38+ years

IEICOS™

COMPLETE SOLUTIONS FOR PHD, MTech, ME, MSc projects and other research work

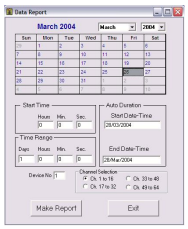
Manufacturers of high quality low-cost complete systems and equipments with computer software for data acquisition and analysis of results for advanced engineering projects in multidisciplinary fields and research work for PhD, M.Tech, M.E., M.Sc and other associated research and development work. We provide solutions and answers for your research project requirements.

We also manufacture advanced test rigs and systems, sensors and transducers, electronic test and measuring instruments for Defence, Quality control, Technical Engineering education, R&D Organizations and Industries for over 38+ years in India and abroad. We are known for indigenization of various components saving time and money to our customers.

We have experts with PhD and Master's level backgrounds to work with you and to assist you in the development, design and building of complete equipments, systems, sensors, instruments to help you complete your research work faster and to ensure publication of quality papers with practical results.

Please feel free to contact us with your requirements.

Some of the PHD/MTech level projects executed for various researchers and students:



Food Technology:

1) Advanced computerized study of effect of increase in shelf life by dehydration of fruits and vegetables

Welding Technology:

1) Impact of high frequency vibration of hot weld joints to increase weld strength and reliability.
2) Computerized Datalogger for strain measurement of weld joint in missile bodies using strain gauges

Earthquake Engineering/Structural Dynamics Technology:

1) Design and Development of Shake Table, accessories and models for earth quake engineering

Composite Material Technology:

1) Measurement and Characterization of Impact effects on composite plate materials.
2) Impact testing of aircrew helmet to defence standards

Production Engineering:

1) Computerized cutting force measurement for Advanced Composite Materials in Aerospace Industry
2) Automated Computerized online tool wear measurement

Tribology:

1) Investigation of cause and effects of gear box dust in extremely heavy machinery
2) High Temperature/Pressure Advanced Friction and Wear Tester for special materials in nuclear engineering.

Leak Detection Technology:

1) Development of aircrew oxygen mask fully automated programmable leak tester
2) Development of test kit for Respiratory masks.

Electronics/Embedded/Signal Processing:

1) Development of embedded controller based control module for defence/atomic energy application
2) Development of FPGA based controller as standalone single board computer
3) Characterization of Low noise High resolution A/D converter for precision measurement instrumentation
4) Ethernet protocol based data acquisition system for remote data access, monitoring and control.
5) Wavelets for single axis waveform analysis.

Renewable/Alternative Energy:

1) Design, development, building and optimization study of conversion of existing cars to electric cars.
2) Automated Solar Tracker for increased efficiency of Photovoltaic solar panels.
3) Characterization and optimization studies of commercially available pumps as turbines for micro hydro-electric projects in rural using eddy current dynamometer
4) Testing and certification standard systems for solar photovoltaic panels to IS 61215 standards

Piezoelectric/Nanotechnology:

1) Linear Nanomotion actuator and capacitive measurement of nanomotion for optical instrumentation.
2) Piezo actuator stack with piezo driver for precision motion control.

Sensors and Instrumentation:

1) Development of very low flow sensor for respiratory flow measurement.
2) Characterization and design study of nanoscale measurement using capacitance displacement sensor
3) Fiber optic white light Fabry Perot interferometer based sensor for high temperature
4) Mass Flow sensor with bypass laminar flow design for direct proportional measurement of flow

Aerospace Engineering:

1) Development of aerofoil models with high lift/drag ratio in polycarbonate materials.
2) Design and Development of supersonic, transonic and cascade wind tunnels.
3) Six component balance for force and moment measurement in wind tunnels.

Computer Science and Engineering:

1) Open Source Supervisory Control And Data Acquisition (SCADA) EPICS software for research and engineering applications
2) Real time Distributed Control System (RDCS) implementation methods for engineering and research
3) Linux/Unix based SQL database application for engineering.
4) ROBOSOFT – Software robotics and automation for automated data capture, mining and processing.

INDUSTRIAL ENGINEERING INSTRUMENTS

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