

CSIR Projects

S.No	Equipments
1.	Syringe Pump
2.	Micro robot miBOT
3.	Electrochemical Workstation
4.	Incubator x 2
5.	Tunable Laser Source and Detector
6.	CNC Wegstr
7.	Precise Current source/Measure unit(2ch, 100 fA resolution, 210V,3A DC/10.5A pulse)
8.	Multiple Output Digital DC Power Supply(0.1V)
9.	Digital Multimeter(8 ½ digit)
10.	SMD soldering and Desoldering Station
11.	USB Modular SMU along with test fixture
12.	Ultrasonic bath x 2
13.	Super-continuum light source with accessories
14.	x-y-z-theta-phi alignment stage with OSA & accessories
15.	Design software and workstations
16.	Smartphone x 5
17.	Oven (2 Nos.)
18.	Hot plates x 2
19.	Handheld spectrometer
20.	Fluorescence Microscope
21.	Ph Meter
22.	Ultrasonic processor for spray coating
23.	Humidity generator and controller
24.	Online UPS: 1KVA
25.	Acetone Meter
26.	Laptop for NBS group
27.	Quantum wise software(3yrs)
28.	Origin
29.	Spin Coater
30.	Silvaco
31.	BenchTop Digital multimeter 6-1/2 with software
32.	Source measure unit,3-Channel with software
33.	Corona Treater
34.	Electronic micro-pipette
35.	Fridge
36.	Hotplate x 2
37.	Multi/dual output power supply
38.	Temperature controlled soldering iron
39.	Oven

S.No	Equipments
1.	San Storage with Expansion enclosure
2.	San switches
3.	NAS Storage(Backup)
4.	GPU server and PCI/FC/iSCSI cards
5.	Virtualization/Cloud Software and Support
6.	High-End Workstations for server monitoring tools, management of AI setup
7.	Infiniband Switch
8.	Desktop PCs and laptops for delhi center
9.	Pack and smart PDUs
10.	Power setup for AI engine(UPS and accessories)
11.	Networking setup equipments(Switch, UTM,VPN Certificates, software, Networking accessories, Printer , server room camera, Rack monitor, Network server)
12.	Hadoop Cluster Servers
13.	GPU Computation Machine
14.	Andriod app testing platform with software libraries and APIs
15.	Andriod POS SDK/Software/APIs,edge gateways, NUC boards
16.	Snapdragon 610/820 Development boards with SDK and APIs, rasp PI boards, Intel Boards with APIs and libraries and accessories
17.	128-channel EEG machine
18.	Eye Tracker
19.	Desktop for acquisition of EEG and Eye Tracker data
20.	COTS Drones and Software
21.	Payload Sensors and Integration Software
22.	Video Cameras, High speed vision cameras, Dynamic Vision sensors and accessories
23.	Development Boards(NVIDIA TX2,Tegra,Intel,Google TPU,GPU Modules) with SDK and APIs
24.	Reference systems(such as EndoPAT/venous occlusion plethysmography)
25.	Reference EEG headsets along with software, ECG, PPG, BP systems
26.	Samsung gear bands/wearable watches , Samsung home robots visible
27.	ECG(Holter/Wireless ECG)
28.	Ambulatory BP monitor
29.	Wireless ECG devices, SMD pick and place machines, Multi-channel DC power sources/supplies
30.	High frequency generator(3.2Ghz)
31.	Medium frequency generator
32.	Test and Measurement a. PXI Controller b.PXI Chassis c.PXI Malfunction I_O Module d.PXI strain bridge input module e. PXi Temperature input module
33.	SMD soldering station with accessories
34.	Lab view full with PID and fuzzy logic toolkit, simulation toolkit and system

	identification toolkit
35.	Sensor nodes for precision sensing
36.	Computing system
37.	Mobile workstations
38.	Software license(Adobe, video editor, project manager)
39.	Rugged field testing computing platform
40.	GPUs for high speed Vision Processing PC High speed camera , Video Camera/NIR Camera

S.No	Equipments
1.	Battery Simulator
2.	Hand-held Digital oscilloscope/power analyzer
3.	Frequency Response analyzer
4.	Thermal Cameras
5.	Real-time Simulator
6.	Work Stations/PC/Laptops
7.	and testing facility

