A.V.C COLLEGE OF ENGINEERING

DEPARTMENT OF INSTRUMENTATION AND CONTROL ENGINEERING

DEVELOPMENT ACTIVITIES

ABOUT MODROBS LAB:

Department of Instrumentation and Control Engineering received grant from AICTE under modernisation and removal of obsolescence (MODROB) scheme of worth Rs.11Lac under F.NO.9-269/RIFD/MOD/Policy-1/2018-19. The grant was utilised to modernise the Process Control Lab under project title "Design and Realization of Advanced Controllers for Nonlinear Processes".

- The Lab is used as Resource for Meeting the Current Industry Demands and will help to raise the Technical Potential of the Faculty and Students which will eventually create a Platform of collaboration of the Academy with the Industry.
- To provide latest knowledge of tools/software in Advanced Controllers to UG, PG students and Faculty.
- To Provide Innovation and Industrial Research Oriented approach to UG and PG Students and the Faculty.
- To provide Consultancy and Process Control based Faculty Development Programmes.

OBJECTIVES OF THE LABORATORY:

- To support the research scholars to carry out the research works in highly nonlinear processes.
- For knowledge upgradation of the faculty members in the field of process tanks used in real time applications.
- Instrumentation and control engineers can carry out the task of measuring, doing research, installing, developing, testing, maintaining and designing various controllers used in the industry. They aim to measure the world accurately and to control it precisely.
- The lab will be utilized for multi-disciplinary projects including electrical, mechanical and Electronics branches.
- This lab is designed to equip graduate Instrumentation and control engineers with advanced proficiency in process engineering and technology theory and practice. It introduces students to experimental and/or computational research and is expected to lead to technical outcomes such as publications, patents etc.
- This lab imparts skills-sets necessary to work in industrial research and process development, technical services, project engineering.
- This lab provides opportunity for the researchers to work on computational process control with modern process software tools for analysis, modelling and simulation of complex nonlinear processes.

About the college:

A.V.C. College of Engineering was started in the year 1996 committed to social welfare. The founding father Sri S. Ramalingam Pillai sowed the seeds of A.V. Charities in 1806 in memory of his beloved son Thiru Velayutham pillai. A.V. Charities began its educational services by starting the A.V.C. (Autonomous) college in 1955, extended their horizon to A.V.C Polytechnic in 1983 and in 1996 by opening the Engineering college. A.V. Charities serve as Beacon light in the field of education to the innumerable youth, with rural background. We are very glad to say that we are second to none in enhancing the young minds to compete the ever changing global changes.

A.V.C College of Engineering is a pioneer institution and first self financing college in Nagapattinam District. We have been approved by All India Council for Technical Education (AICTE) and also in possession of ISO 9001:2015 certificate. We are moving ahead with National Board of Accreditation (NBA) for the Engineering courses. Our Mission is to make the institution a Centre of Academic Excellence. The R&D facilities have been opened up to make the students as reservoir of knowledge, aptitude to advance and to face the global challenges.

About the Department:

The Department was established in the academic year 2001 – 2002, to meet the growing demand of the Industries for Instrumentation and Control Engineers. Students are exposed to the latest trends in Instrumentation and control, with state of the art infrastructure and through qualifies and committed faculty members. Instrumentation systems and control engineering play a vital role in any modern Industry. We aim at producing talented instrumentation and control specialists who cater to the needs of the modern industries.

PROJECT COORDINATOR:
Dr. S. VADIVAZHAGI, M.E., Ph.D.
HOD-ICE, A.V.C.C.E.
Ph:9976252277

PRINCIPAL:
Dr. C. SUNDAR RAJ, M.E., Ph.D.
A.V.C. College of Engineering.

A.V.C.COLLEGE OF ENGINEERING

Approved by AICTE & Affiliated to Anna University
Re-Accredited by NAAC with `B++' Grade (2nd Cycle)
An ISO 9001:2015 Certified Institution.
Mannampandal, Mayiladuthurai – 609 305.

Department of Instrumentation and Control Engineering

REASEARCH OPPORTUNITIES IN AICTE MODROBS GRANT PROCESS CONTROL LAB





EQUIPMENTS INSTALLED:

1. Multi Process Controller (Cascade/Ratio)
2. Control Valve for spherical Tank System in Chemical Industries
3. PLC Trainer Kit
4. Digital Storage Oscilloscope
5. Multi Process Trainer (Temperature & Pressure) for Industrial Safety
6. Interacting Trainer (Conical Tank)

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Students Project at MODROBS Lab









MODROBS LAB FINAL YEAR PROJECT DETAILS:

S.No	Reg.No	Name of Students who have done the Project	Title of the Project	Name of the Supervisor with Designation
BATCH 2019-2023				
1	820319112003	T. Karthikraj	Real Time Flow Control In A Cylindrical Tank System	Dr. S. Vadivazhagi
	820319112002	B. Hariharan		
2	820319112006	B. Srinivas	Real Time Pressure Control Of Cylindrical Process Tank	Dr. C. Ravikumar
	820319112001	R. Chandramohan		
3	820319112005	K. Prabhakaran	Real Time Implementation of Adaptive Controller Design For A Spherical Tank	Dr. Ka. Suriyaprabha
	820319112004	R. Nivas		
BATCH 2018-2022				
1	820318112002	G. Dhinesh Kumar	Real Time Level Control of Spherical Tank Process Using Gain Scheduled PID Controller	Dr. S. Vadivazhagi
	820318112005	M. Mohamed Jafrin		
	820318112011	R. Vasanthan		
	820318112302	A. Saravanan		
2	820318112010	S. Susindren	Real Time Implementation Of IMC Controller For A Conical Process Tank	Dr. KA.Suriyaprabha
	820318112006	J. Mohamed Shafik		
	820318112008	M. Suresh		
	820318112009	M. Surya		
3	820318112001	L. Afsar Ali	SCADA Based Multi Process Controllers For A Cylindrical Tank	Mr. R. Gopikrishnan
	820318112007	B. Sakthivel		
	820318112004	M. Manibharathi		
4	820318112301	M. Niraimathi	IoT Based Irrigation Plant Monitoring System	Dr. C. Ravikumar
	820318112003	V. Gajapriya		