

Details of Projects (Transparency Audit Point No. 4.5 (iii&iv))

ONGOING

A. Mission Mode Projects

		(Rs. In lakh)
S. No	Project Title	Amount
1.	Drone based Electromagnetic and Magnetic System (DREAM) (HCP0020)	153.90
2.	Medical instruments and Devices (HCP0026) Task 2.4 Development of Advanced Closed Loop Control System to Improve the Battery Performance in Electric Assisted Tricycle for Outdoor Mobility for Differently Abled Persons	57.19
	Task 3.4 Development of IoT enabled Smart 2D/3D devices for Pre-stage Cervical Cancer examination for Primary health centers (PMCs) (HCP0026) Task 3.4	40.00
3.	Advanced Technologies Leads for Assuring Safety of Food (ATLAS) – HCP0031 Task 3.5 Development and Validation of FluoriPCR: A hand-held platform device for on-site detection of meat authenticity and microbial contamination	60.80
	Advanced Technologies Leads for Assuring Safety of Food (ATLAS) – HCP0031 Task 3.8 Portable UV-VIS spectral Sensing System for Detection of Adulteration in Edible Oils	88.215
6.	Aerospace Materials and Technologies (HCP0036)	59.450
7.	Indigenous Development of Technologies for Advanced Devices and Laboratory Instruments (IDEAL) – HCP0034	3183.902

B. FTT/FTC Projects

		(Rs. In lakh)
S. No	Project Title	Amount
1.	Development of Rapid Honey Adulteration Detection System (MLP0117) FTT-AEISS Scheme	98.72
2.	Development of High Power Thyratrons for Fast Switching Applications (MLP0118) FTT-AEISS Scheme	104.84
3.	Development of Cold Plasma Technologies – MLP0119 – FBR-AEISS Scheme	158.00

4.	Development of High Emission Density Nano-Technology based scandate cathode for high Power mm wave Devices – MLP0120 – NCP-AEISS Scheme	230.00
5.	Task 1: High Power Su-THz Compact Source Applicable for Security Screening and Non-destructive Evaluation – MLP0121	634.20
6.	Task 2: Compact Photonic Crystal (PhC) based W-band Source – MLP0121	226.58

Inhouse Projects

1.	Development of 2.6MW S-band Pulse Tunable Magnetron ILP 0017	1.50
2.	Development of Green Technology for Waste Management at CSIR-CEERI ILP0018	75.00
3.	Design and Development of RF Analyzer	2.000

C. Sponsored/Grant-in-Aid Projects

(Rs. In lakh)			
S. No	Project Title	Sponsoring Agency	Committed Amount
1.	Special Manpower Development Programme for Chips-to-System Design (SMDP-C2SD)	DeitY, New Delhi	9972.00
2.	Creating of DSIR-Common Research and Technology Development Hub (CRTDH) at Jaipur in the Area of Electronics/Renewable Energy under DSIR-CRTDH programme	DSIR, New Delhi	500.00
3.	Evaluation of Behavioural Video Analytics System	M/s United White Metals Ltd., Mumbai	170.54
4.	Development of Intelligent Embedded E-sense System for online and offline Detection of Heavy Metals (Iron, Arsenic etc.) in Ground Water for Quality Assessment	WTI, DST, New Delhi	29.975
5.	Design of 170 GHz, 100 kW Short Pulse Gyrotron	ITER (IPR), Ahmedabad	22.58
6.	Indigenous Design, Development & Qualification of Ku Band (140-210 Watts) and Ka Band (100-150 watts) TWTs	SAC-ISRO, Bangalore	2020.00
7.	Detection of Threat Objects in Baggage and Food Quality Inspection using Image	M/s Krystalvision	60.17183

