

**AHEAD Results Area 3 Round 2 awarded projects and equipment to be purchased by different grants**

University Name	Faculty	Name of the Grant	Name of the project	Project Coordinator	Equipment Budgeted over 1 million
Colombo	Faculty of Science	DOR- STEM ROUND 2	Development of a Raman spectroscopy facility for biofluid based disease diagnostics: with an application for early stage detection of CKDu	Dr. Siyath Gunewardene	Inverted type microscope, Research grade optical table, LASER for sample illumination, CCD detector for spectrometer, MP spectrometer, Hb1C analyzer
	Faculty of Medicine	DOR- STEM ROUND 2	Analysis of cell membrane protein profiles of plasma cells in patients with multiple myeloma and effects of decoctions used in indigenous medicine to treat cancers on multiple myeloma cells.	Dr. Lallindra Gunarathne	Multiparametric flowcytometer, quantitaive RT-PCR
	Faculty of Science	DOR- STEM ROUND 2	High-tech transgenic approaches to control dengue by genetic engineering mosquito vector Aedes aegypti	Prof. Ranil Dassanayake	Needle Puller, Fluorescent microscope and Fluorescence camera, Real Time PCR machine, Dissecting Microscope
Peradeniya	Faculty of Science	RIC STEM ROUND 2	Development of wound dressing materials using biopolymers and natural products	Dr. Samodha Gunathilake	Benchtop NMR
	Faculty of Agriculture	DOR-STEM ROUND 2	Spatial distribution of mineral elements and metalloids in rice fields, and its relation with the productivity and quality of rice grains in Sri Lanka	Dr. Lalith Suriyagoda	Microwave digester, Ultrapure water system -ASTM Type I water
	Faculty of Science	DOR-STEM ROUND 2	Utilization of natural red earths in the northwest coastal belt, Sri Lanka as an economic deposit	Dr. Nadeesha Koralegedara	Supply, instal and training of particle size analyzer with required accessories (drying oven, muffle furnace, sonicator-10L, centrifuge, sieve set & shaker, analytical balance), Drone, polarizing microscope with an in-built digital camera
	Faculty of Agriculture	DOR-STEM ROUND 2	An Assessment of Economic and Environmental Feasibility of Alternative Agricultural Technologies to Restore Degraded Village Tank Cascade Systems of Dry Zone of Sri Lanka: A Case Study of Thirappane	Prof. Jeevika Weerawewa	qRT-PCR machine, Water quality testing instrument, PCR machine, Bio Char Making machine
	Faculty of Engineering	DOR-STEM ROUND 2	Use of artificial inclusions to improve the performance of rail track for faster and heavier trains	Dr. S.K. Navaratnarajah	Foundation and steel frame for Cyclic Load Testing Frame, Universal testing machine and dynamic jacks
Sri Jayawardenepur a	Faculty of Technology	RIC STEM ROUND 2	Biodiesel Production from Waste Vegetable Oil: Replacing fossil fuel requirements in the transport sector	Dr. Udara Arachchige	Flue gas analyzer
	Faculty of Humanities and Social Sciences	RIC STEM HEMS ROUND 2	Sri Lankan Ethnic Drums Sample Library for Native Instruments Kontakt Player	Prof. Pradeep Ratnayake	Studio console                      Studio Monitor Pair                      Sub-woofer Audio Interface
	Faculty of Medical Sciences	DOR-STEM ROUND 2	Investigating factors leading to severe dengue	Prof. Gathsaurie Neelika Malavige	liquid nitrogen transport vessel

<b>Kelaniya</b>	<b>Faculty of Science</b>	RIC STEM ROUND 2	Commercialization of value added byproducts of virgin coconut oil and desiccated coconut industries and invention of quality assurance methods for virgin coconut oil and refined coconut oil industries	Prof. Kapila Seneviratne	Highspeed centrifuge Biosafety II cabinet Freeze dryer Gel doc Microscope with camera Semi-prep HPLC