S.No	Equipments
1.	Transmission spectrophotometer(2.5um-5.5um)
2.	Transmission spectrophotometer(5.5um-10um)
3.	Impedance Analyser
4.	Florescent spectrophotometer
5.	Data Analysis Software(Matlab and Origin lab)
6.	Refractometer
7.	Somatic cell and bacteria counter
8.	FT-NIR spectrophotometer
9.	Homogeniser
10.	Protein Analyser
11.	Crud Fat Analyser
12.	UPS 10KVA
13.	CAD tools for simulation and PCB design
14.	Minor lab equipment
15.	Refractometer

S.No	Equipments
1.	Dairy analyser
2.	Edible oil analyser
3.	Raman spectrophotometer
4.	Electrochemical analyser
5.	PCB design and simulation software
6.	Embedded software(compiler)
7.	Texture and Electronic Visual Analyser
8.	Portable Fruit/Vegetable Quality Analyser
9.	Multi-spectral system
10.	FT-IR based food analyser
11.	Potentiostat
12.	IR data analysis software
13.	GC analyzer

S.No	Equipments
1.	Six set camera module
2.	Three set camera module
3.	Auto focus single camera module
4.	Fix focus single camera module
5.	USB camera
6.	Infrared camera
7.	Carrier Boards with LAN
8.	Carrier Boards without LAN
9.	Carrier Boards with CSI interface
10.	Industrial grade Prototype Platform(Jetson TX-2i/Xavier)
11.	Network switches
12.	External Access point
13.	Network attached storage
14.	MATLAB software multi licenses
15.	High end workstation/Linux server
16.	NVIDIA Jetson TX2 Development Platform
17.	NVIDIA Jetson Xavier Development Platform
18.	NVIDIA Jetson Nano Development Platform
19.	USB camera module
20.	Carrier Board for Jetson TX2 with LAN and USB interface
21.	Configurable Network Switches
22.	Outdoor/External Access Point
23.	High-end Linux Server
24.	Desktop Workstation
25.	Multimedia HDMI Monitor(18.5-inch HD LED)
26.	Graphics Card(NVIDIA TITAN RTX)
27.	Graphics Card(NVIDIA GeForce RTX 2080 Ti)
28.	Multifunction Printer

S.No	Equipments
1.	Digital Twin a)Module Builder b)Libraries c)Interface with C++,Simulink and other IIOT Platform KAA – Open Source IIOT Platform
2.	VR headset with Toolkit
3.	Handheld 3D Laser Scanner(FARO)
4.	Data Logger with 16 Channel and Above with expandable DAC Card
5.	High End WorkStation and storage
6.	Mobile WorkStation
7.	Development Boards & Kit with accessories
8.	QHD Display Screen
9.	External Graphic Card Dock
10.	High end AR/VR workstation with GPU
11.	Mobile workstation with AR/VR
12.	Color Printer
13.	Quad HD display Screens
14.	Sound System
15.	High Resolution Digital camera, lens and accessories
16.	360 View Camera
17.	Handheld Laser Scanner

S.No	Equipments
1.	Chemical bench
2.	Table top Di plant
3.	Powder mixture
4.	Table top lathe machine
5.	Vacuum beljar and accessories
6.	Pumps
7.	Power supply
8.	Measuring instruments Varnier callipers
9.	Magnetron sputtering system

S.No	Equipments
1	Server
2	Field Testing Equipment

S.No	Equipments
1.	PXI cards for data acquisition

S.No	Equipments
1.	Embedded Boards
2.	Cameras with Necessary Accessories

S.No	Equipments
1.	Battery Simulator
2.	High Current Probe
3.	Handheld Power Analyzer

S.No	Equipments
1.	High frequency oscilloscope(>12GHz)
2.	Pulse Power supply Peak voltage:upto-30kV Pulse width: upto 1 micro sec PRF: upto 100Hz
3.	THz radiation detection equipment(Gunn diode,sub-harmonic mixer) with accessories
4.	THz Detectors(Micro bolometer arrays, schottky diodes etc) with accessories
5.	Minor Equipments (Vacuum gauges and mass flow meters with controllers, high end computers/laptops, TMP/Rotary pump, Local High frequency oscillators)

S.No	Equipments
1.	High voltage/current probe
2.	Workstations
3.	Other minor equipments
4.	Handheld DSO
5.	Winding Machine
6.	Battery Charger
7.	Linear Regulated Power supply
8.	Desktop/Workstation/Laptops

