

ഭരണഭാഷ-മാതൃഭാഷ

അനേർട്ട്

ANERT



Agency for New and Renewable Energy Research and Technology

നവീനവും പുനരുപയോഗയോഗ്യവുമായ ഊർജ്ജ ഗവേഷണങ്ങൾക്കും സാങ്കേതിക വിദ്യകൾക്കുമുള്ള ഏജൻസി
(Department of Power, Government of Kerala)

SRI 2020-21

List of proposals provisionally selected for initial presentation

Following proposals in different subjects have been selected for making an online presentation before Internal Screening Committee of ANERT for preliminary screening. The selection is only provisional and proposals are liable to get rejected at any stage of the selection process if they are found not meeting any of the requirements given in the Guidelines. The presentations are planned to be held from 15th April onwards and detailed schedule for presentation will be intimated later.

Subject: Bio Energy

Sl. No.	Reference No.	Principal Investigator	Institution	Project Title	Category
1	SRI 06/2020-21	Dr. S N Kumar, Assistant Professor, EEE	Amal Jyothi College of Engineering, Kanjirappally	Efficient Utilisation of Green Waste for the Synthesis and Fabrication of Electrodes for Energy Engineering Applications	Sponsored
2	SRI 09/2020-21	Dr. Amith Aravind, Associate Professor, ME	Saintgits College of Engineering, Kottayam	Transesterification of Rubber seed oil to Biodiesel using a Novel Nanocatalyst, Derivation of Blended Diesel and its Performance Evaluation for Automobile Engines	Sponsored
3	SRI 18/2020-21	Dr. Krishnakumar B, Principal Scientist	CSIR-NIIST, Thiruvananthapuram	Performance Analysis of Biogas Plants Installed by ANERT	Collaborative
4	SRI 20/2020-21	Dr. Krishnakumar B, Principal Scientist	CSIR-NIIST, Thiruvananthapuram	Co-digestion of water hyacinth biomass with organic fraction of municipal solid waste (OFMSW) in high solid	Sponsored

File No.ANERT-TECH/259/2020-S(NEP)

				treating pilot scale Anaerobic Digestion system	
5	SRI 21/2020-21	Sasi N, Associate Professor, ME	College of Engineering, Trivandrum	Performance Assessment and Improvement Methods for Better Gas Yield in Biogas Plants	Collaborative
6	SRI 28/2020-21	Maneesh T, Assistant Professor, ME	Marian Engineering College, Trivandrum	Assessment of Different Organic Feed Materials for Producing Biogas Using Horizontal Drum Type System	Sponsored

Subject: Solar PV

Sl. No.	Reference No.	Principal Investigator	Institution	Project Title	Category	Remarks
1	SRI 03/2020-21	Dr. Jani Das, Assistant Professor, EEE	Muthoot Institute of Technology and Science, Varikoli, Ernakulam	Performance Assessment and Forecasting with Environmental Impact for a Rooftop Solar PV Plant in Kerala	Collaborative	
2	SRI 04/2020-21	Ms Deepthi Jayan K Assistant Professor, Department of Basic Sciences & Humanities	Rajagiri School of Engineering and Technology, Kakkanad, Kochi	A combined DFT and Post DFT Investigation on Lead-Free non toxic Inorganic Perovskites	Sponsored	
3	SRI 10/2020-21	Akhila K, Assistant Professor, EEE	Adi Shankara Institute of Engineering & Technology, Kalady, Ernakulam	Cost Optimised Floating Solar Plants for Rural Electrification	Sponsored	
4	SRI 11/2020-	Dr. Binoy Baby,	St. Joseph's College of	Experimental Investigation of	Sponsored	

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	21	Professor and HoD, ME	Engineering & Technology, Palai.	the Performance of a BIPV/Thermal Collector assisted indirect Solar Dryer with PCM based Thermal Storage		
5	SRI 17/2020-21	Ms. Deepa Sankar, Associate Professor, EEE	Adi Shankara Institute of Engineering & Technology, Kalady, Ernakulam	Solar Wind Hybrid Power Source for Deep Sea Fishing Vessels with Battery Management	Sponsored	
6	SRI 19/2020-21	Dr. Adersh Ashok, Scientist, CSTD	CSIR-NIIST, Industrial Estate PO, Thiruvananthapuram	Design and Development of Optics Integrated Rooftop Agrivoltaics	Sponsored	
7	SRI 23/2020-21	Dr. Godwinraj D, Assistant Professor, ECE	Amal Jyothi College of Engineering, Kanjirappally, Kottayam	Performance Enhancement of Three Port Converter Using E-GAN HEMT Suitable for Solar Photovoltaic Based LVDC System	Sponsored	
8	SRI 26/2020-21	Dr. M S Senthil Saravanan, Professor, ME	Sree Buddha College of Engineering, Nooranad, Alappuzha	Efficiency Improvement in Dye Sensitized Solar Cells Using Carbon Nanotubes	Sponsored	
9	SRI 27/2020-21	Richu Zachariah, Assistant Professor, ME	Amal Jyothi College of Engineering, Kanjirappally, Kottayam	Solar Based Poly Generation System for Residential Buildings in	Sponsored	