	<b>Faculty of Science</b>	RIC STEM ROUND 2	Research, Innovation and Commercialization of Consumer Electronics Products for Futuristic Smart Cities Targeting International Market	Dr. Aruna Ranaweera	Mixed Signal Oscilloscope with test probes and connectors Vector Network Analyzer with Calibration Kit and test probes solar array simulator Supply & delivery of High Precision RF Power Meter Source Measure Unit EDA/CAD/Simulation Tools
	<b>Faculty of Science</b>	DOR- STEM ROUND 2	Smart Village as a Strategy for Socio-economic Development of Rural Communities in Sri Lanka	Dr. Sujeewa De Silva	UV trans illuminator, Solar PV simulator, phase contrast microscope, Atmospheric furnace
	<b>Faculty of Management</b>	DOR STEM ROUND 2	Impact of Social Protection on Poverty Reduction, Food Security and Household Savings in Sri Lanka: An Empirical Analysis	Dr. Roshini Jayaweera	
<b>Moratuwa</b>	<b>Faculty of Engineering</b>	RIC STEM ROUND 2	Development of an Intelligent Camera with Real-Time Video Analytics System	Dr. Ranga Rodrigo	
	<b>Faculty of Engineering</b>	RIC STEM ROUND 2	Multipurpose, energy harvesting and human limb muscles performance evaluating exercise equipment	Dr. Ravindra Wijesiriwardana	Precision Multimeters LCR meter waveform generator oscilloscope pressure sensing system 3D Printer
	<b>Faculty of Engineering</b>	DOR STEM ROUND 2	Design and Development of Micro/Nano Electro Mechanical Systems (MEMS/NEMS) Based Lab-on-a-Chip (LoC) Devices for Future Bio-medical Applications	Dr. Ranjith Amarasinghe	Thin film coater, Digital microscope, LCR meter
	<b>Faculty of Architecture</b>	DOR STEM ROUND 2	Assessing Urban Comfort, Safety and Security of public realm for Sustainable Urbanization in Sri Lanka.	Dr. Janaka Wijesundara	Wind test lab equipment1, Wind/Heat simulation 3D animation license software,
	<b>Faculty of Engineering</b>	DOR STEM ROUND 2	An Analytical Framework for Digital Social Media in Sri Lanka	Dr. Lochandaka Ranathunga	High-End Computers and Lap top, Server system, High End GPU Cards
	<b>Faculty of Engineering</b>	DOR STEM ROUND 2	Data Driven Transport Analytics	Dr. Charith Chitraranjan	server machine, Client workstation, cube software
<b>Jaffna</b>	<b>Faculty of Engineering</b>	RIC STEM ROUND 2	Developing speaker verification and speaker diarization technologies for real world applications	Dr. Ahilan Kanagasundaram	High Performance Computing Node with GPU
	<b>Faculty of Science</b>	DOR STEM ROUND 2	Development of Novel Electrolyte and Electrode Materials for Secondary Sodium-ion and Magnesium-ion Batteries	Dr. Kandasamy Vignarooban	Fourier-Transform Infrared Spectrometer, Differential Scanning Calorimeter, High Temperature Furnace , Glove Box
	<b>Faculty of Graduate Studies</b>	DOR HEMS ROUND 2	Multi-Stakeholder Approach for Water Security in Northern Province, Sri Lanka: Through Participatory Action Research	Dr. Rajendra Surenthirakumaran	
	<b>Faculty of Science</b>	RIC STEM ROUND 2	Purification and Commercialization Of Pyrolytic Carbon Char Generated From Waste Tire Pyrolysis Plants In Sri Lanka	Dr. Samantha Ranaweera	FTIR Magnetic seperator Glass reactor Thermal Gravimetric Analyse Miller for 200 micro meter

<b>Ruhuna</b>	<b>Faculty of Science</b>	DOR STEM ROUND 2	Scientific Investigation of leaves of Psidium guajava (pera), Garcinia gummituta(goraka) and Eryngium foetidum (andu), and leaves and bark of Cinnamomum verum for the preparation of innovative functional foods and combined herbal nutraceuticals to be used in reducing the risk of Non-Communicable Diseases (NCD's) and improvement of insulin impairment.	Prof. Vajira P Bulugahapitiya	Rotary evaporator, Freeze Dryer, Preparative HPLC, Class-2 Safety Cabin,