S.No	Equipments
1.	Debugger lueterbach for ARM Cortex-M and Cortex-R Series and FPGA design debugging
2.	Workstations/High end PCs
3.	Machine learning algorithms SW
4.	Laptops
5.	MSP 432/MSP430 JTAG debuggers
6.	FPGA based development board for machine learning and IoT Analytics

S.No	Equipments
1.	Robotic kits and AI-based toys and kits with sensors, control device, motors, programming applications and related accessories including software for making models, experiments and demonstrations
2.	Electronic kits and basic oscilloscope
3.	3-D printer with accessories(computer, software etc.)
4.	Projectors and display, computer/laptop, UPS, and other associated accessories
5.	Electronic demonstration kits(amplitude/frequency modulation),basic oscilloscope
6.	Microscope(digital and inexpensive ordinary microscope)
7.	Science experiment kits, Soldering iron station, breadboard etc.
8.	Other minor systems

P-50 Equipments and Apparatus for FY 2019-20

S.No	Name of Equipments
1.	Hot plate -- 4 nos
2.	Spin Coater
3.	Temperature bath
4.	Oil Filling Equipment
5.	Conveyer belt furnace
6.	Breadth Analyzer calibration setup(Control & Automation Group)
7.	Drone M600/M100
8.	CST Design Studio(multi user)
9.	Vacuum fan, water spray pump, nibbler cutter, hand grinder, drill bit setup etc
10.	Fire Alarm System(for whole institute)
11.	RO Water Plant
12.	Exhaust system
13.	CCTV Camera for clean room
14.	PPM analyzer cum dew point analyzer
15.	Portable Hydrogen Gas Detector System
16.	VC Facility
17.	Windows and off license
18.	UPS(20KVA)
19.	Welding generator
20.	Floor crane
21.	Vertical Milling Machine
22.	Three axis digital Our(DRO)milling machine with accessories
23.	Pillar drilling machine with accessories
24.	Muffle Furnace
25.	Reflow Furnace
26.	Workstations
27.	Produce quality meter
28.	Drones
29.	Healthcare Monitoring system
30.	PCs&Printers
31.	Low frequency exciter with accessories
32.	DSO/Multimeter
33.	General purpose power supply
34.	Zynq Ulytrascale+ RFSoc Dev kit
35.	High end workstations
36.	Handheld DSO/Scopemeter
37.	High end workstations
38.	5V, 250 Amp power supply for electromagnet
39.	Microsoft office & Windows OS
40.	Laptop
41.	PCs
42.	Multifunction laserjet printer

S.No.	Items
1.	FESEM
2.	RIE system for metal films (Cr, Al, Metal oxides, etc.) etching
3.	DI water plant
4.	Chemical benches, ovens, etc. For PR coating, baking & developing – before and after nano-patterning
5.	CVD for Parylene: for environmental protection coating of sensors
6.	LTCC resistor welder for resistive welding of LTCC devices
7.	Other small process & characterization equipment to realize NEMS and Nano-fluidic based sensors and Bio-laboratory (Film thickness monitor, 4-point probe, etc.)
8.	Ribbon bonder
9.	Film thickness measurement tool
10.	Four point probe
11.	Hot probe
12.	Multifunction acoustic calibrator

Sponsored Project

S.No	Equipments
1.	Measuring Tools
2.	Printers

S.No	Equipments
1.	Solenoid Valve (150 nos.)
2.	Sensors with transmitters, pH, TDS, (50 nos.)
3.	Level Sensor (50 nos.)
4.	Digital Meter Handheld (50 nos.)
5.	Power supply (60 nos.)
6.	Optional Sensor Module (5 nos.)

S.No	Equipments
1.	Laser Projector
2.	High precision thermal imager
3.	CCD/CMOS Camera with high resolution lens
4.	High Performance workstation for solar PVT System modeling
5.	Data Acquisition System with support software
6.	Hot water recirculation pump and controller
7.	Minor equipment: flow sensor, flow rate totalizer, valves, temperature and pressure sensors, indicators etc.