	Processing and Pattern Recognition Techniques for Single View x-ray Scanners & Development of Near 3D Image Visualization Software for Dual View X-ray Scanner	Image Systems Pvt. Ltd., Pune	
8.	Design and Development of a Power Assistive Hybrid e-Trike (PAH e-Trike) for Differently Aabled Person in Rural and Urban Regions of India	DST, New Delhi	37.124
9.	High Current Density (>500 A/cm ²) Sheet-beam Plasma Cathode Electron Gun for Sub-mm Microwave Source	BRNS (DAE), Mumbai	34.344
10.	Indoor Environmental Quality (IEQ) Monitoring and Control System based on Wireless Sensor – Actuator Network for Smart Indoor Environments	DST, New Delhi	28.92024
11.	Rural Technology Business Incubation (RTBI), Jaipur	DST, Jaipur	30.000
12.	Design and Development of MEMS based Piezoelectric Acoustic Sensor for Low Frequency Applications	SERB-DST, New Delhi	48.4968
13.	Information Access from Document Images of India Languages	IIT, Kharagpur (Through DST, New Delhi)	80.00
14.	Design and Development of Dielectric Barrier Discharge based Micro-hollow Cathode Plasma Device Arrays and Their Characterization	SERB-DST, New Delhi	30.55922
15.	Development and Deployment of Technologies for Effective Management of Rain-water Harvesting (RWHT): Ensuring Safe Drinking Water and Optimal Water use for Agriculture	DST, New Delhi and DST, Jaipur	338.6415
16.	Design and Development of Renewable Energy based DC Microgrid System for Rural Electrification	SERB-DST, New Delhi	42.12297
17.	Leather Quality Estimation using an Automated Machine Vision System	MeitY, New Delhi	47.60
18.	Autonomous Drones for Warehouse Management Project	M/s Cognizant Technology Solutions India Pvt. Ltd., Chennai	75.00

19.	Fabrication of Linear Variable Optical Filter (LVOF) in the 450-900 nm Wavelength	IRDE, Dehradun	9.4875
20.	Remote Vital Information and Surveillance System for Elderly and Disabled Persons	DST, New Delhi	24.6626
21.	Design and Development of Flexible Tactile Sensor Matrix for Fetal Health Monitoring	SERB-DST, New Delhi	45.1271
22.	Development of Technologies for Environmental Audio and Aroma Digitization and Recreation for Indian Heritage Sites	DST, New Delhi	75.59
23.	"TPMS" for Fleet Management Industry	M/s Fleeca Ind. Pvt. Ltd., जयपुर	5.00
24.	Design and Development of thick Film Sensor Electrodes for EMAT	Rajasthan Electronics and Instruments Ltd., Jaipur	107.50
25.	Design, Development and Fabrication of MEMS Technology based Sensors and Temperature Sensors for Indian Navy and Pilot Implementation of Wireless Communication Scheme with the Sensors	Ministry of Defence (NAVY), New Delhi	39.49
26.	Development of a Reliable, Low-cost, Portable, IoT-enabled, Optical Device for Measuring PM2.5 concentration in Air	DST, New Delhi	8.964
27.	Bio-mimetic and phyto-technologies designed for low-cost purification and recycling of water	DBT, New Delhi	64.55
28.	Resource Constrained AI	MeitY, New Delhi	125.08
29.	Research in Human Centered Robotics with Special Emphasis on Field and Bio-medical Rehabilitation (Indo-Korea Joint Network Centre on Robotics)	IIT, Delhi- DST, New Delhi	38.974
30.	Investigation of Ion-focusing Mechanism Based Sheet Beam Driven Sub-THz Source for High Power NDE Application (Indo-Russian Joint Collaboration)	DST, New Delhi	28.866
31.	Twinning Programme with MIDI, Ethiopia	MIDI, Ethiopia	195.88109

32.	Growth of GaN based Blue-green Laser Structure using MOCVD	SSPL-DRDO, New Delhi	252.34
33.	Design Studies of High Power RF Amplifiers and Development of Antennae for MM-wave backhaul/fronthaul Connectivity for 5G	MeitY, New Delhi	103.05
34.	Investigation on Nano-Technology based Thermionic Cathode for High Power Vacuum Electron Devices (VEDs)	SERB-DST, New Dehi	26.29
35.	Development of E-mode III-Nitride Devices for Energy Devices Tride Devices for Energy Optimized Agile Power Electronics	DST, New Delhi	26.75
36.	Development of spectroscopic soil health analyzer using chemo metric analysis and cloud services	DST, New Delhi	61.53
37.	Design and Development of MEMS-based Capacitive Micromachined Ultrasonic Transducer (CMUT) for Milk Quality Analyzer	DST, New Delhi	86.01999
38.	Development of wearable electronic-skin patch for real-time monitoring of human health parameters and tactile sensing	DST, New Delhi	61.1792
39.	Mercury free Far UV-C (222nm) Excimer Radiation Source for Inactivation of Pathogens	DST, New Delhi	69.0528
40.	Rapid low Cost Fluorescent AIE-based Detection of Renal Dysfunction from urine Samples and Fabrication of Portable and Real Time Devices	DBT, New Delhi	42.07120
41.	Development of Oxide Coated Cathode and Heater Assembly for 4 MW	SAMEER, Guhawati	11.51875

