jawaharlal Nehru University, New Delhi	<b>Dr. Ganga Devi Sinniah,</b> Plant Pathology Division, Tea Research Institute of Sri Lanka, Talawakelle, Sri Lanka,
14.	Design and Development of Block-Chain Enabled Secure and Bio-safe NFMI-based Wireless Body Area Network SB-NFMI-WBAN	<b>Dr. Vinay Kumar,</b> Department of Electronics and Communication Engineering, MNIT Allahabad, Prayagraj, Uttar Pradesh	<b>Prof. Dush Nalin Jayakody,</b> Department of Electrical and Electronics Engineering, Sri Lanka Institute of Information Technology, Malabe, Sri Lanka
15.	A Geo-AI Approach to Optimize Sugarcane Yield Estimation Integrating Surveillance, Forecasting, and Policy Reform in India and Sri Lanka	<b>Dr. Shray Pathak,</b> Department of Civil Engineering, IIT Ropar, Ropar, Punjab,	<b>Dr. W B M A C Bandara,</b> Department of Agricultural Engineering and Environmental Technology, University of Ruhuna, Mapalan, Sri Lanka
16.	Development of Printable Carbon Ink Using Sri Lankan Graphite for Printed Photovoltaics	<b>Prof. S Sundar Kumar Iyer,</b> Department of Electrical Engineering, IIT Kanpur, Kanpur, Uttar Pradesh,	<b>Dr. Hasitha Weerasinghe,</b> Department of Physics and Electronics, University of Kelaniya, Kelaniya, Sri Lanka

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### Annexure-II

#### List of recommended workshop proposals under India-Sri Lanka Joint Workshop Call-2024:

S.No.	Title of workshop proposal	Indian PI and Institute	Sri Lankan PI and Institute
1.	Next generation bioformulations and manipulation of plant microbiome for empowering plant health and disease resistance	<b>Dr. Abhrajyoti Ghosh,</b> Department of Biological Sciences, Bose Institute, Kolkata, West Bengal	<b>Prof. Devika M De Costa,</b> Department of Agriculture University of Peradeniya, Getambe, Sri Lanka,
2.	IoT Cloud and AI Solutions for Sustainable Agriculture Practices	<b>Dr. R Senthil Kumar,</b> Department of Computer Science with Cognitive Systems, Dr. NGP Arts and Science College, Coimbatore, Tamil Nadu	<b>Dr. Udesh Oruthota,</b> Faculty of Computing and IT, Sri Lanka Technology Campus, Padukka, Sri Lanka,
3.	CKDu in India and Sri Lanka Prevalence and risk factors	<b>Prof. Anasuya Ganguly,</b> Department of Biological Sciences, BITS Pilani, KK Birla Goa Campus, Zuarinagar, Goa,	<b>Prof. Rohana Chandrajith,</b> Department of Geology, Faculty of Science, University of Peradeniya, Sri Lanka,
4.	Low cost housing for developing countries using 3D concrete printing technology	<b>Dr. Manish Kumar,</b> Department of Civil Engineering, Indian Institute of Technology Gandhinagar, Gandhi Nagar, Gujarat	<b>Dr. B Janarthanan,</b> Department of Engineering, University of Jaffna, Jaffna, Sri Lanka,
5.	Ensemble Based Early Warning Systems for Flood Disaster Management	<b>Dr. Sanjaykumar M Yadav,</b> Professor, Department of Civil Engineering, Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat,	<b>Dr. Panduka Neluwala,</b> Senior Lecturer, Department of Engineering, University of Peradeniya, Peradeniya, Sri Lanka,

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6.	Advanced thermal and nonthermal sustainable technologies for food industry waste reduction and waste valorization	<b>Prof. Winny Routray,</b> Department of Food Process Engineering, National Institute of Technology, Rourkela, Rourkela, Orissa,	<b>Dr. M A Dulani Somendrika,</b> Faculty of Applied Sciences, Department of Food Science and Technology, University of Sri Jayewardenepura, Nugegoda, Sri Lanka,
7.	Innovative Technologies for shaping the future of Food Processing Industries	<b>Dr. S Thangalakshmi,</b> Department of Food Engineering, National Institute of Food Technology Entrepreneurship and Management, Kundli, Sonipat, Haryana	<b>Prof. Lasanthi Jayathunge,</b> Department of Biosystems Technology, University of Sri Jayewardenepura Pitipana, Sri Lanka,
8.	5 Day Indo-Sri Lankan bilateral workshop on Applications of Geospatial Technologies for Urban Environmental Sustainability	<b>Dr. Akshar Tripathi,</b> Department of Civil Environmental Engineering, Institute Indian Institute of Technology Patna, Bihar	<b>Prof. Lasantha Manawadu,</b> Department of Geography, University of Colombo, Colombo, Sri Lanka,
9.	Novel and Emerging Technologies in Food Processing and Safety Key Requirements for Developing Industry Relevant Technologies and Export Promotion	<b>Dr. Anupam Roy,</b> Department of Chemical Engineering, Birla Institute of Technology Mesra, Ranchi, Jharkhand,	<b>Dr. Ilmi GN Hewajulige,</b> Industrial Technology Institute (ITI) Colombo, Sri Lanka
10.	Bridging Science and Artificial Intelligence Innovative Approaches to Materials Modeling	<b>Dr. Himanshu Pandey,</b> Department of Physics, Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat,	<b>Dr. E M D Siriwardane,</b> Department of Physics, University of Colombo, Colombo, Sri Lanka,
11.	Artificial Intelligence in Dentistry Exploring Current Insights and Future Trends	<b>Dr. Narendra Padiyar,</b> Department of Prosthodontics and Crown & Bridge, Mahatma Gandhi University of Medical Sciences and Technology, Jaipur, Rajasthan,	<b>Dr. Rasika Manori Jayasinghe,</b> Department of Prosthetic Dentistry, Faculty of Dental Sciences, University of Peradeniya, Peradeniya, Sri Lanka,

