

RESEARCH LABORATORIES & CENTRALIZED INSTRUMENTATION FACILITIES
Department of Instrumentation and control Engineering, NIT
Tiruchirappalli

Sl.No	Name of the Equipment	Name of the Laboratory	Short description of the Equipment (Model, Make Important Details)	Faculty In charge Contact Details
1	Twin Rotor/Aero dynamical Rotors	Embedded Lab	The 2 DOF Helicopter experiment provides an economical test bed to understand and develop control laws for vehicles with dynamics representative of a tethered rigid body helicopter, spacecraft or underwater vehicle.	Dr. D. Ezhilarasi 0431-2503365
2	Automated Green House	Embedded Lab	Green House structure with complete Cladding, Shading system, Evaporative pad and cooling system, Fogging system, MP Control system for automation, Top ventilation with manual operation	Dr. D. Ezhilarasi 0431-2503365
3	MEMS-design software(Micro fluidic analyser and BIOCHIP analyser)	MEMS Lab		Dr.M.Umapathy 0431-2503353
4	LCR meter	MEMS Lab	Measurement of Admittance, Phase angle, Reactance, Conductance, Susceptance, Q-factor, DC resistance (IM3536 / HIOKI)	Dr.G.Uma 0431-2503359
5	Laser displacement sensor	MEMS Lab	The confocal measuring system is used for fast distance and thickness measurement. Different sensor models and controller interfaces open versatile fields of application, e.g. in the semiconductor industry, glass industry, medical engineering and plastics production. (IFC2451 / microepsilon)	Dr.G.Uma 0431-2503359
6	PROBE STATION	MEMS Lab	Probe station is used to achieve precise measurement results for I-V/C-V measurements. (PSDB1160 / Signatone)	Dr.G.Uma 0431-2503359

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7	COMSOL MULTI PHYSICS SOFTWARE PRODUCT MODULES	MEMS Lab	Simulating designs and processes based on electromagnetics, structural mechanics, acoustics, fluid flow, heat transfer, and chemical engineering behaviour. (COMSOL 5.3a)	Dr.G.Uma 0431-2503359
8	MEMS CAD TOOL COVENTORWARE	MEMS Lab	The suite has many MEMS-specific features for modelling and simulating a wide range of MEMS devices, including inertial sensors (accelerometers and gyros), microphones, resonators, and actuators. (COVENTORWARE 10.1)	Dr.M.Umapathy & Dr.G.Uma 0431-2503353 0431-2503359
9	COMSOL Multi Physics Software Product Modules			Dr.M.Umapathy 0431-2503353
10	Matlab, Simulink & Software Tool Boxes			Dr.A.Ramakalyan 0431-2503357
11	Distributed Control system (DCS)	Process Control Lab		Dr.K.Srinivasan 0431-2503363
12	Coventorware turbo and Extended analyser module and architect 3D software	MEMS Lab		Dr.M.Umapathy 0431-2503353
13	Wireless based process Trainer	Process Control Lab		Dr.K.Srinivasan 0431-2503363
14	Impedance Analyzer			Dr. K Dhanalakshmi 0431-2503360
15	DIGITAL VIDEO EEG SYSTEM	Biomedical Lab		Mrs Sridevi & Dr.N.Sivakumaran 0431-2503361 0431-2503362

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16	DSO			0431-2503350
17	SMART BASED TEMPERATURE PROCESS CONTROL AND MULTIPROCESS STATION			0431-2503350
18	MULTIWAVE FORM SIGNAL GENERATOR			0431-2503350
19	DIGITAL STROAGE OSCILLOSCOPE (DSO)			0431-2503350