## CONTINUING EDUCATION (TRAINING PROGRAMME) FOR TECHNICAL PERSONNEL IN PULP AND PAPER INDUSTRY

By
Priti Shivhare Lal
Sc-E-II

#### **PROJECT TITLE:**

**Continuing Education for Technical Personnel in Pulp and Paper Industry (Training Programmes)** 

#### **DURATION:**

Two years (2011-2016)





#### **OBJECTIVE**

To train the technical manpower of the Indian Paper Industry and personnel involved in paper handling so as to equip them to cope with the new technological developments taking place elsewhere.

#### **Technical Program (Line of Investigation)**

- Preparation of syllabus in different areas of pulp and paper technology for short term courses
- Preparation of comprehensive training manuals
- Organizing two training programs in a calendar year & Four in two years.

#### **Background & Summary of the Project:**

Technical manpower in Indian paper mills do not receive any significant training during the service. In India, there is no institution that imparts technical training to the mill personnel on continuous basis. Continuing education is essential to improve the technical capability of the mill personnel, as there is consistent increase in the use of new technologies in paper industry to meet the market demands. It becomes very difficult to exploit the new technologies in the optimum level without proper understanding about the new processes.

#### **Quantified and Qualified targets:**

The project activities will cover the following targets:

- To update the knowledge of technical personnel of Indian Paper Industry which will enable them to utilize the resources equipment & unit processes to the optimum level.
- To conduct two training programmes in a calendar year one for RCF Based Mills and one for Agro Based Mills.
- Prepare technical manual for the proposed Four training programmes.

#### **TRAINING PROGRAMMES CONDUCTED (2011-2013)**

Dates/Locations	Area of Proposed Training	No. of Participants
9 <sup>th</sup> Cess Trg. Prog. August 22-23, 2012 CPPRI, Saharanpur	"Chemical Recovery & Environmental Management"	48
10 <sup>th</sup> Cess Trg. Prog. November 05-06,2012 TNPL,Kagithapuram (TN)	"Energy Conservation in Pulp & Paper Industry"	45
11 <sup>th</sup> Cess Trg. Prog. February 20-21, 2013 Kashipur (U.S. Nagar) (U.K)	"Trends in Processing and Papermaking of Recycled Fiber"	50
12 <sup>th</sup> Cess Trg. Prog. June 24-26, 2013 Chandigarh (UT)	"Utilization of Agro-residue Fibres in Indian Paper Industry"	35

#### **ACHIEVEMENTS**

Total number of training programs conducted	4
Number of participants	78
Number of lectures	44
Number of external & internal faculty	45

S.No.	Name of the faculty	Organization	Topic
1.	Mr. Sunil	Energy	Role of MCDT in Energy
	Khandare,	Economist, BEE	Conservation
2.	Dr. T.G.	Energy &	Energy Efficiency opportunities
	Sundara	Climate Change	in Vacuum pumps
	Raman	Development,	
		SPB Ltd.	
3.	Sh. Mukesh	MK Process	Best Co-generation practices in
	Kumar	Technologies,	Pulp & Paper Mills
		New Delhi	
4.	Sh. Saurabh	Feedback Infta,	Role of ESCO in achieving the
(3)	Srivastava	Gurgaon	PAT targets by pulp & paper
			mills

S.N	Name of the faculty	Organization	Topic
5.	Dr. S. Chinnaraj	RD&QC, TNPL	Waste to Energy
6.	Sh. H.K.	Roackwell	VFD in Pulp & Paper
	Virupakshpa	systems	Industry
7.	Sh. B.J.	Lloyd Insulations	Best Insulation practices for
	Kuppuswamy,	(India) Ltd.	Pulp & Paper Industry
8.	Sh. Nagesh Kumar	Birla Institute of	Fuel Switching
		Management	
		Technology,	
		Greater Noida	
9.	Dr. Sunil Kumar	TCIRD Paper Mill	Coating of Boards
FELLIC		Campus, Yamuna	
		Nagar (Haryana)	