	<b>Faculty of Science</b>	DOR STEM ROUND 2	A green technological approach to control freshwater algal blooms in Sri Lanka using native bacterial isolates	Dr. Shirani Widana Gamage	meter, spectrophotometer, microplate reader, High Performance Liquid Chromatogram (HPLC), Class II biosafety cabinet, GelDoc apparatus
<b>Eastern</b>	<b>Faculty of Arts and Culture</b>	RIC HEMS ROUND 2	Computerization/ Digitization and Documentarization of Manuscripts Collections in Tamil with the Special Reference to the Eastern Part of the Island	Dr. J. Kennedy	
	<b>Faculty of Science</b>	DOR STEM ROUND 2	Exploration of local nanomaterials for concrete technology.	Dr. M Koneshwaran	FT-IR, TGA, DSC
	<b>Faculty of Science</b>	DOR STEM ROUND 2	Optimizing Thermoelectric Performance of Rare-earth based Strongly Correlated Cage Materials by Electronic Substitution	Dr. Pararajasingam Peratheepan	Mini Arc Melting System, Cryogen-Free Measurement System [CFMS-5T-30-H3]
<b>Rajarata</b>	<b>Faculty of Applied Sciences</b>	RIC STEM ROUND 2	Proteomic and Machine Learning approach to early detection of proteins involved in Chronic Kidney Disease of Unknown Etiology (CKDu)	Dr. Eustace Fernando	Isoelectric focusing system Protein gel documentation densitometer MAC Pro (Radeon Pro Vega II Duo) Computer with 28 cores 3 Pro display XDR screens for the Mac Pro computer
	<b>Faculty of Applied Sciences</b>	RIC STEM ROUND 2	Encapsulation of Omega -3 fish oil from Sri Lankan Fishes and Development of Omega -3 Fortified Foods	Prof. Sanath Hettiarachchi	Gas Chromatograph - Mass Spectrometer Supply and delivery of Microwave Digestion System UV - Vis spectrophotometer
	<b>Faculty of Applied Sciences</b>	DOR STEM ROUND 2	Heavy Metal Contamination of Soil, Water Resources and Food in the North Central Province of Sri Lanka – Development of Cost Effective Remediation Techniques	Dr. Ranjith Edirisinghe	Supply & installation of Inductively coupled plasma mass spectrometry (ICP-MS)- A1, lab woven wire mesh copper complete sieve set, Enzyme linked immunosorbent assay kits
	<b>Faculty of Agriculture</b>	DOR STEM ROUND 2	Combined effects of heat and soil water stress on agronomy and physiology of selected field, horticultural and plantation crops of Sri Lanka	Dr. Nalaka Geekiyanage	low temperature incubator, PMS Pressure Chamber, VAPRO® Vapor Pressure Osmometer , signal controllers with sensors , 25KW electricity generator, heat pumps, split condensers, evaporators, blowers and air ducts
	<b>Faculty of Agriculture</b>	DOR STEM ROUND 2	Development of Commercially Viable Dense Total Mixed Ration (TMR) briquettes for Dairy Cows Using Locally Available Ingredients	Dr. Deepthi Nayananjalie	Fiber extraction unit, Kjeldhal unit ,bomb calorimeter, Freeze drier, Micro-plate reader, Gel documentation unit, PCR machine
	<b>Faculty of Livestock, Fisheries and Nutrition</b>	DOR STEM ROUND 2	Development of economically feasible protocols to utilize fish waste by extracting bio-active compounds to develop commercial products	Dr. Dileepa de Croos	refrigerated centrifuge, freeze dryer , Rotary evaporator, UV-Vis spectrophotometer, Soxhlet apparatus with 6 units and heating mantle,
<b>Wayamba</b>	<b>Faculty of Livestock, Fisheries and Nutrition</b>	DOR STEM ROUND 2	Animal feed phosphate from Eppawala Rock Phosphate: Nutritive evaluation of rock phosphates for poultry layer and effects on birds' performance and product quality	Dr. Jayarukshi Jayasekara	chiller , Freezer , CO2 Incubator , PCR and PCR work station, Egg shell thickness gauge, Feed distillation unit, Analytical balances , Ion selective electrode, environmental controlled poultry house, High Performance Liquid Chromatography machine

