

Vidya Prasarak Mandal's
MAHARSHI PARSHURAM COLLEGE OF ENGINEERING,
VELNESHWAR



Report on
Basics of PLC & It's Applications

Organized by
Department of Instrumentation Engineering

18th & 20th February 2019

In Association With

**TATA Power Skill Development Institute Trombay,
Mumbai, Maharashtra (TPSDI 2019)**

Program Coordinators

Mr Sadanand Gite

Asst. Professor Instrumentation Department
sadanand.gite@vpmmpcoe.org

ORGANIZING COMMITTEE

Mr.Avinash Pawar
HOD, (Instrumentation)

Ms Pradnya Gokhale
(Instrumentation)

Mr. Vikas Nandeshwar
(Instrumentation)

Mr Umesh Satpute
(Instrumentation)

Mr.Sadanand Gite
(Instrumentation)

Ms.Pratibha Pandit
(Instrumentation)

Mr. Parshuram More
(Instrumentation)

RESOURCE PERSONS

- Mr. Shivanand Katare
Trainer - TATA Power Skill Development Institute Trombay, Mumbai, Maharashtra
- Mr.Pesuna Yazdi
Trainer - TATA Power Skill Development Institute Trombay, Mumbai, Maharashtra

Basics of PLC & It's Applications @ Instrumentation Department

In association with **TPSDI 2019**

A three day workshop on, “PLC and Its Applications” is Conducted in department of Instrumentation of MPCOE Velneshwar by “TATA Power Skill Development Institute ” from 18th -20th Feb 2019.

The objective of this workshop is to study basics of PLC classification, different components, hands on Experimentation on PLC for Faculties and students.

About Workshop

The work shop on “Basics PLC and It's Applications” explores the ideas , its Industrial applications and programming of PLC that is useful for engineering students.

Total 17 students and faculties participated in this workshop where both the trainers Mr.Shivanand Katare and Mr.Pesune Yazdi Conducted their sessions in interactive manner

Training Program: Basics of PLCs and its Applications

Learning Outcomes:

- Understand PLC's architecture
- Knowledge of different types of PLCs
- Ability to understand Reliability & Redundancy Levels
- Knowledge on Installing PLC Software
- Hands on experience on Building Ladder Logic Programs and running them in the PLCs, carrying out modifications, forcing I/Os, Checking diagnostics & their implications
- Understanding PLC connectivity with Workstation & HMI
Knowledge on implementation of PLCs in Power Industry

Contents :

- Architecture of a Programmable Logic Controller (PLC)
- Different classifications of PLCs in the Industry
- Benefits over Hardwired Relay Logic
- Details of different components of a PLC
- Input / Output modules and their configuration & Termination

- PLC Programming concepts
- Levels of redundancy in PLCs
- Hands-on experience on a PLC Trainer
- How to Install PLC System software on a Workstation
- Building basic Ladder logic diagram for a given requirement, downloading and running it on the PLC
- Load, run, test, simulate, modify preprogrammed applications on the PLC Trainer Panel
- Creating HMI interface
- Application of PLCs in the Power Industry
- Concepts of Redundancies deployed in making PLCs robust

Detailed program for the Event
“Basics of PLC & It’s Applications”
18th - 20th Feb, 2019

Biomedical Laboratory , Instrumentation Department, Bhaskarachary Building,
 First Floor, MPCOE, Velneshwar

Date	Time	Particulars
18 th Feb 2019	9.30 AM to 10.30 AM	Registration – Instrumentation Department
	10.30 AM to 11.30 AM	Inauguration Function– Biomedical laboratory
	11.30 AM to 11.45 AM	Tea Break
	11.45 AM to 1.15 PM	Introduction of Basics of PLC
	1.15 PM to 2.15 PM	Lunch
	02.15 PM to 04.00 PM	Hands on Session
	04.00 PM to 04.15 PM	Tea Break
	4.15 PM to 5.15 PM	Hands on Session
Date	Time	Particulars
19 th feb 2019	9.00 AM to 10.00 AM	Theory Session
	10.00 AM to 10.45 AM	Theory Session
	10.45 AM to 11.15 AM	Tea Break
	11.15 AM to 1.15 PM	Test

	1.15 PM to 2.15 PM	Lunch
	02.15 PM to 04.00 PM	Hands on Session
	04.00 PM to 04.15 PM	Tea Break
	4.15 PM to 4.30 PM	Hands on Session
	9.00 AM to 10.00 AM	Theory Session
	10.00 AM to 10.45 AM	Theory Session
20 th feb 2019	10.45 AM to 11.15 AM	Tea Break
	11.15 AM to 1.15 PM	Test
	1.15 PM to 2.15 PM	Lunch
	02.15 PM to 04.00 PM	Hands on Session
	04.00 PM to 04.15 PM	Tea Break
	04.15 PM-5.15PM	Vote of Thanks