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12.	International Workshop on Artificial Intelligence in Offshore Energy Sector for Climate Mitigation	<b>Dr. J Preetha Roselyn,</b> Department of Electrical and Electronics, SRM institute of Science and Technology, Kattankulathur, Tamil Nadu,	<b>Dr. Logeeshan Velmanickam,</b> Department of Electrical Engineering, University of Moratuwa, Moratuwa, Sri Lanka,
13.	Indo-Sri Lanka Collaborating Workshop for Advancement and Modernization in Coconut Value Chain A Cutting-Edge Technology Transformation	<b>Dr. Thirukkumar S,</b> Department of Food Science and Nutrition, Amrita School of Agricultural Sciences, Amrita Vishwa Vidyapeetham, Coimbatore, Tamil Nadu,	<b>Dr. Vijith S Jayamanne,</b> Department of Food Science and Technology, Faculty of Agriculture, University of Ruhuna, Matara, Sri Lanka,
14.	Solid Waste Application for sustainable Construction involving High end Techno-managerial Approaches SWACHTA	<b>Dr. Lalit Borana,</b> Department of Civil Engineering, Indian Institute of Technology Indore, Indore Madhya Pradesh,	<b>Dr. T Jeyakaran,</b> Department of Civil Engineering, Faculty of Engineering South Eastern University of Sri Lanka, Olivil, Sri Lanka,
15.	Biomaterials for Tissue Engineering and Advanced Drug Delivery from Research to Clinical Applications	<b>Dr. Pooja Bhati,</b> Department of Mechanical and Automation, Indira Gandhi Delhi Technical University for Women, Kashmere Gate, New Delhi,	<b>Dr. T MSU Gunathilake,</b> Department of Polymer Science, Faculty of Applied Sciences, University of Sri Jayewardenepura, Sri Lanka,
16.	Smart technologies for futureproofing water/ wastewater plants	<b>Dr. Abhijith G R,</b> Department of Civil Engineering, IIT Kanpur, Kanpur, Uttar Pradesh,	<b>Dr. K G N Nanayakkara,</b> Department of Civil Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka,
17.	Circular agri-food systems for sustainable development strengthening agri-food supply chains for food security and environmental sustainability	<b>Dr. Rajyalakshmi G,</b> Department of Manufacturing, Vellore Institute of Technology, Chennai, Tamil Nadu,	<b>Dr. U S S Dharmapriya,</b> Department of Manufacturing & Industrial Engineering, Faculty of Engineering, University of Peradeniya, Peradeniya, Sri Lanka,

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18.	Quality Assessment of Herbal Drugs and Raw Materials	<b>Prof. Inder Pal Singh,</b> Department of Natural Products, NIPER Mohali, Sahibzada, Ajit Singh Nagar, Punjab,	<b>Dr. Vaira Asela Agampodi,</b> Technical Services Division, Industrial Technology Institute (ITI) Mawatha, Colombo, Sri Lanka,
19.	AI and IoT Based Techniques for Monitoring and Forecasting Water Related Disaster	<b>Prof. Amitansu Pattanaik,</b> Sharda School of Basic Sciences and Research, Sharda University Agra, Agra, Uttar Pradesh,	<b>Dr. Chamal Perera,</b> Department of Civil Engineering, University of Moratuwa, Moratuwa, Sri Lanka,
20.	5days Workshop on Digital Twins and AI Bridging the Future of Intelligent Systems	<b>Dr. K R Premlatha,</b> Department of Information Technology, Thiagarajar College of Engineering, Madurai, Tamil Nadu,	<b>Dr. Sampath Deegalla,</b> Department of Computer Engineering, University of Peradeniya, Mahakanda, Sri Lanka,
21.	International Workshop on Energy Digital Twin for Demand Side Management with Renewable Energy Integration	<b>Dr. Chitra,</b> Department of Electrical and Electronics Engineering, Aarupadai Veedu Institute of Technology, Chennai, Tamil Nadu,	<b>Dr. A G Manjula Siriwardhana,</b> Department of Electrical Engg, National Engineering Research Development Centre of Sri Lanka (NERDC), Jaala, Sri Lanka,
22.	Statistical Modelling of Big Climatic and Geospatial Data for Disaster Risk Reduction (STARR)	<b>Dr. Priyank J Sharma,</b> Department of Civil Engineering, Indian Institute of Technology Indore, Indore, Madhya Pradesh,	<b>Prof. R L H L Rajapakse,</b> Department of Civil Engineering, University of Moratuwa, Moratuwa, Sri Lanka,

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