				Kerala		
10	SRI 36/2020- 21	Dr. Sheik Mohammed, Assistant Professor, EEE	TKM College of Engineering, Kollam	Testing and Performance Evaluation of the Standalone Rooftop Solar PV Systems	Collaborative	
11	SRI 37/2020- 21	Ms. Juna John Daniel, Assistant Professor, EEE	Sree Buddha College of Engineering, Nooranad, Alappuzha	An Improved MPPT Based PV System Feeding Borewell Submersible BLDC Pump Under Partial Shading Condition	Sponsored	
12	SRI 38/2020- 21	Dr. Angel Susan Cherian, Assistant Professor, Department of Physics	Mar Thoma College, Tiruvalla	Bi-facial thin film solar cells- An inexpensive and effective way of photovoltaics	Sponsored	
13	SRI 39/2020- 21	Dr. C George Thomas, Research Director, IRTC	Integrated Rural Technology Centre (IRTC), Mundur PO, Palakkad	Agrivoltaics: Feasibility of Growing Crops under Solar Panels	Sponsored	
14	SRI 40/2020- 21	Dr. K Gangadharan Nair, Senior Faculty, IRTC	Integrated Rural Technology Centre (IRTC), Mundur PO, Palakkad	System engineering design, installation and performance evaluation of Hybrid Solar Power Plant at Malom of Kasargod .	Collaborative	
15	SRI 42/2020- 21	Dr. Aldrin Antony, Associate Professor, Department of	Department of Physics, Cochin University of Science and Technology,	Fabrication of Interdigitated Dopant Free Carrier Selective	Sponsored	

		Physics	Kochi	Silicon Heterojunction and PERC Solar Cells		
16	SRI 45/2020- 21	Dr. Joel George, Associate Professor, ME	Rajagiri School of Engineering and Technology, Kakkanad, Kochi	Hybrid Cooling of Solar PV/T Using Latent Heat Storage Materials: Nano Encapsulated PCM Slurry as Collector Fluid in Conjunction with Biochar Enhanced PCM	Sponsored	
17	SRI 48/2020- 21	Dr. Manoj Kumar M V, Professor, EEE	Government College of Engineering, Kannur	Smooth transfer of Solar PV Inverter from Islanded to Grid Connected Mode	Sponsored	
18	SRI 49/2020- 21	Mr. Alex V, Assistant Professor, EEE	SreeBuddha College of Engineering, Alappuzha	Utilisation of Solar Power for Agriculture, Household Amenities and Electric Vehicle Charging	Sponsored	
19	SRI 52/2020- 21	Prof Sukesh A, Assistant Professor, EEE Department	Government College of Engineering, Kannur	Solar Induction Cooker	Sponsored	
20	SRI 53/2020- 21	Shajan K Thomas, Assistant Professor, ME	Toc H Institute of Science and Technology Ernakulam	Solar Photovoltaic Panel Optimisation for All Weather Energy Generation	Sponsored	Received late. To be considered if funds available after finalisation of proposals received on time

21	SRI 54/2020- 21	Abilash R S, Assistant Professor, EEE	College of Engineering, Perumon, Kollam	Design and Development of High Efficient Solar PV System for AC Applications	Sponsored	Received late. To be considered if funds available after finalisation of proposals received on time
22	SRI 55/2020- 21	Reenamole G, Assistant Professor, Department of Chemistry	Mar Thoma College, Tiruvalla	New Photo anode Material Architectures for Dye Sensitised Solar Cells	Sponsored	Received late. To be considered if funds available after finalisation of proposals received on time

Subject: Solar Thermal

Sl. No.	Reference No.	Principal Investigator	Institution	Project Title	Category
1	SRI 07/2020-21	Pradeep A, Assistant Professor, ME	College of Engineering, Trivandrum	Design and Development of an effective Cocentrating Solar Power Technology	Sponsored
2	SRI 12/2020-21	Sreekala P, Assistant Professor	Amal Jyothi College of Engineering, Kanjirappally	Green Energy LVDC Power Production Using Integrated Solar Thermo Electric Generation System	Sponsored
3	SRI 34/2020-21	Dr. Jithesh P K, Assistant Professor, ME	Government Engineering College Kozhikode	Design and Development of High Yield Concentrated Solar Thermal Desalination Systems	Sponsored

Subject: Wind Energy

Sl. No.	Reference No.	Principal Investigator	Institution	Project Title	Category
1	SRI 13/2020-21	Tecna George, Assistant Professor, EEE	Vimal Jyothi Engineering College, Chemperi, Kannur	Self Recurrent Wavelet Neural Network Control for MPT and Power Quality Improvement of Grid Connected WECS	Sponsored
2	SRI 22/2020-21	Dr. Jayaraj Kochupillai, Principal	Mar Baselios Christian College of Engineering and Technology, Peermade	Vortex Induced Renewable and Non- polluting Wind Energy Conversion System	Sponsored