S.No	Equipments
1.	Turbo Pumping System along with backing pump
2.	Residual Gas Analyser
3.	Microbalance
4.	Programmable High Voltage sources and power supplies etc.
5.	Turbo Pumping System along with backing pump
6.	Residual Gas Analyser

S.No	Equipments
1.	Spectrum Analyzer
2.	Logic Analyzer
3.	DC Power Supply
4.	Digital Multimeter
5.	Function Generators
6.	Data acquisition systems
7.	Video Conference Setup
8.	Projector and accessories
9.	3 D printers and laser cutting tools
10.	DSO/MSO
11.	Measurement probes
12.	Grind simulator
13.	Wind Simulator
14.	Real time simulator
15.	TMP Rotary Pump
16.	Mass flow meter
17.	CNC, Multilayer PCB Machines

S.No	Equipments
1.	DIE-Bonder with accessories
2.	Table-top Spectro-photometer with accessories
3.	Minor Equipment

S.No	Equipments
1.	Workstation
2.	Magasonic Cleaner
3.	Vector network analyser

S.No	Equipments
1.	Special Equipments, Dehumidifier, Work station, hardware, computation, furniture etc.

S.No	Equipments
1.	EMC/EMC (pre-compliances)

S.No	Equipments
1.	Thermo Scientific Orion Aqua Mate 8000 UV-Vis with chemical solutions

S.No	Equipments
1.	Support and AMC of SURF-3D Software

S.No	Equipments
1.	Helix winding machine with pitch measurement system
2.	High Frequency PNA for testing (ATE)
3.	TWT test power supply
4.	Metrological equipment

S.No	Equipments
1.	Scanner, Workstation, Printer

S.No	Equipments
1.	Constant voltage and current sources
2.	Soldering station with rework
3.	Computer/Laptop, printer
4.	Gas Sensor (Analyser module and sensors)
5.	Diff. type of know gas cylinders
6.	Optical component, accessories

S.No	Equipments
1.	General purpose electronic measuring and testing equipment

S.No	Equipments
1.	Rotary Pump+TMP

S.No	Equipments
1.	Motorized tricycle
2.	Hand Propelled tricycle
3.	Freight charges for destination
4.	Handheld digital oscilloscope
5.	Handheld LCR Meter
6.	Handheld digital multimeter
7.	Programmable DC Power Supply
8.	Laptop
9.	PC Hardware – HP Z 440 Workstation
10.	Cordless drill driver
11.	Fabrication of Equipment

S.No	Equipments
1.	Ion Pump
2.	TMP Pump
3.	Air Furnace
4.	Power Supply
5.	Desktop Computer
6.	Miscellaneous

S.No	Equipments
1.	RF Power Supply 13.56 MHz/300W

S.No	Equipments
1.	Spectroscopic Sensing System
2.	High Performance PC work stations
3.	Centralized UPS
4.	Embedded Hardware Software platform
5.	Environmental Sensor System, temp. humidity, sunlight
6.	Water flow and pressure sensors
7.	Soil Sensors moisture/conductivity
8.	SMPS, batteries, charger power supply
9.	SMD soldering stations
10.	Handheld DMM rs, signal calibrator and DSO
11.	Sensors for water quality-TDS, Ph/ORP, with transmitters
12.	Sensors for agriculture fields soil moisture/conductivity
13.	Water flow and pressure sensors
14.	Sensors for environmental monitoring temp., humidity, sunlight, airflow
15.	Soil testing and nutrient analysis/calibration meters
16.	High Voltage power supply, high current charger for batteries
17.	Ozone analyser, UV intensity meters
18.	Data acquisition system with printer 4 no for 4 places in agro field networking

S.No	Equipments
1.	Embedded Software

S.No	Equipments
1.	Personal Computer
2.	Energy Storage Simulator
3.	Hardware in loop platform

S.No	Equipments
1.	ECG such as Holter ECG, BP Monitor, EEG Headset (Such as EMOTIV), Treadmill, Power and Spectrum Analysers, 3 D printers, Computers, workstations and laptops, Minor equipments such as electronic, optical and mechanical equipment for data collection, Office Furniture, Works and services for establishing data collection facilities and digital health lab

S.No	Equipments
1.	Bench Top PVD System with accessories

S.No	Equipments
1.	Various Capital Equipment lie Camera , Illumination System, computer hardware and software

S.No	Equipments
1.	Digital Oscilloscope
2.	HV Probe
3.	Optical Pyrometer
4.	Multimeter
5.	Power Supply
6.	Laptop and Desktop
7.	Miscellaneous

S.No	Equipments
1.	High-end workstation
2.	Audio Capture (RIR Measurement) setup including hardware, software, omni directional/Direction speakers, headphones
3.	Aroma capture/test bed (Seat)

S.No	Equipments
1.	Force Gauge with Stage
2.	Spin Coater
3.	Thermal Evaporator