Inauguration function

Inauguration function of the workshop TPSDI 2019. We organize three days of workshop on “Basics PLC and its Applications”



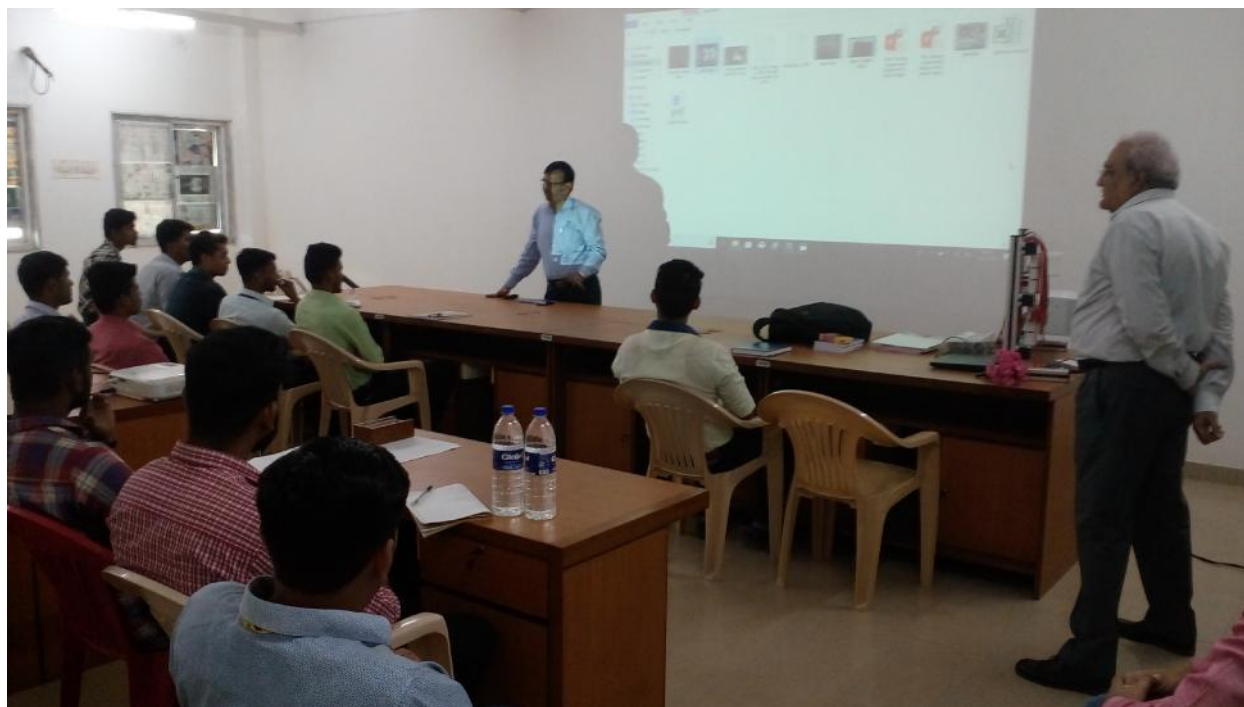
Mr. Vikas Nanadeswar Welcomes TPSDI trainers Mr. Shivanand Katare and Mr.Pesuna Yazdi



Session Photos :











Attendance :

3-Days workshop on "PLC & its Applications"

Conducted by

TATA Power Skill Development Institute (TPSDI)