D. CSIR Skill Initiative Programme sponsored by CSIR, New Delhi

S. No	Project Title	Starting Date	Total Cost
1.	CSIR Integrated Skill Initiative (Phase- II)	Oct., 2020	280.59
2.	CSIR Virtual Laboratory	Dec., 2020	30.92

Sponsored/Grant-in-Aid Projects Technically/Administratively Closed (July, 2020-January, 2021)

Administratively Closed

S. No.	Project Title	Starting Date	Sponsoring Agency	Committed Amount (Rs. In Lakh)
1.	Design of Mixed Signal Circuits for Instrumentation applications.	29.09.2008	DIT/MCIT New Delhi.	231.720
2.	Design & Development of 3.00 MW S-Band Tunable Pulse Magnetron.	25.04.2011	BARC, DAE Mumbai.	156.146
3.	Rapid Real time Blood Pressure Measurement and Hypertension predisposition Diagnostics using Pulse Transit Time and Blood Pressure Variability	17.05.2014	D.S.T./Indo-U.S., New Delhi	49.338
4.	A Community based Participatory Aquifer Management System for Equity and Sustainability in Water Resource Management	14.06.2016	DST, New Delhi	25.005
5.	Design Optimization of Solar Tree	18.5.2016	CEL, Sahibabad	4.275
6.	Healthcare Home Assistance System	12.7.2017	M/s Samsung India, New Delhi	17.391
7.	Environment Friendly Thermoelectric Generator	15.06.2017	DST, New Delhi	86.275
8.	Development of MEMS Magnetic Sensor and RF/Microwave Tunable Devices	30.11.2017	DMRL (DRDO), Hyderabad	71.869
9.	Non-intrusive Health Care Analytics	11.09.2018	M/s Samsung India, New Delhi	57.39259
10.	Development of Software Algorithms using IR and Fluorescence Spectroscopy for crude oil and other downstream fluids in Refinery's Property Measurement	07.10.2018	M/s Lambda Point Innovation, Pune	9.00
11.	Design and Development of Work Function Measurement Set-up for Thermionic Emitter Materials for ISRO's Electric Propulsion System using Closely Spaced Diode Method	09.01.2019	ISRO, Bangalore	28.74
12.	Development of Electronic Milk Analyser using Green Technology	05.11.2014	MeitY, New Delhi	65.232
13.	Fabrication of Silicon Carbide Power Diodes	15.02.2019	RIC-DRDO, Chennai	24.0366

14.	Design and Fabrication of Large Deflection MEMS Biomorph Element for Tunable Filters	31.05.2017	SAC/ISRO, Ahmedabad	21.30
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Technically Closed

S. No.	Project Title	Starting Date	Sponsoring Agency	Committed Amount (Rs. in lakh)
1.	Concentrated Photovoltaic (CPV) Assisted Tandem Artificial Photosynthetic (AP) Device for Effective Solar-to-Chemical Conversion	01.07.2017	DST, New Delhi	32.370
2.	Development of III-Nitride White and UV LED Technology for Green Energy and Societal Impact	18.09.2017	PSA, New Delhi	243.608
3.	Design and Development of Tunable Film Bulk Acoustic Wave Resonators (FBAR) and Filters	07.11.2017	DST, New Delhi	58.36879
4.	Design and Development of MEMS Accelerometer	07.12.2017	IISU(ISRO), Bengaluru	69.005
5.	Development of Thermionic Emitter for High Thrust Electric Propulsion System	27.07.2018	VSSC, Trivandrium	126.49
6.	Energy Harvesting Smart Windows using High Contrast Grating Based Planar Concentrators for Building Integrated Photovoltaics	15.09.2018	SERB-DST, New Delhi	77.4835
7.	VANET security research. Cognizant SOW	25.11.2018	M/s Cognizant Technology Solutions India Pvt. Ltd., Chennai	40.00
9.	Design of 100KW,170GHz Short Pulse Gyrotron	09.06.2017	ITER-India, Gandhinagar	26.86
10.	Spectroscopic Platform for Detection of Adulteration in Milk		MeitY, New Delhi	64.08

CSIR Funded Projects Completed During the Year

1.	Development of Ultrasensitive, rapid and portable system for COVID19 screening using lab-free Raman Finger Printing and AI (MLP0047)	8.00	1.6.2020	31 st December, 2020 (six months)
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