S.No	Name of the faculty	Organization	Topic
10.	Dr. Nishi Kant	Deputy Director TCIRD	Enzyme Application in
	Bhardwaj	Paper Mill Campus,	Deinking
		Yamuna Nagar	
		(Harayana)	
11.	Mr. Pawan	Chairman	Issue & Challenges in
	Agarwal	C/o Naini Paper mill,	Agro based mill
		Kashipur (UK)	
12.	Dr. Shettar	R & D Manager,	Biorefinery approach
		Godaveri Biorefineries	in utilization of Agro
		Limited, Sameerwadi.	residue pulps
13.	Sh. Sandeep	(DIP) Emami Paper Mill	Improving quality of
	tyagi Manager	Ltd, Balgopalpur,	deinking pulp
Ha.		Balasore-756020 Orrisa	

S.No.	Name of the faculty	Organization	Topic
14.	Sh. Ajay	Rockwell Systems	Power & Energy
	Narula,		Management systems
15.	Sh. P. Noel	Customer Relation	Application of High/ Medium
	Charle	Mangaer, Nestzsch	consistency pumps for energy
		Technologies (I)	Conservation Pulp and Paper
		Pvt. Ltd., Chennai	Industry
16.	Sh. Suresh	Vaibhav Paper Mill	Water conservation by Zero
	Desai	Vapi	discharge in waste paper
			based mill
17.	Sh.K.Sashu	Paper Mill Bhopa	Pollution treatment on
	Sighal	Raod, Mawana	practical experience



9th Cess training programme on "Chemical Recovery & Environmental Management" from 22 to 23 August, 2012 at CPPRI, Saharanpur (U.P)



Participants interacting with the Faculty during 10<sup>th</sup> Cess training programme on November 06 ,2012



Participants of 11<sup>th</sup> Cess training programme with Mr. Pawan Aggarwal, Chief Guest, Senior Scientists of the institute (CPPRI), External Faculty & M.Sc Students of (Cellulose Pulp & Paper) during Inaugural Session on February 21,2013.



Participants of 12th Cess training programme with Mr. Pawan Aggarwal, Chief Guest, Dr. Mathur, Director CPPRI, Senior Scientists of the institute (CPPRI), during Inaugural Session on July 24, 2013

### PHASE II 2014-2016

#### **Work Progress**

#### During the project tenure following training programs were organized

Name	Area of proposed training	Date	No of participants	Lecture delivered
13 <sup>th</sup> cess	Energy & Environmental Management	July 28, 29, 2015CPPRI,	39	9
prog.	Iviariagement	Saharanpur		
14 <sup>th</sup> cess	Calibration and Quality	July 30 - 31,	41	8
prog.	evaluation of pulp and Paper	2015CPPRI,		
	product	Saharanpur		
15 <sup>th</sup> cess	Printing and Surface Evaluation	January 19-20,	38	12
prog.	of paper	2016CPPRI,		
		Saharanpur		
16 <sup>th</sup> cess	Advance in Pulping, Bleaching	Feb. 21, 22,	42	12
prog.	and Papermaking	2017CPPRI,		
		Saharanpur		







#### Work Progress (Summary)

S.No	Activities as per Work Plan	Status
1.	Preparation of syllabus in different areas of pulp and paper technology for short term courses.	Completed
2.	Preparation of comprehensive training manuals	Completed
3.	Organizing two training programs in a calendar year & Four in two years.	Completed

#### **Major Achievements**

- •Total four numbers of training programme were organized.
- •120 numbers of trainees from various pulp and paper industries have attended these programs.
- •Total 41 numbers of lectures were delivered by internal and external faculties.
- •Participants got benefitted with the lectures delivered by the experts of the related areas.
- •In addition to these training programs, customized training was imparted to LIC Kanpur officials in the area of paper testing, students of various educational institution/universities and mil personnel.

















# Thank You