Sr. No	Name of Participants	18 Feb	19 Feb	20 Feb
1	Mr. Aniket Prabhakar Pagade	<i>Apagde</i>	<i>Apagde</i>	<i>Apagde</i>
2	Mr. Aniket Anant Shirkar	<i>Ashirkar</i>	<i>Ashirkar</i>	<i>Ashirkar</i>
3	Ms. Nutan Shirish Oak	<i>Oak N.S.</i>	<i>Oak N.S.</i>	<i>Oak N.S.</i>
4	Ms. Pratiksha Ramesh Mandalekar	<i>Mandalekar</i>	<i>Mandalekar</i>	<i>Mandalekar</i>
5	Mr. Sairaj Sanjay Shinde	<i>Sshinde</i>	<i>Sshinde</i>	<i>Sshinde</i>
6	Mr. Ishtiyag Abdul Karim Patait	<i>Batait.</i>	<i>Batait.</i>	<i>Batait</i>
7	Mr. Sagar Santosh Bhosale	<i>Bhosale</i>	<i>Bhosale</i>	<i>Bhosale</i>
8	Mr. Suraj Ramesh Bhosale	<i>Bhosale</i>	<i>Bhosale</i>	<i>Bhosale</i>
9	Mr. Aditya Yogesh Rajput	<i>Rajput</i>	<i>Rajput</i>	<i>Rajput</i>
10	Mr. Subodh Gajanan Jangli	<i>Jangali</i>	<i>Jangali</i>	<i>Jangali</i>
11	Ms. Punam Sunil Gamare	<i>Gamare</i>	<i>Gamare</i>	<i>Gamare</i>
12	Mr. Prashant Pratap Shirke	<i>Shirke</i>	<i>Shirke</i>	<i>Shirke</i>
13	Mr. Pranit Panchal	<i>Panchal</i>	<i>Panchal</i>	<i>Panchal</i>
14	Mr. Siddhesh Ankush Halde	<i>Halde</i>	<i>Halde</i>	<i>Halde</i>
15	Mr. Sachin Umesh Dhawde	<i>Dhawde</i>	<i>Dhawde</i>	<i>Dhawde</i>
16	Mr. Swapnil Mohite	<i>Mohite</i>	<i>Mohite</i>	<i>Mohite</i>
17	Mr. Parashuram Babush More Ms. Rahul Gurusath Udey	<i>Udey</i>	<i>Udey</i>	<i>Udey</i>
18	Ms. Parashuram Babush More	<i>More</i>	<i>More</i>	<i>More</i>
19				
20				

[Signature] 20/02/2019

HOD
(Instrumentation Engg.)
J/C Head
Department of Instrumentation Engg
VPM's MPCOE Velneswar
Tal. - Guhagar (Ratnagiri) 415729

Feedback

Training Feedback

Participant Name [optional]:	Poonam Sunil Gamare.			
Course Name: Basics of PLC & Applications	Start Date: 18-Feb-19	End Date: 20-Feb-19		
Facilitator(s): Mr. S H Katare	Mr. Y J Pesuna	Venue: Velneshwar		

		Disagree → Agree											
		0	1	2	3	4	5	6	7	8	9	10	
A	The training was relevant to my area of study / curriculum												✓
B	The training will help me to get better understanding of relevant topics covered in my studies												✓
C	The training helped me gain new knowledge required to do my studies effectively												✓
D	The training will improve understanding of safety practices												✓
E	Topics were covered in necessary detail and depth											✓	
F	The facilitator was knowledgeable and experienced in his domain for the objectives of this session												✓
G	Relevant examples / case studies were discussed											✓	
H	Will recommend this training to a friend or a colleague												✓
I	How satisfied are you overall with this training program?											✓	

Things I like most about the course / session

- a) Doubts cleared successfully.
- b) Open Discussion.

Suggestions for Improvements

- a) _____
- b) _____

Any other comments/suggestions:

- a) _____
- b) _____

Date: 20/02/2019

Training Feedback

Participant Name [optional]:	<i>Aniket Anant Shirkar</i>			
Course Name: Basics of PLC & Applications	Start Date: 18-Feb-19	End Date: 20-Feb-19		
Facilitator(s): Mr. S H Katare	Mr. Y J Pesuna	Venue:	Velneswar	

		Disagree → Agree											
		0	1	2	3	4	5	6	7	8	9	10	
A	The training was relevant to my area of study / curriculum											✓	
B	The training will help me to get better understanding of relevant topics covered in my studies												✓
C	The training helped me gain new knowledge required to do my studies effectively												✓
D	The training will improve understanding of safety practices												✓
E	Topics were covered in necessary detail and depth									✓			
F	The facilitator was knowledgeable and experienced in his domain for the objectives of this session												✓
G	Relevant examples / case studies were discussed											✓	
H	Will recommend this training to a friend or a colleague											✓	
I	How satisfied are you overall with this training program?										✓		

Things I like most about the course / session

- a) Both trainers gave much more information about PLC.
 b) _____

Suggestions for Improvements

- a) Increase duration of days training.
 b) _____

Any other comments/suggestions:

- a) Training was good!
 b) _____

Date: 20/02/2019

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Empowering Skills for Life!

TIE.FM.01: Ext 1.0



Organizing committee & Trainers with HOD Prof. . Avinash Pawar.

Conclusion

In 3 days workshop they covered basics of PLC and its Applications students are very happy with course and practice session