Subject: Storage and Electric Vehicles

Sl. No.	Reference No.	Principal Investigator	Institution	Project Title	Category	Remarks
1	SRI 01/2020- 21	Dr. Rajeev T Professor, EEE	College of Engineering, Trivandrum	Development of energy management control unit for a solar-powered electric vehicle charging station for grid support	Sponsored	
2	SRI 02/2020- 21	Dr. Vishnu B R, Assistant Professor, ME	Marian Engineering College, Thiruvananthap uram	Design and Fabrication of Electric Go-kart with Improved Cooling Technology of Battery	Sponsored	
3	SRI 15/2020- 21	Dr. Nafeesa K, Professor & HoD, EEE	MES College of Engineering, Kuttipuram, Malappuram	Solar PV Based Multi Functional EV Charger Employing Hybrid Converter with	Sponsored	

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				Bidirectional Power Flow	
4	SRI 16/2020- 21	Dr. Trijo Tharayil, Associate Professor, ME	Sree Buddha College of Engineering, Nooranad, Alappuzha	Thermal Management of Batteries in Electric Vehicles Using Pulsating Heat Pipes	Sponsored
5	SRI 24/2020- 21	Dr. Sheeba R, Professor, EEE	TKM College of Engineering,Ko llam	Autonomous charging station with AI based battery swapping for an isolated island	Sponsored
6	SRI 30/2020- 21	Dr. J B Sajin, Associate Professor, ME	Sree Buddha College of Engineering, Nooranad, Alappuzha	Extraction and Characterisation of Carbon from Hevea Brasiliensis Leaves for High Storage Lithium Battery Applications	Sponsored
7	SRI 31/2020- 21	Deepa M U, Assistant Professor, EEE	College of Engineering, Trivandrum	A Novel Control Strategy for Enhancing the Storage of Battery in Electric Vehicles	Sponsored
8	SRI 32/2020- 21	Dr. Jayaprakash P, Professor, EEE	Government College of Engineering, Kannur	Investigation on Fuel Cell Electric Vehicle for Power Conditioning and Power Dispatch to the Grid	Sponsored
9	SRI 33/2020- 21	Vinod V P, HoD, Department of EEE	Sree Buddha College of Engineering,No oranad, Alappuzha	A Novel Regenerative Braking System with Dual Input Superboost Converter for a	Sponsored

				BLDC Driven Electric Vehicle		
10	SRI 43/2020- 21	Dr. Rajesh Baby, Associate Professor and Dean Research,	St. Joseph's College of Engineering & Technology, Palai.	Design, Fabrication and Implementation of PCMs Based Passive Cooling System for Thermal Management of Li-ion Batteries Used in Electric Vehicles	Sponsored	
11	SRI 46/2020- 21	Dr. Jenopaul, Professor, EEE	Adi Shankara Institute of Engineering & Technology, Kalady, Ernakulam	Design and Development of Low Powered Onboard Hydrogen Production System for Future Fuel Cell Based Vehicles	Collaborative	
12	SRI 50/2020- 21	Vidya M S, Assistant Professor, EEE	College of Engineering, Trivandrum	Microgrid Frequency Control by Grid Support of Electric Vehicles in Charging Station	Sponsored	
13	SRI 51/2020- 21	Dr. Soney C George, Dean Research	Amal Jyothi College of Engineering, Kanjirappally, Kottayam	Development of Piezo-electric Mxene/Bismuth Titanate-PVDF/CTAB modified rGO Supercapcitor Power Cell	Sponsored	
14	SRI 56/2020- 21	Prof. (Dr.) Prasanth Raghavan, Associate Professor, Department of Polymer	Department of Polymer Science and Rubber Technology, Cochin University of	Design and Development of Prototype Solar Powered Electric Vehicle with Improved	Sponsored	Received late. To be considered if funds available after finalisation

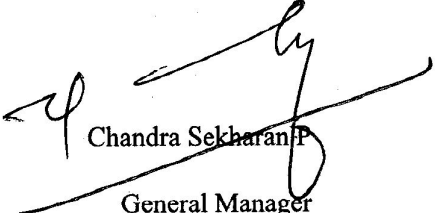
		Science and Rubber Technology	Science and Technology, Kochi	Performance		of proposals received on time
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Subject: Miscellaneous

Sl. No.	Reference No.	Principal Investigator	Institution	Project Title	Category
1	SRI 08/2020-21	Dr. Abhilash Suryan, Assistant Professor, ME	College of Engineering, Trivandrum	Design and Development of a mobile Solar-Wind Hybrid Energy Resource Station for Disaster Management	Sponsored
2	SRI 47/2020-21	Dr. Kishor Kumar V V, Assistant Professor, ME	Government College of Engineering, Kannur	Design and Development of a solar cell powered thermo electric cold storage facility	Sponsored

12/04/2021

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