	Faculty of Applied Sciences	DOR HEMS ROUND 2	An exploration of behaviour of households and firms in achieving sustainable development goals: Studies on the Sri Lankan context	Dr. Asanka Pallegedara	
Uva Wellassa	Faculty of Science and Technology	DOR STEM ROUND 2	Coastal geomorphology, Quaternary geology, and value addition to coastal mineral resources of Sri Lanka	Dr. Amila Sandaruwan	CHNS elemental analyzer, ground penetrating radar (GPR)
	Faculty of Management	DOR HEMS ROUND 2	Social Entrepreneurship as A Strategic Response To Sustainable Outcomes	Dr. Janaka Siyambalapitiya	
Open	Faculty of Natural Sciences	DOR STEM ROUND 2	Engineering immobilized DNzyme fluorescence sensors for environmental on-site monitoring of water bodies for metal contamination and exploring the metal-protein interaction on specific proteins in selected non-communicable diseases	Dr. Senthilnithi Rajendram	RT-PCR with Analysing Software with interfacing Computer, Agrose Gel Electrophoresis with blotting system including SDS PAGE Electrophoresis, Gel documentation system, Tabletop Centrifuge, Micro Plate Reader & xenon lamp,ULT Freezer, Aluminium block bath cool thermo unit, Nanodrop, Constant temperature water bath with exocyclic Thermo circulator, Fluorescence spectrophotometer cell
	Faculty of Natural Sciences	DOR STEM ROUND 2	Engineering nanomaterials for photovoltaic and environmental remedial applications	Dr. G. K. R. Senadeera	EDXRF elemental analyzer, Thermal Conductivity Analyzer, I-V and IPCE measurement system,UV- Vis-NIR spectrophotometer, Spin coating unit, programmable Hot plates with stirer, sputtering Unit, Electronic balance, TOC and COD meters, Dual lamp Photoreactor
Sabaragamuwa	Faculty of Applied Sciences	RIC STEM ROUND 2	Value addition and commercialization of low gem-quality corundum in Sri Lanka using innovative heat treatment technology based on physiochemical analysis	Dr. D.N.S. Wanniarachchi	High Temperature Electrical Tube Furnace Fourier Transform Infrared Spectrometre Generator (3phase) with accessories Muffle Furnace
	Faculty of Geomatics	RIC STEM-HEMS ROUND 2	InforBoom; VGIS-based Informed Decision Making for Strengthened Local Land Governance	Dr. Padmakumara Milinda Piyasena Nawasiya Mudiyansele	UAV with sensors and a training
	Faculty of Applied Sciences	DOR STEM ROUND 2	Investigating geochemical factors contribute to CKDu in Uva Province and identification of microbes for residual pesticides detoxification in water and soil environment	Prof. Sunethra Gunatilake	GC-MSD, Purge and trap unit, Microwave digester, Hydried generator, Lamina flow cabinet, -80C refrigerator, Microbiological rotating incubator
	Faculty of Management Studies	DOR HEMS ROUND 2	TOURISM IN RURAL POVERTY ALLEVIATION THROUGH SOCIO-CULTURAL AND COUNTRYSIDE CAPITALIZATION	Dr. Ushan Peiris	
	Faculty of Social Sciences and Languages	DOR HEMS ROUND 2	The Impact of Water Management Strategies on livelihood Success of Rural Community: The Case of Irrigated Paddy Farming in the Dry-Zone of Sri Lanka	Dr. Aruna Shantha	

<b>South Eastern</b>	<b>Faculty of Technology</b>	RIC STEM ROUND 2	using resistant maize varieties with improved biomass, semio-chemicals and bio-pesticides technologies, and development of nutrient rich maize based food and feed in Sri Lanka	Dr. ADNT Kumara	Gas Chromatography coupled Mass Spectrometry Unscrambler x data analysis software package
	<b>Faculty of Management Studies and Commerce</b>	DOR HEMS ROUND 2	Designing and Development of Financial Literacy among Small Scale Business Holders: Application and Review in the Eastern Province of Sri Lanka	Prof. Ahamed Lebbe Abdul Rauf	